

A MODEL FOR HEALTH PROFESSIONALS TO FACILITATE A WELLNESS  
PROGRAM IN THE STATE HEALTH FACILITIES OF OSHIKOTO REGION,  
NAMIBIA

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## ABSTRACT

The purpose of this study was to develop a model for health professionals to facilitate a wellness program in the state health facilities of Oshikoto Region in Namibia. A significant number of health professionals experience psychosocial, physical and personal challenges in the workplace, which has necessitated the development of this proposed model. However, the development of the model required concepts that are derived from empirical data. To achieve that, the study design involved a convergent mixed method approach which required both quantitative and qualitative methods of data collection and analysis. The study was conducted in four phases. Phase 1 involved identification and analysis of concepts focusing on: (1) assessing the state health facilities in terms of the facilitation of wellness programs, using a checklist, (n=3) which were purposely selected; (2) describing knowledge, practices and experiences of health professionals with regard to the facilitation of a wellness programs, using self-administered questionnaires, nurses (n=147) who were randomly selected through stratified sampling; doctors (n=17) who were conveniently sampled and (3) exploring and describing perceptions of health professional managers regarding facilitation of wellness programs, using in-depth interviews, (n=6) which were purposely selected and all- inclusively sampled. The findings revealed that health professionals are faced with organizational challenges such as unavailability of wellness policies, unavailability of wellness program and lack of consultation for staff recruitment; resource challenges such as staff shortage, inadequate facilities and equipment; psychosocial challenges such as insufficient support from management, stress, scope of practice issues and workload; and personal challenges such as inadequate knowledge on wellness program, illnesses and lack of self-care in the work environment that hinder the facilitation of wellness programs. Using the WHO Framework and model (2010), psychosocial, physical and personal environment concepts were identified as the main central concepts and as a guiding tool to develop this model. These concepts form the basis of model development. The WHO framework and model (2010) guided the identification and analysis of concepts; and the Practice Oriented theory of Dickoff, James and Wiedenbach (1968) was used to describe the identified concepts.

Phase 2 involved the construction of the relationships statement. To achieve this, the Practice Oriented theory of Dickoff et al. (1968), WHO framework and model (2010); and Fayol's Management theory (1920) were adopted to guide the construction of the relationships statements that formed the basis for the development of a model. Phase 3 involved the description and evaluation of the model. A model for health professionals to facilitate wellness programs was described according to Chinn and Kramer's descriptive components in terms of its purpose, structure (assumptions, definitions of concepts, relation statements and nature) and process. Three phases of the model were identified, namely: needs assessment, managing and maintaining a conducive environment and outcome. The model was evaluated using Fawcett's six criteria (significance, internal consistency, parsimony, testability, empirical adequacy, and pragmatic adequacy) of evaluating nursing theories.

Phase 4 involved the development of guidelines for operationalization of the model, based on the needs identified from the study findings, to guide the Ministry of Health and Social Services (MoHSS), health professionals and all stakeholders in the facilitation of wellness programs. Guidelines were developed to direct the effective implementation of the model that would facilitate the wellness program in the state health facilities. Based on the study findings, recommendations were made to the policymakers, regulatory body, MoHSS and management respectively, to develop a comprehensive and inclusive wellness policy to institute a wellness program in the state health facilities; revise the scope of practice for nurses; establish a wellness directorate at the national level; advocate for and facilitate psychosocial, physical and personal support to enable health professionals cope with challenges in their work environment. Future research is recommended on implementation and evaluation of the effectiveness of the model and guidelines that has been developed.

## DECLARATION

I, Julia Amadhila, hereby declare that this study is a true reflection of my own research, and that this work, or part thereof has not been submitted for a degree in any other institution of higher education.

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Julia Amadhila



October 2022

NAME OF STUDENT

SIGNATURE

DATE

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## DEDICATION

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## LIST OF ACRONYMS

AIDS	Acquired immune-deficiency syndrome
BMI	Body mass index
CL	Confidence level
CMO	Chief Medical Officer
EAP	Employee Assistance Program
ECG	Electrocardiogram
GPA	Global Plan of Action
HBV	Hepatitis B virus
HIV	Human Immune-deficiency Virus
HPH	Health Promoting Hospitals
IHO	Intermediate Hospital Oshakati
ILO	International Labour Organization
MoHSS	Ministry of Health and Social Services
NCDs	Non-communicable diseases
NDHS	Namibia Demographic Health Survey
NDP	National Development Plan
NGO's	Non-Governmental Organizations
NHPF	National Health Policy Framework
NM	Nurse Manager
OHS	Occupational Health and Safety
OPM	Office of the Prime Minister
PHC	Primary Health Care
PMO	Principal Medical Officer
SDGs	Sustainable Development Goals
SMOs	Senior Medical Officers
SPSS	Statistical Package for Social Science
STIs	Sexual transmission infections
TB	Tuberculosis

UNAM	University of Namibia
UREC	University of Namibia Research Ethics Committee
WELCOA	Wellness Council of America
WHO	World Health Organization
WISN	Workload Indicators for Staffing Needs
WWP	Workplace Wellness Program

## Table of Contents

ABSTRACT.....	i
DECLARATION.....	iii
ACKNOWLEDGEMENTS.....	iv
DEDICATION.....	vi
LIST OF ACRONYMS.....	vii
LIST OF TABLES.....	xvi
LIST OF FIGURES.....	xviii
CHAPTER 1.....	1
INTRODUCTION AND BACKGROUND OF THE STUDY.....	1
1.1 INTRODUCTION AND RATIONALE OF THE STUDY.....	1
1.2 BACKGROUND OF THE RESEARCH PROBLEM.....	4
1.3 CONTEXT OF THE STUDY.....	6
1.4 STATEMENT OF THE PROBLEM.....	8
1.5 PURPOSE OF THE STUDY.....	11
1.6 OBJECTIVES OF THE STUDY.....	11
1.7 SIGNIFICANCE OF THE STUDY.....	11
1.8 PARADIGMATIC PERSPECTIVE.....	12
1.8.1 Pragmatist.....	13
1.8.2 Philosophical assumptions.....	13
1.9 THEORETICAL FOUNDATIONS OF THE STUDY.....	16
1.9.1 The Practice-Oriented theory (1968).....	17
1.9.2 The Theory Generation (2011).....	18
1.9.3 WHO healthy workplace model (2010).....	19
1.9.4 Management theory by Fayol (1920).....	20
1.9.5 Evaluation theory (2005).....	21
1.10 RESEARCH DESIGN AND METHODS.....	21
1.10.1 Phase 1: Identification and analysis of concepts.....	23
1.10.2 Phase 2: Construction of relationships statement.....	24
1.10.3 Phase 3: Description and evaluation of the model.....	24
1.10.4 Phase 4: Description of guidelines for operationalizing.....	25
1.11 ETHICAL CONSIDERATIONS.....	25
1.12 DEFINITION OF THE KEY CONCEPTS.....	26

1.13 PRESENTATION OF THE CHAPTERS.....	28
1.14 SUMMARY OF THE CHAPTER.....	32
CHAPTER 2 .....	33
LITERATURE REVIEW .....	33
2.1 INTRODUCTION .....	33
2.2 PURPOSE OF LITERATURE REVIEW.....	33
2.3 SCOPE OF THE LITERATURE REVIEW .....	34
2.4 BACKGROUND OF WELLNESS PROGRAMS.....	37
2.5 PRACTICE OF WELLNESS PROGRAM IN THE WORKPLACE.....	39
2.5.1 Worldwide.....	39
2.5.2 Africa .....	40
2.5.3 Namibia.....	42
2.6 LEGAL FRAMEWORK OF WELLNESS PROGRAM AND PRACTICE.....	43
2.6.1 WHO/ILO joint effort on Occupational Health and Safety .....	44
2.6.2 Constitution of Namibia 1990.....	45
2.6.3 Labour Act No.11, of 2007 .....	46
2.6.4 National Health Policy Framework 2010 - 2020 .....	47
2.7 GUIDING THEORIES FOR THE DEVELOPMENT OF A MODEL .....	48
2.7.1 Dickoff, James and Wiedenbach (1968) Practice-Oriented theory.....	48
2.7.2 Chinn and Kramer’s theory generation (2011) .....	49
2.7.3 WHO Framework and Model (2010).....	51
2.7.4 Fayol’s Management theory (1920).....	52
2.8 OVERVIEW OF THE STATE HEALTH FACILITIES WITH REGARD TO THE FACILITATION OF WELLNESS PROGRAMS .....	53
2.9 KNOWLEDGE, PRACTICES AND EXPERIENCES OF HEALTH PROFESSIONALS CONCERNING THE FACILITATION OF WELLNESS PROGRAMS .....	55
2.10 PERCEPTIONS OF HEALTH PROFESSIONAL MANAGERS CONCERNING WELLNESS PROGRAMS.....	58
2.11 SUMMARY OF THE CHAPTER.....	60
CHAPTER 3 .....	61
RESEARCH METHODOLOGY.....	61
3.1 INTRODUCTION .....	61
3.2 APPROACH FOR MODEL DEVELOPMENT .....	61
3.3 REASONING STRATEGIES.....	63

3.3.1 Inductive reasoning .....	64
3.3.2 Deductive reasoning.....	64
3.3.3 Synthesis .....	65
3.3.4 Derivation .....	66
3.3.5 Analysis.....	66
3.3.6 Inferences .....	67
3.3.7 Bracketing.....	67
3.3.8 Reflexivity.....	68
3.3.9 Flexibility .....	69
3.4 PROCESS OF DEVELOPING A MODEL.....	69
3.4.1 Identification of concepts [Phase 1].....	69
3.4.2 Analysis of concepts [Phase1] .....	96
3.4.3 Construction of relationship statements [Phase 2].....	97
3.4.4 Description and evaluation of model [Phase 3] .....	101
3.4.5 Guidelines for operationalizing the model [Phase 4].....	103
3.5 ETHICAL CONSIDERATIONS .....	103
3.5.1 Permission and ethical clearance process .....	103
3.5.2 Voluntary informed consent.....	104
3.5.3 Application of principle of beneficence.....	105
3.5.4 Application of principle of justice .....	105
3.5.5 Application of the principle of respect.....	106
3.6 SUMMARY OF THE CHAPTER.....	106
CHAPTER 4 .....	107
PRESENTATION AND DISCUSSIONS OF QUANTITATIVE RESULTS [PHASE 1] .....	107
4.1 INTRODUCTION .....	107
4.2 PRESENTATION AND DISCUSSION OF FINDINGS .....	107
4.2.1 Sub-objective 1: Assess the state health facilities in Oshikoto region regarding facilitation of a wellness program.....	108
4.2.2 Sub-objective 2: Describe the knowledge, practices and experiences of health professionals concerning facilitation of wellness program in the state health facilities. ...	116
4.3 SUMMARY OF THE CHAPTER.....	144
CHAPTER 5 .....	145
PRESENTATION AND DISCUSSION OF QUALITATIVE RESULTS, AND MERGING OF FINDINGS [PHASE 1].....	145

5.1 INTRODUCTION .....	145
5.2 PRESENTATION OF FINDINGS .....	145
5.2.1 Main theme 1: Participants perceived challenges that affect the facilitation of a wellness program for health professionals in the health facilities. ....	147
5.2.2 Main theme 2: Participants express knowledge regarding wellness programs in the health facilities. ....	161
5.2.3 Main theme 3: Participants recommend good practices and approaches to facilitate wellness programs for health professionals in the health facilities. ....	163
5.3 MERGING SUB - OBJECTIVES 1, 2 & 3 AND IDENTIFICATION OF THE CONCEPTS .....	166
5.4 SUMMARY OF THE CHAPTER.....	168
CHAPTER 6 .....	170
DEFINITIONS, CLASSIFICATION AND CONSTRUCTION OF THE RELATIONSHIP BETWEEN CONCEPTS .....	170
6.1 INTRODUCTION .....	170
6.2 BACKGROUND OF CONCEPTS IDENTIFIED.....	170
6.2.1. Identification of central concepts and statements .....	171
6.3 DEFINITION AND CLASSIFICATION OF CONCEPTS .....	174
6.3.1 Examination of the concept “psychosocial” .....	175
6.3.2 Examination of the concept “physical” .....	182
6.3.3 Examination of the concept “personal”.....	188
6.3.4 Examination of the concept “environment” .....	193
6.3.5 Final reduction process of identified criteria of the main statement “facilitation of psychosocial, physical and personal environment” to facilitate wellness programs for health professionals in the health facilities. ....	201
6.3.6 Definition of related concepts .....	203
6.3.7 Definition of the statement “facilitation of psychosocial, physical and personal environment”.....	204
6.4 CONSTRUCTION OF RELATIONSHIPS.....	205
6.4.1 Identified statements of concepts.....	205
6.4.2 Adopting theories to guide the development of a model .....	208
6.5 PROPOSED STRUCTURE FOR THE MODEL DEVELOPMENT.....	225
6.5.1 Phase 1: Needs assessment .....	225
6.5.2 Phase 2: Managing and maintaining a conducive environment.....	227
6.5.3 Phase 3: Outcome.....	230

6.6 SUMMARY OF THE CHAPTER.....	233
CHAPTER 7 .....	234
DESCRIPTION OF THE STRUCTURE AND PROCESS, EVALUATION OF THE MODEL AND GUIDELINES FOR OPERATIONALIZATION OF THE MODEL .....	234
7.1 INTRODUCTION .....	234
7.2 MODEL DESCRIPTION .....	234
7.2.1 Overview of the model.....	235
7.2.2 Purpose of the model.....	238
7.2.3 Structure of the model.....	239
7.2.4 The process description of the model.....	249
7.3 EVALUATION OF THE MODEL.....	260
7.3.1 Significance of the model .....	260
7.3.2 Internal consistency of the model .....	261
7.3.3 Parsimony of the model .....	262
7.3.4 Testability of the model .....	263
7.3.5 Empirical adequacy of the model.....	263
7.3.6 Pragmatic adequacy of the model .....	264
7.4 GUIDELINES FOR THE OPERATIONALISATION OF THE MODEL .....	265
7.4.1 Phase 1: Needs assessment .....	265
7.4.2 Phase 2: Managing and maintaining a conducive environment.....	268
7.4.3 Phase 3: Outcome.....	274
7.5 SUMMARY OF THE CHAPTER.....	278
CHAPTER 8 .....	279
CONCLUSION, CONTRIBUTION, LIMITATIONS AND RECOMMENDATIONS OF THE STUDY .....	279
8.1 INTRODUCTION .....	279
8.2 PURPOSE OF THE STUDY.....	279
8.3 CONCLUSIONS OF THE STUDY .....	280
8.3.1 Research question 1: What are the appropriate concepts that could guide the development of a model for health professionals to facilitate a wellness program in the state health facilities? .....	280
8.3.2 Research question 2: How will the identified concepts that guide the development of a model be analysed? .....	286
8.3.3 Research question 3: What would be the nature of relationships among the central concepts that could guide the development of the model? .....	286

8.3.4 Research question 4: What model could be developed to facilitate a wellness program for health professionals in the state health facilities?.....	287
8.3.5 Research question 5: What guidelines could be developed to operationalize such a model?.....	288
8.4 LIMITATIONS OF THE STUDY.....	288
8.4.1 Methodological limitations .....	288
8.4.2 Literature availability .....	290
8.4.3 Testing and implementation limitations.....	290
8.5 RECOMMENDATIONS .....	290
8.5.1 Recommendations for the stakeholders .....	290
8.5.2 Recommendations for the MoHSS.....	291
8.5.3 Recommendations for Management .....	292
8.5.4 Recommendation for training .....	293
8.5.5 Recommendations for further research .....	293
8.6 CONTRIBUTION TO THE BODY OF KNOWLEDGE.....	294
8.6.1 Identification of challenges experienced by health professionals that hinder facilitation of a wellness program in the state health facilities of Oshikoto Region. ....	294
8.6.2 Facilitation of psychosocial, physical and personal environment model.....	295
8.6.3 Operationalization guidelines of the model .....	295
8.7 DISSEMINATION OF THE FINDINGS .....	295
8.7.1 Publications.....	295
8.7.2 Paper presentation .....	296
8.7.3 Book and chapters.....	296
8.8 SUMMARY OF THE CHAPTER.....	297
REFERENCES .....	298
ANNEXURE A: ETHICAL CLEARANCE FROM UNAM .....	320
ANNEXURE B: PERMISSION LETTER FROM MOHSS .....	321
ANNEXURE C: PERMISSION LETTER FROM OSHIKOTO REGIONAL DIRECTOR ....	323
ANNEXURE D: PERMISSION LETTER FROM THE MEDICAL SUPERINTENDED OF IHO .....	324
ANNEXURE E: CHECKLIST FOR ASSESSING HEALTH FACILITIES.....	325
ANNEXURE F: HEALTH PROFESSIONALS QUESTIONNAIRE.....	327
ANNEXURE G: INTERVIEW GUIDE .....	331
ANNEXURE H: CONSENT FORM FOR QUANTITATIVE STUDY .....	332

ANNEXURE I: CONSENT FORM FOR QUALITATIVE STUDY ..... 333  
ANNEXURE J: INDIVIDUAL INTERVIEW TRANSCRIPTION..... 334  
ANNEXURE K: CROSS TAB, ORDINARY REGRESSION AND CHI-SQUARE TABLES341  
ANNEXURE L: CONFIRMATION OF PROFESSIONAL EDITING ..... 349

## LIST OF TABLES

Table 1. 1: Research design.....	22
Table 3. 1: Summary of population and sample size of participants per health facility..	77
Table 3. 2: Tesch’s steps of data analysis and its application to the study. ....	90
Table 3. 3: Application of credibility criterion .....	91
Table 3. 4: Application of transferability criterion .....	92
Table 3. 5: Application of confirmability criterion.....	92
Table 3. 6: Application of dependability criterion .....	92
Table 4. 1: Health facilities demographic data.....	109
Table 4. 2: Comparison of information on provision of wellness interventions for the three health facilities in Oshikoto region. ....	110
Table 4. 3: Comparison of information on policies and environmental support for the three health facilities in Oshikoto region .....	111
Table 4. 4: Comparison of information on communication for the three health facilities in Oshikoto region. ....	112
Table 4. 5: Comparison of information on provision of wellness interventions, policies and environmental support; and communication for the three health facilities in Oshikoto region.....	114
Table 4. 6: Demographic Data of the participants .....	117
Table 4. 7: Respondents’ rating of knowledge on wellness programs.....	119
Table 4.18 1: Respondents’ nutritional status; level of physical and emotional activity; and health habits.....	126
Table 4.19 1: Respondents’ health screenings/examination in the past 12 months.....	127
Table 4.25 1: Participants’ experiences regarding management support at the health facility.....	136
Table 4.26 1: Participants’ level of interests in the wellness programs at the health facilities.....	139
Table 5. 1: Main themes, themes and sub-themes from SMOs, PMO and NMs.....	147

Table 5. 2: Merged quantitative and qualitative findings, concluded statements, identified concepts and main central concepts (Phase 1).....	167
Table 6. 1: Criteria / defining attribute“psychosocial”.....	180
Table 6. 2: Characteristics of essential and related criteria in respect of “psychosocial” .....	181
Table 6. 3: Criteria / defining attributes of “physical”.....	186
Table 6. 4: Characteristics of essential and related criteria in respect of “physical” .....	187
Table 6. 5: Criteria / defining attributes of “personal”.....	191
Table 6. 6: Characteristics of essential and related criteria in respect of “personal” .....	192
Table 6. 7: Criteria / defining attributes of “environment”.....	197
Table 6. 8: Characteristics of essential and related criteria in respect of “environment” .....	198
Table 6. 9: Characteristics of essential and related criteria.....	200
Table 6. 10: Application of Practice-Oriented theory.....	208
Table 6. 11: Application of WHO framework and model .....	216
Table 6. 12: Application of Management theory .....	220

## LIST OF FIGURES

Figure 1. 1 Research site map adopted from NDHS (37). .....	7
Figure 1. 2 Practice-Oriented theory by Dickoff et al. (52). .....	17
Figure 1. 3 Theory generation by Chinn and Kramer (56). .....	18
Figure 1. 4 Avenues of influence for a healthy workplace as adopted from WHO (23). .....	20
Figure 1. 5 Components of Management functions by Fayol (54). .....	21
Figure 3. 1 Flowchart showing approach for model development and implementing convergent mixed method design adopted from Cresswell and Plano Clark (48).....	63
Figure 4.1 Health professional’s knowledge on wellness programs.....	121
Figure 4.2 Health professionals practice regarding nutrition.....	129
Figure 4.3 Health professionals practice regarding health habits.....	130
Figure 4.4 Health screening in the past 12 months.....	133
Figure 4.5 Health professionals experience regarding management support.....	139
Figure 4.6 Health professionals’ interests in wellness programs.....	143
Figure 6. 1 Researcher’s Mental Map.....	207
Figure 6. 2 Central concepts of the study.....	217
Figure 6. 3 Components of management process .....	222
Figure 6. 4 The external and internal environments as components of needs assessment .....	226
Figure 6. 5 Components of Management process, dynamics and conducive environment.....	228
Figure 6. 6 Components of the outcome of the model.....	231
Figure 7.1 A model to Facilitate Psychosocial, Physical and Personal Environment....	234
Figure 7.2 Phase 1: Needs assessment.....	250
Figure 7.3 Phase 2: Managing and maintaining a conducive environment.....	251
Figure 7.4 Phase 3: Outcome.....	256

## CHAPTER 1

### INTRODUCTION AND BACKGROUND OF THE STUDY

#### 1.1 INTRODUCTION AND RATIONALE OF THE STUDY

A wellness program is a coordinated and comprehensive health promotion and protection strategy implemented at the worksite, which includes programs, policies, benefits, environmental supports, and links to the surrounding community designed to encourage the health and safety of all employees (1,2). Passey et al. (3) define wellness program as an initiative and policy directed at chronic disease prevention and supporting healthy behaviours for employees.

On the other hand, workplace wellness refers to any workplace health promotion activity and organizational policy intended to support healthy behaviour and promote healthy lifestyles to employees and their families. Furthermore, wellness aimed at reducing health risks and increase productivity through health education, use of fitness facilities and health promotion policies (4). Essentially, wellness is a combination of social, physical, emotional, financial, occupational, environmental, intellectual, and spiritual health (2,5,6).

Health professionals are commonly overloaded with work, which exposes them to stress and burnout, while their wellness is neglected (7,8). However, the health facilities have set a target to promote health and well-being and to respond to the health needs of the health professionals. That is why wellness programs were introduced, i.e. to promote the health and well-being of all employees including health professionals (5,9,10) and ensure that they are physically, socially, emotionally and economically well (10,11).

Ideally, a comprehensive wellness program is supposed to contain five components, namely: health education, which is one of the most common components focusing on sharing health tips through monthly newsletters; a supportive social and physical work environment, which concerns itself with encouraging employees and cheering each other to participate in wellness programs; integration of a wellness program into the organization's structure, which concentrates on allocating a budget and other resources to the wellness program; linkage to related programs such as employee assistance programs (EAP) aimed at balancing work and life of employees; and workplace screening and education whereby opportunity is offered to employees for off-worksites medical screening and follow-up (3). Correspondingly, Anspaugh et al. (12) point out that wellness necessitates daily decision making in nutrition, stress management, physical fitness, emotional health, preventive health care and other aspects of health.

The potential benefits of wellness programs are to improve the health status of employees and reduce medical and lost productivity costs and assist employees with health related challenges and psychosocial stressors that often affect their work performance (13). Wellness programs are similarly intended to increase productivity and job satisfaction, reduce absenteeism due to illness and reduce healthcare costs (14–16), by assisting employees to cope with their stress. A coordinated and comprehensive worksite wellness program is designed to meet the health and safety needs of all employees (1). Consequently, effective implementation of workplace wellness programs in the health facilities enhances provision of quality care and support to patients, clients and their families; and ultimately improves job performance (17), since the well-being of health professionals affects not only the individuals but also the provision of care to their patients

(18,19). As a result, this provides benefits to the employer, employee and community at large.

Furthermore, wellness programs include provision of health information, screening for risks, lifestyle management on fitness and nutrition, behavioural health and psychological counselling (9,20). Research has also demonstrated that well implemented wellness programs can change employees' behaviours and work productivity (20). Equally, literature revealed that employees who attend wellness programs benefit by learning how to lead a healthy and stress free lifestyle, , leading to lower absenteeism and greater productivity (18,19). Since a workplace is an integral site for health promotion, protection and disease prevention, employers are expected to implement wellness programs to ensure a healthy and safe work environment for their employees (10).

Creating a healthy workplace through a wellness program is essential, thus it requires a broad and complex network of forces that interact to improve health, safety and well-being of employees (14,21). The World Health Organisation (WHO) framework and model (14) suggests that employers, in collaboration with employees and other stakeholders, can make a significant contribution towards the creation of a healthy and safe workplace. In the health facilities, a collaborative effort that enables wellness programs is required from management, health professionals and stakeholders such as policymakers, regulatory bodies, non-governmental organizations (NGO's) and communities. Management plays a major role in engaging stakeholders to become supporters (3); Policymakers develop and implement health policies that address the physical and psychosocial working environment; NGOs can provide financial support to address the physical and personal environment (14); the regulatory body may address regulations that improve the health

professionals' psychosocial environment; whereas the community linkages can offer health related programs and services when the employer does not have the capacity or expertise (3).

On average, health professionals working full-time spend more than one third of their day, for five days a week, at their workplaces (2). This is an indication that the workplace may directly affect their well-being because they spend most of their time at work. Therefore, health professionals are vulnerable to high levels of work related stress and burnout (8) that adversely affect their health and performance, hence the need for a model that facilitates a wellness program to support their well-being.

## 1.2 BACKGROUND OF THE RESEARCH PROBLEM

Workplace wellness programs started in the 1970s in USA, where the first wellness center was opened in California, and have become increasingly popular over the past decades (14). The World Health Organization (WHO) and International Labour Organization (ILO) initiated a global effort to improve the health, safety and well-being of workers by creating a healthy workplace. This is not only of utmost importance to the workers and their families but also to the productivity, national and global economy (14).

Wellness Africa was later established to empower individuals and organizations in order to establish a sustainable healthy workplace culture through wellness programs (22). Research demonstrated that health professionals in the developing countries, including sub-Saharan Africa, are vulnerable to occupational stress due to insufficient resources, being understaffed, high demand for providing quality care to patients, and work overload (23–25). Also, a Global Survey of Health Promotion and Workplace Wellness Strategy (25) identified stress, chronic diseases (e.g. heart diseases, Diabetes) and infectious

diseases (e.g. HIV) as three top health issues in Africa that drive employers' investment in wellness programs. But, Eng, Moy and Bulgiba (26) highlighted that there is scarcity of workplace health programs being reported in the low and middle-income countries.

A study done in Botswana among health care workers (n=1856) aimed at assessing whether participation in Workplace Wellness Programme (WWP) was associated with job satisfaction, occupational stress, well-being and burnout, reported that participation in workplace wellness activities may have increased job satisfaction and lower stress and burnout (8). The study further highlighted sources of stress among health workers including shortage of staff, insufficient resources and materials as well as too much work. This implies that unhealthy employees are likely to be unhappy, less productive, demoralized, stressed, suffer from burnout, be exhausted due to overwork and more disposed to sick leave and frustrated (27).

In Namibia, the Namibian Constitution of 1990 (28), the Labour Act number 11 of 2007 (29,30) and the National Health Policy framework (31) oversee the occupational health and safety measures that serve as the basis for the facilitation of wellness programs for employees. Although the legislations emphasized that health, safety and well-being are fundamental human rights for every Namibian, little seems to be done regarding facilitation of wellness programs for health professionals in the state health facilities of Oshikoto region.

The Workload Indicators for Staffing Needs [WISN] (32) reported that Namibia's state health facilities in Oshikoto region are the most understaffed and health professionals are therefore exposed to work overload. It is evident that health professionals are vulnerable to high levels of occupational stress and burnout due to heavy workloads, long working

hours, daily exposure to clinical dilemmas like crisis events and various illnesses and diseases as well as the demand of providing quality care to patients (24,33). These might expose health professionals to unhealthy lifestyle practices such as poor nutrition, physical inactivity and alcohol use (21), which often lead to chronic diseases and are costly for health facilities due to lost productivity (34).

According to MoHSS (35,36) a total number of 375 sick leave applications (355 for nurses and 20 for doctors) were recorded from January to December 2015 at Onandjokwe Intermediate Hospital; while Omuthiya District Hospital has recorded 26 sick leave applications from the health professionals during the same period. In addition, the maximum frequency of these recorded sick leave applications per staff member amounts to eight times per year.

Health professionals who have health problems impact productivity and quality of care, then present distresses that affect other staff members, those who work with them as well as management (17). It is therefore crucial to facilitate wellness programs in the health facilities to ensure effective promotion of health professionals' well-being.

### 1.3 CONTEXT OF THE STUDY

Namibia is a country in South-western Africa that covers about 824, 000 square kilometers. It is bordered by Angola and Zambia in the north, the Atlantic Ocean in the west, Botswana in the east and South Africa in the south and east. According to the Namibia Demographic Health Survey [NDHS] (37) the country has a population of 2.6 million, and it is divided into fourteen regions(Figure 1.1 below). The report further indicated that almost two-thirds of the population lives in the four northern regions and less than one-tenth lives in the south.



The MoHSS (32) acknowledges that approximately half of the population of the global south is located in rural areas and that these areas are only served by 38% of health workers. The numbers of health professionals (doctors and nurses) at these three health facilities are as follows: Onandjokwe Intermediate Hospital has a total number of 272 (24 doctors and 248 nurses); Omuthiya District hospital has 65 (3 doctors and 62 nurses) while Tsumeb District hospital has 71 (5 doctors and 66 nurses) (36).

#### 1.4 STATEMENT OF THE PROBLEM

The development of a model for health professionals to facilitate a wellness program in the state health facilities was necessitated by the Workload Indicators for Staffing Needs [WISN] (32) report of 2015 which indicated that both intermediate and district hospitals in Namibia are understaffed relative to their workload. It was further reported that these hospitals only had one third of the doctors that they require based on workload. In addition, this report specified that the worst staffed is Onandjokwe Intermediate Hospital, with overall nurses staffing of only 59% of its requirement. Furthermore, it appears that there is currently no wellness program that addresses the psychosocial, physical and personal needs of the health professionals. That might directly affect the health professionals' physical, social, mental, financial, occupational, environmental and spiritual well-being (6), which would contribute to health risks and poor work performance (24). This is evidenced by WISN (32) report and registered sick leave records of health professionals (35).

According to the Ministry of Health and Social Services (MoHSS) (35) registers, 375 sick leave applications were recorded among health professionals in Onandjokwe Intermediate Hospital from January to December 2015, of which the maximum frequency sick leave

per staff member amounts to eight times per year. Research demonstrated that understaffing and heavy workload lead to work related stress, health risks and poor work performance (24,33). It is evident that a person's likelihood of feeling stressed is strongly associated with overall health risks that are mostly responsible for absenteeism (39). Stress is indicated as the top health risk that drives employers' wellness strategies in Africa, Asia, Australia, Canada and Europe compared to Latin America and United States (25).

Despite the fact that legislation emphasizes that health, safety and well-being are fundamental human rights for every Namibian (28,29,31); the researcher being a nurse observed that nothing is done to promote health and well-being of health professionals in the state health facilities. In view of these reports, the researcher chose Oshikoto region as a study site given the background above.

In their study, Ledikwe et al. (8) point out high levels of stress and burnout among health workers in Botswana government facilities due to the rising burden of patient numbers. Similarly, a study in India indicated that the main health professionals' stressors are too much work, time pressure and tiring job with insufficient time for rest and meals (24). Furthermore, Mosadeghrad (40) reported that the major sources of stress among Iranian nurses were too much work, staff shortage, inadequate pay, inequality at work, lack of promotion, job insecurity and lack of management support.

Unfortunately, the WISN report fails to indicate, given the cited situations, how a wellness program is facilitated in order to promote and improve the well-being of health professionals in the state health facilities which are the most understaffed. This critique prompted the researcher to consider the following research questions:

- How is the wellness program for health professionals facilitated in the state health facilities of Oshikoto Region?
- What are the appropriate concepts that could guide the development of a model to facilitate a wellness program for health professionals in the state health facilities?
  - What conditions are state health facilities in concerning the facilitation of wellness program? How are the situations at the state health facilities concerning the facilitation of wellness program?
  - What knowledge and experience do health professionals have concerning the facilitation of wellness programs; and what are their practices that facilitate wellness programs in the state health facilities?
  - How do health professional managers perceive wellness programs in the health facilities?
- How will the identified concepts that guide the development of a model be analysed?
- What would be the nature of relationships among the central concepts that could guide the development of the model?
- What model could be developed to facilitate wellness programs for health professionals in the state health facilities? and
- What guidelines could be developed to operationalize such a model?

Based on these questions, the researcher considers it necessary to explore the situation and develop a model in order to facilitate wellness programs for health professionals that promote their well-being in the state health facilities.

### 1.5 PURPOSE OF THE STUDY

The purpose of the study was to develop a model for health professionals to facilitate a wellness program in the state health facilities of Oshikoto Region.

### 1.6 OBJECTIVES OF THE STUDY

The purpose of this research was to accomplish the following objectives:

- Identify concepts for the development of the model for health professionals to facilitate a wellness program in state health facilities [Phase 1],
  - Assess the state health facilities of Oshikoto region regarding the facilitation of wellness programs [Phase 1],
  - Describe the knowledge, practices and experiences of health professionals concerning facilitation of a wellness program in the state health facilities [Phase 1],
  - Explore and describe the perceptions of health professional managers concerning facilitation of a wellness program in the state health facilities [Phase 1],
- Analyse the concepts that guide the development of a model [Phase 1],
- Construct the relationships statement of the central concepts that guide the development of a model [Phase 2],
- Describe and evaluate the model for health professionals in the state health facilities [Phase 3] and
- Describe the guidelines for operationalizing of such a model [Phase 4].

### 1.7 SIGNIFICANCE OF THE STUDY

The findings of this study will contribute to an understanding of the challenges faced by the health professionals in the state health facilities, which hamper facilitation of a

wellness program that would promote health and well-being. The findings of the study will also inform policymakers and other stakeholders to contribute to the facilitation of a wellness program. It is anticipated that the model will contribute valuable information to the body of knowledge. A model has been developed and this will facilitate wellness programs that promote well-being among health professionals. Hence, this study developed a model which can serve as an intervention to improve the well-being of health professionals in the health facilities.

### 1.8 PARADIGMATIC PERSPECTIVE

A paradigm is a set of shared beliefs that inform the interpretation of research data as well as the lens through which a researcher looks at the world (41). Furthermore, the paradigm serves to define what should be studied, what questions should be asked, how these questions should be asked and what rules should be followed in interpreting the answers obtained (41). It may be referred to as a set of assumptions, concepts, values and practices that constitutes a way of viewing reality for the community that shares them, especially in an intellectual discipline (42). Using a paradigm can help create a bridge between the aims of a study and the method to achieve those aims (43). Paradigms should be viewed as lenses that help to sharpen our focus on a phenomenon because they provide structures and directions that the research should take and details of how it should be performed (43). Paradigm includes the philosophical elements of beliefs about reality, ways of knowing, ethics and values, language, methods and approaches that guide a researcher's approach to enquiry (44). Research uses four world views namely: positivist, constructivist, transformative and pragmatist (45).

### 1.8.1 Pragmatist

The pragmatist paradigm is a philosophical view that uses a mixed method approach in a single study to enable a complex understanding of the research problem (45). The Pragmatist paradigm is also defined as an approach that enables a researcher to adopt a pluralistic stance of gathering all types of data to best answer the research questions (44). Creswell (44,45) indicated that pragmatism is associated with mixed methods research focusing on the use of multiple methods of data collection to inform the problem under study.

In this study, pragmatism was necessary to enable the researcher to gain a complex understanding of the research problem (46), because using either quantitative or qualitative methodologies would not have been enough to answer the research questions. Thus, the quantitative approach was needed to describe the situations of the state health facilities; as well as knowledge and experiences of health professionals concerning facilitation of wellness program; whereas the qualitative approach was necessary to explore perceptions of health professional managers concerning facilitation of wellness programs. After data collection, the findings are merged to develop the central concepts that formed the basis for the development of a model to facilitate a wellness program for health professionals in the state health facilities.

### 1.8.2 Philosophical assumptions

Philosophical assumptions consist of a basic set of beliefs that guide inquiries or knowledge that informs the study (44). This study was guided by the following philosophical assumptions: ontology, epistemology, axiology, methodology and rhetoric.

### *1.8.2.1 Ontology*

According to Kivunya and Kuyini (41), ontology is a branch of philosophy concerned with the assumptions we make in order to believe that something is real. Ontological assumptions in this study were made to understand the nature of reality of the situation at the state health facilities of Oshikoto region with regard to the facilitation of a wellness program. The researcher used a mixed methods approach that allows multiple measures to understand the nature of reality.

For the quantitative element, a self-administered questionnaire was used to describe the knowledge, experiences and practices of health professionals concerning the facilitation of a wellness program in state health facilities. Also, a checklist was used to observe and understand the situation in the three state health facilities. For the qualitative element, the researcher used individual face-to-face interviews to explore and describe the perceptions of health professional managers about the facilitation of a wellness program in state health facilities. This approach was aimed at finding the reality of what is happening in the state health facilities with regard to the facilitation of a wellness program.

### *1.8.2.2 Epistemology*

Epistemology is concerned with the basis of knowledge, its nature, the way it is acquired and how it can be communicated to others (41). In this study, for the quantitative part, the researcher obtained objective evidence from the participants using a questionnaire and checklist. For the qualitative part, subjective evidence was obtained using an interview guide as a tool. Therefore, reality is known through using many tools of research that reflect both deductive and inductive evidence.

In addition, for the quantitative part, the results were obtained from the health professionals who shared their knowledge, practices and experiences as well as objective facts through observation from the health facilities; whereas, for the qualitative part, perceptions regarding facilitation of a wellness program were obtained from health professional managers in the state health facilities.

#### *1.8.2.3 Methodology*

Methodology refers to the research design, methods, approaches and procedures used in an investigation that is well planned to find out something (41). Cresswell and Plano Clark (44) defined it as the process of conducting research. This study adopted a mixed method approach, with a convergent parallel design. Both quantitative and qualitative data was collected and analysed separately, then results were merged. A qualitative, exploratory, contextual approach was used to explore the health professionals' perception regarding the facilitation of a wellness program in the health facilities. In addition, a quantitative, descriptive approach was used to assess the health facilities and to describe the knowledge, practices and experiences of health professionals on the facilitation of a wellness program. For the quantitative part, data was collected using a self-administered questionnaire and an observational checklist, while for the qualitative part an unstructured interview guide was used.

#### *1.8.2.4 Axiology*

Axiology refers to the ethical issues that need to be considered when planning a research proposal; which considers the philosophical approach to making decisions of value (41). It is also considered as the nature of ethics and what is valued (47). Pragmatist researchers believe that values play a major role in conducting research and in drawing conclusions

from their studies (47). Values and ethical principles were discussed and maintained during both quantitative and qualitative parts of the research. For the qualitative part, to avoid bias the researcher identified her own experiences and beliefs then put them aside and presented subjective data from the interviews, evidenced by verbatim transcriptions and quotes. For both quantitative and qualitative parts, the researcher adhered to ethical principles including right to privacy, respect, confidentiality, anonymity, fairness, truthfulness in interpretation of findings, seeking permission to access the health facilities and conduct the study, beneficence and non-maleficence, so that participants were protected at all times.

#### *1.8.2.5 Rhetoric*

This assumption is concerned with the language of research (44). In this study the researcher employed both formal and informal language styles. The qualitative part of the study used informal language to explore and describe the perceptions of health professionals regarding facilitation of a wellness program in the state health facilities using simple language. A rhetorical assumption implies that the researcher writes in a literary informal style using the personal voice and uses qualitative terms and limited definitions (48) The researcher developed her own style to present the qualitative data in the form of themes and sub-themes. The quantitative part used formal language in the research instruments, data analysis and presenting of study findings.

### 1.9 THEORETICAL FOUNDATIONS OF THE STUDY

Theoretical foundations are significant because they can be used to explain the issues that drive the research study (44). The study used three theories and one model that were applied in different phases of the study for the development of a model. These include the

Practice Oriented theory of Dickoff, James and Wiedenbach (49), Theory generation by Chinn and Kramer (50), the WHO framework and model (14); and the Management theory by Fayol (51,52).

### 1.9.1 The Practice-Oriented theory (1968)

Dickoff et al.'s theory (49) stipulates the three essential ingredients in the conceptualization process including the goal, the prescription and the survey list. The survey list consists of six organized principles of agent, recipient, context, dynamic, procedure and terminus as per figure 1.2 below. The practice-oriented theory guided the conceptualization process of the findings that enabled the development of a model. Concepts resulting from the findings are described in terms of the six principles of the survey list, which form the basis for the model aimed at facilitating a wellness program for health professionals in the state health facilities of Oshikoto region. This theory is described in detail under chapter 6 and applied in the three phases of a model development under chapter 7.

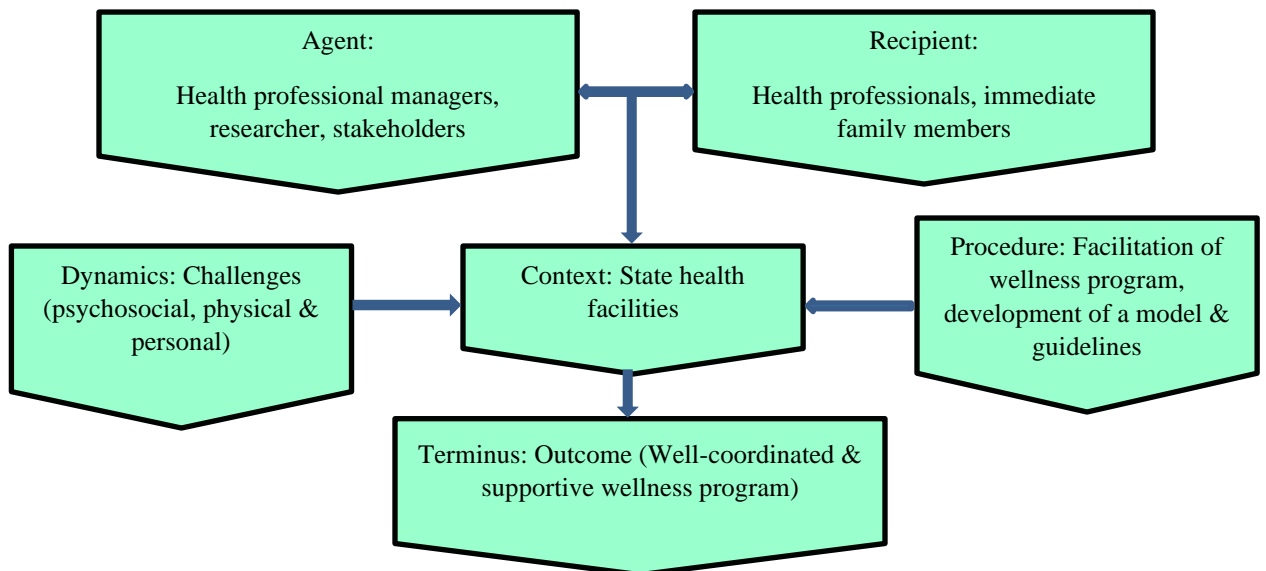


Figure 1. 2 Practice-oriented theory by Dickoff et al. (49).

### 1.9.2 The Theory Generation (2011)

The theory generation process by Chinn and Kramer (50) focuses on approaches to structuring and contextualizing empiric theory development. This involves forming systematic linkages between concepts. Concepts were identified from the findings of the study and literature review. Theory generation steps are: identification and analysis of concepts, construction of relationship statement, description and evaluation of a model as well as guidelines for operationalizing the model as indicated in figure 1.3 below. This study used the theory generation process to develop a model for health professionals to facilitate a wellness program in the state health facilities of Oshikoto region. The theory generation was used to: identify and analyse concepts in Phase 1 (chapters 4, 5 and 6); construct relationship statements in Phase 2 (chapter 7), describe and evaluate the model in phase 3 (chapter 7) as well as to describe guidelines for operationalizing the model in phase 4 (chapter 7).

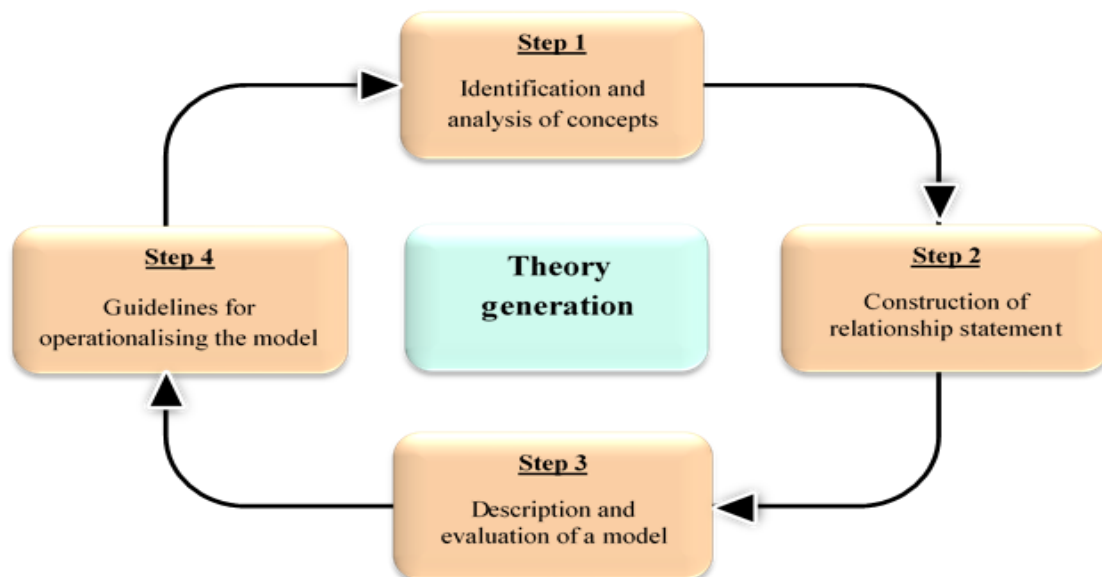


Figure 1. 3 Theory generation by Chinn and Kramer (53).

### 1.9.3 WHO healthy workplace model (2010)

The WHO healthy workplace model is a global, comprehensive framework that was developed after a systematic review of literature on healthy workplaces, to promote health and safety for employees at work (14,54). The purpose of this model is to create healthy workplace programs that can be used by any workplace of any size in any country based on their own culture (14). This model comprises four avenues of influence, namely: physical work environment, psychosocial work environment, personal health resources in the workplace and enterprise community involvement as shown in figure 1.4 below. This model emphasizes that in order to create a workplace that protects, promotes and support the complete physical, mental and social well-being of workers, four avenues of influence should be considered based on identified needs. This study used the WHO framework and model to identify and analyse concepts that guided the development of a model to facilitate a wellness program to ensure the well-being of health professionals in the state health facilities. The application of the model is done in Phase 1 (chapters 5 & 6), and the detailed explanation is discussed in chapter 6 of the thesis.

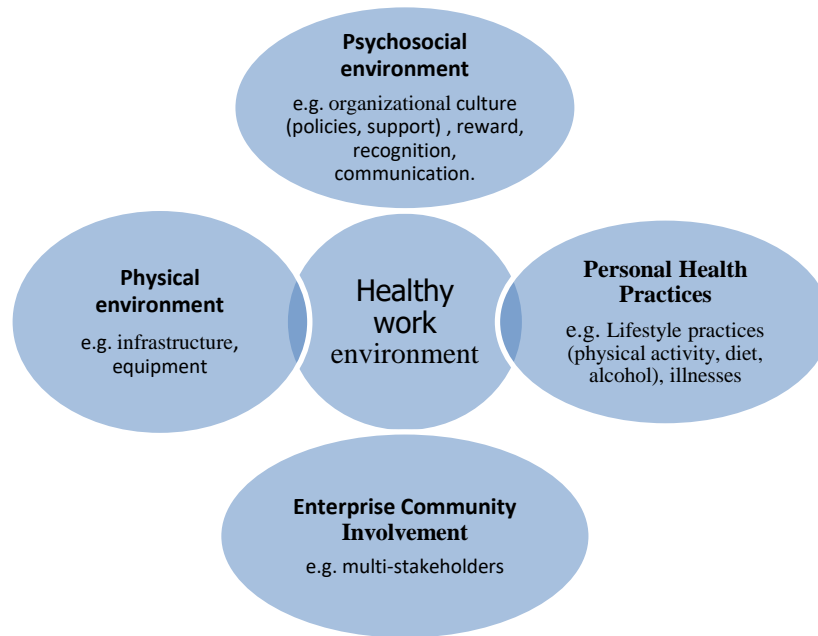


Figure 1. 4 Avenues of influence for a healthy workplace as adopted from WHO (14).

#### 1.9.4 Management theory by Fayol (1920)

The management theory developed by Fayol (51,52) is a model of how management interacts with personnel to productively manage staff and plan production efficiently. This theory consists of four managerial functions, namely planning, organizing, directing and controlling as shown in figure 1.5 below. The management theory is adopted to guide the development of a model to facilitate a wellness program for health professionals in the state health facilities of Oshikoto region. This theory is explained in detail in chapter 6 and applied in phases 2 and 3 (chapter 7) of the thesis.

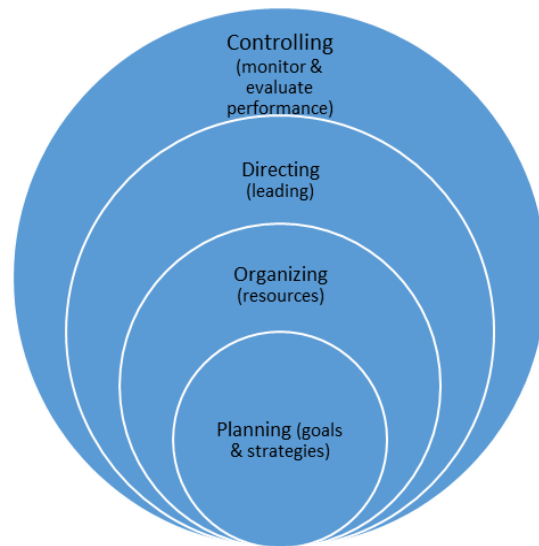


Figure 1. 5 Components of management functions by Fayol (51).

#### 1.9.5 Evaluation theory (2005)

Fawcett (55) developed six criteria for evaluation of nursing theories, namely: significance, internal consistency, parsimony, testability, empirical adequacy and pragmatic adequacy. Some of these criteria are differentiated for grand theories and middle range theories, but not differentiated according to the type of qualitative or quantitative approach used to develop the theory. This study used the evaluation theory to evaluate the model developed in accordance with the criteria proposed by Fawcett, to address the questions as described in chapter 7.

#### 1.10 RESEARCH DESIGN AND METHODS

A mixed method using convergent parallel design was used (45) as shown in table 1.1 below. Convergent parallel design was used in this study to obtain a more comprehensive understanding of the facilitation of a wellness program for health professionals in the selected state health facilities (44). For the quantitative part, a non-experimental,

descriptive and cross-sectional design was used, while for the qualitative approach, an exploratory, descriptive and contextual design was used. The convergent design allowed the researcher to collect both quantitative and qualitative data concurrently but analyse the two data sets separately and independently (45), with the overall intention to link up the results from the two databases (44).

Table 1. 1: Research design

Phase	Objectives	Methodology
Phase 1: Identification and analysis of concepts	1. Assess the state health facilities in the Oshikoto region regarding the facilitation of a wellness program.	Quantitative and descriptive, Population: All state intermediate and district health facilities in Oshikoto Region (n=3) purposively selected. Instrument for data collection: Checklist Analysis: Descriptive statistics Validity: Face and content validity Reliability: Pilot study conducted
	2. Describe the knowledge, practices and experiences of health professionals concerning facilitation of a wellness program in the health facilities.	Quantitative, descriptive, and cross-sectional Population: Health professionals Probability stratified random sampling nurses n=147, convenience sampling doctors n=17 (n=164) Instrument for data collection: Self-administered questionnaire Analysis: Descriptive statistics, cross tabulation, ordinal regression using SPSS version 25. Validity: Content, external, construct and face validity. Reliability: Piloting, Cronbach's alpha testing
	3. Explore and describe the perceptions of health professional managers concerning facilitation of a wellness program in the health facilities.	Qualitative, exploratory, descriptive and contextual Population: Health professional managers Sample and sampling: All-inclusive sampling (n=6) (SMOs=2, PMO=1, Nurse managers=3). Instrument for data collection: Interview guide, audio recorder and field notes Analysis: Thematic analysis Trustworthiness: Credibility, transferability, confirmability and dependability.
	Merging of findings for objectives 1, 2 & 3	Procedure for merging of objectives 1, 2 & 3 was conducted as presented in Table 5.2: (1) findings, (2) concluded statement, (3) identified concepts and (4) main central concepts. Findings are: <ul style="list-style-type: none"> <li>• Resource challenges</li> <li>• Organizational challenges</li> <li>• Psychosocial challenges</li> <li>• Physical challenges</li> <li>• Personal challenges</li> </ul>
	4. Analyse the concepts that guide the development of a model.	Part I: Identification of concepts: Concepts identified were classified using WHO framework and model (14): <ul style="list-style-type: none"> <li>• Psychosocial environment</li> <li>• Physical environment and</li> <li>• Personal environment</li> </ul> (See Table 5.2) Part II: Analysis of concepts: <ul style="list-style-type: none"> <li>• Identified concepts were defined</li> <li>• Practice theory by Dickoff et al. (49) was used to describe concepts.</li> </ul>

Phase 2: Construction of relationship statements	5. Construct the relationships statement of the central concepts that guide the development of a model.	<ul style="list-style-type: none"> <li>The relationships among concepts derived from empirical data, theories and model were specified.</li> <li>Practice-oriented theory(49), Fayol’s Management theory (51), and WHO framework and model (14) were adopted.</li> </ul>
Phase 3: Description and evaluation of the model	6. Describe and evaluate the model for health professionals in the state health facilities.	Part 1: Model description: <ul style="list-style-type: none"> <li>Five methods of model description by Chinn and Kramer’s (53) theory generation were used.</li> <li>Other theories adopted to guide description: practice theory of Dickoff et al.(49), and Fayol’s Management theory (51).</li> </ul> Part 2: Model evaluation: Fawcett’s (55) six evaluation criteria were used.
Phase 4: Description of guidelines for operationalizing	7. Describe the guidelines for operationalizing of such a model.	Guidelines were developed in terms of objectives, activities and strategies.

This study was based on four phases of theory generation namely: identification and analysis of concepts (phase 1), construction of relationship statement (phase 2), description and evaluation of the model (phase 3) and development of the guidelines for operationalizing the model (phase 4)

#### 1.10.1 Phase 1: Identification and analysis of concepts

The concepts were identified from the findings of the three objectives tallied to the three populations of the study: the health facilities, the health professionals and the health professional managers. Methods for each objective are shown in Table 1.1. A checklist was used to collect quantitative data from Onandjokwe Intermediate Hospital, Omuthiya District Hospital and Tsumeb District Hospital, to assess the situation with regard to the facilitation of a wellness program. A self-administered questionnaire was also used to collect quantitative data from health professionals concerning their knowledge, practices and experiences on facilitating a wellness program in the health facilities. In-depth face to face individual interviews were conducted to explore and describe the perceptions of health professional managers about the facilitation of wellness program in the health facilities.

The findings from the three objectives were then merged to develop results and interpretations to expand the researcher's understanding (44), as indicated in chapter 5. Concept identification is guided by the WHO framework and model (14). This is followed by a detailed examination of concepts as described in chapter 6 that guided the development of a model. The practice oriented theory by Dickoff et al. (29), and the WHO framework and model (14) were adopted to guide conceptualization. Concepts from the findings based on research objectives were described in terms of agent, recipient, context, dynamics, procedures and terminus. The detailed description of the research methodology is provided in chapter 3 of the thesis.

#### 1.10.2 Phase 2: Construction of relationships statement

Walker and Avant (56) state that a relational statement declares a relationship of some kind between two or more concepts. The Practice Oriented theory by Dickoff et al. (29), the WHO framework and model (14), and Management theory (51) were adopted to guide the construction of relationships statements as illustrated in figure 3.2 and described in Chapter 6 and 7. That formed the basis for the development of a model for the facilitation of a wellness program for health professionals in the state health facilities. Construction of relationship statements provided the basis for model description.

#### 1.10.3 Phase 3: Description and evaluation of the model

In this study, a model was developed in line with Theory generation by Chinn and Kramer (30) methods, namely: overview of the model, purpose, structure (assumptions, definition of concepts, relation statements and nature of the structure of the model), process description and evaluation. Details are presented in Chapter 7. The WHO healthy workplace model (14) and Management theory (51) were adopted to guide the

development of a model. The model was evaluated using set standard evaluation criteria as supported by Fawcett (55) namely: significance, internal consistency, parsimony, testability, empirical adequacy and pragmatic adequacy.

#### 1.10.4 Phase 4: Description of guidelines for operationalizing

This model is to be implemented by the MoHSS's health facilities, health professionals and all stakeholders involved in the facilitation of a wellness program for health professionals in the state health facilities. The guidelines were developed to direct the effective implementation of a psychosocial, physical and personal environment model that would facilitate the wellness program for health professionals in the state health facilities. Details are discussed in Chapter 7.

#### 1.11 ETHICAL CONSIDERATIONS

Approval was sought from the University of Namibia Research Ethics Committee [UREC]. Permission to conduct the study was obtained from the Ministry of Health and Social Services [MoHSS], the Regional Director of Oshikoto as well as from the management of each state health facility in the Oshikoto region.

A completed informed written consent forms (refer to Annexures H and I), which explained the purpose, objectives, methods, expectations and duration, was obtained from each participant. The health professionals' rights to self-determination were explained to them; that they had the right to decide whether or not to participate in the study. Participation was voluntary; nobody was forced to participate and participants were given the opportunity to withdraw from the study at any time without any punishment (57). Anonymity was maintained throughout the study; codes were used instead of personal details; no identity was revealed and information was not linked to participants.

Participants were fairly selected based on the problem under study and the inclusion criteria as well as exclusion criteria, but not on any other grounds. They were treated fairly and equally before, during and after participation in the study. Participants were assured that the information would be treated with strict confidentiality and data would be captured on a personal computer which has a personal password. Information would only be released when consent had been obtained from MoHSS.

Participants' right to protection from discomfort and harm was ensured (57). Full disclosure of the nature and benefits of the study was explained to participants. Privacy was ensured by using a private room to avoid harm to participants during interviews. Participants were made aware of their rights not to answer a question if they felt uncomfortable with it.

#### 1.12 DEFINITION OF THE KEY CONCEPTS

The key concepts used in the study: "A model for health professionals to facilitate wellness program in the health facilities of Oshikoto region, Namibia" are defined below.

- **Model:** A model is described as a symbolic depiction of reality that provides a schematic representation of certain relationships among phenomena, and it uses symbols or diagrams to represent an idea (57). Chinn and Kramer defined a model as a symbolic representation of an empiric experience in the form of words, pictorial or graphic diagrams, mathematical notations, or physical material (53). Furthermore, a model helps one to define and guide specific research tasks or provide an organised framework. It also helps to structure the way one can view a situation, event or group of people (57). According to Burton (14), a model is an abstract representation of the structure, processes and system of a healthy workplace concept. In this study, a model

is a theoretical representation of a proposed structure intended to facilitate a wellness program for health professionals in the state health facilities of Oshikoto region.

- **Health professionals:** Health professionals are human resources that are trained to diagnose, treat, and prevent human illnesses, injury and other physical and mental impairments in accordance with the needs of the people they serve (58). Furthermore, they advise on and apply preventive and curative measures, and promote health, with the ultimate goal of meeting the health needs and expectations of individuals and the community at large. In this study, the term ‘health professionals’ is used to refer to doctors and nurses providing preventive and curative care to patients and clients; and working in the three health facilities (Onandjokwe Intermediate hospital, Omuthiya and Tsumeb district hospitals) of Oshikoto region in Namibia.
- **Facilitate:** Facilitate is defined as to make easier or assist the progress of something (59), or to make something possible (60). In addition, to facilitate is to help people deal with a process or reach an agreement or solution without getting directly involved in the process and or discussion (61). In the context of this study the term ‘facilitate’ refers to provision of assistance to health professionals in the state health facilities to deal with and expedite a process of establishing a wellness program that would promote their psychosocial, physical and personal well-being.
- **Wellness program:** A wellness program is an established plan and course of action to promote awareness of positive physical and mental health (62). In this study, the term ‘wellness program’ refers to an organised program designed to support and assist health professionals and promote their psychosocial, physical, emotional, financial and spiritual well-being in the state health facilities of Oshikoto region.

- **Health facilities:** Health facilities are places that provide healthcare, including hospitals, clinics, outpatient care centres, specialized care centres such as birthing centres and psychiatric care centres (63). In this study, health facilities refer to the three state hospitals where health professionals provide healthcare to patients and clients in Oshikoto region. These are Onandjokwe Intermediate Hospital, Omuthiya and Tsumeb district hospitals, which were reported to be understaffed relative to their workload (15).

### 1.13 PRESENTATION OF THE CHAPTERS

This study comprised eight chapters as presented below:

**Chapter 1: Introduction and background of the study:** This chapter introduces the problem and clarifies what prompted the researcher to choose the problem. The context, purpose and objectives as well as significance of the study, are also explained. Furthermore, the chapter discusses the paradigmatic perspective and theoretical basis of the study. Finally, the research methodology and ethical considerations were also highlighted and key concepts were defined.

**Chapter 2: Literature review:** The chapter reviews the literature relevant to the study topic. First, the chapter highlights the purpose and scope of the literature review. Thereafter, the discussion focuses on the background as well as the practice of wellness programs from a global, Africa and Namibia point of view. The legal framework of wellness programs and practices are described. Guiding theories for the development of a model namely: theory generation, practice theory, management theory and the WHO framework and model are also discussed. An overview of the state health facilities with regard to the facilitation of a wellness program, knowledge, practices and experiences of

health professionals in terms of the facilitation of wellness program are discussed. Finally, the review focuses on the perceptions of health professional managers concerning the facilitation of a wellness program in the health facilities.

**Chapter 3: Research methodology:** This chapter discusses the approach used in the development of facilitating psychosocial, physical and personal environment model that would facilitate a wellness program for health professionals in the state health facilities. The reasoning strategies used in the study are described. The process of developing a model through identification of concepts that includes designs and methodologies of convergent mixed method (quantitative and qualitative methods) is discussed. The discussion emphasises the design, study population, sample and sampling technique, research instruments, data collection, data analysis as well as measures to ensure validity, reliability and trustworthiness. Analysis of identified concepts was also done. In addition, other phases of the study that guide the development of a model including the phase 2 construction of relationships statement, phase 3 description and evaluation of the model as well as phase 4 description of guidelines for operationalizing the model are also discussed. Finally, the ethical considerations are discussed.

**Chapter 4: Presentation and discussion of quantitative findings:** This chapter presents results and discussion of the quantitative analysis and discussion that address the first two objectives which are: assessment of the state health facilities in Oshikoto region regarding the facilitation of a wellness program; as well as a discussion of the knowledge, practices and experiences of health professionals with regard to the facilitation of a wellness program in the health facilities. The presentation and discussion of results covers demographic information, provision of wellness interventions in the state health facilities,

policies and environmental support, health professionals' knowledge on facilitation of wellness programs, health professionals' practices regarding facilitation of wellness programs; and health professionals' experiences regarding management support and interests with regard to facilitation of wellness program. The concepts were identified based on the findings of the study. The results are presented in tables and charts.

**Chapter 5: Presentation and discussion of qualitative findings:** The qualitative findings generated through face to face individual interviews on perceptions of health professional managers concerning the facilitation of a wellness program in the state health facilities are presented. Findings are presented in a table of three main themes, three themes and sub-themes. The three main themes are: participants' perceived challenges that affect the facilitation of a wellness program for health professionals in the health facilities, participants' express knowledge regarding the facilitation of a wellness program in the health facilities; and participants' recommended approaches to facilitate a wellness program for health professionals in the health facilities. The three themes: psychosocial challenges, physical challenges and personal challenges are discussed with supporting verbatim quotes from participants and literature. The chapter concludes with merging of findings and concluding remarks from sub-objectives 1, 2 and 3 for both quantitative and qualitative analysis that led to the identification of central concepts.

**Chapter 6: Definitions, classification and construction of the relationship between concepts:** This chapter focuses on the analysis of central concepts which are the basic building blocks in the development of a model. The background of concepts identification, clear definitions of the structure and uses of concepts in the process of model development; as well as classification of concepts are described. The construction of the

central statement that precisely reflects the relationships between the concepts is also discussed. The chapter further describes the relationship statements. Further descriptions focus on the six elements of Practice Oriented theory by Dickoff et al. (49) and the WHO healthy workplace framework model (14) which were adopted to classify the concepts identified from the findings of the study. The Management theory by Fayol (51) is described and its application to the study is elucidated. The chapter concludes with the proposed structure for the model development.

**Chapter 7: Description of the structure and process, evaluation of the model and guidelines for operationalization of the model:** The description of the facilitating psychosocial, physical and personal environment model, to facilitate a wellness program for health professionals in the state health facilities of Oshikoto region in Namibia is presented in this chapter. The model description is done by relating the overview, purpose and structure of the model. The assumptions, theoretical definitions of central and related concepts, relationship statements and nature of the model are also described. The process of model description as per the theory espoused by Chinn and Kramer (53) guided by Dickoff et al.'s (49) six elements of practice oriented and management theory by Fayol (51) is extensively discussed in relation to the three phases of the model. Furthermore, an evaluation of the model according to Fawcett's (55) criteria for evaluation of theories is also described. Finally, the guidelines to operationalize the model are described in relation to three phases of the model, namely needs assessment, managing and maintaining a conducive environment, and facilitation of a wellness program.

**Chapter 8: Conclusion, contributions, limitations and recommendations of the study:** This chapter presents the conclusion according to the objectives of the study and

the four phases of the study guided by theory generation of Chin and Kramer (64). Contributions to the body of knowledge are outlined, limitations of the study in terms of methodology, literature, testing and implementing are identified and recommendations for the stakeholders, MoHSS, management and further research are highlighted.

#### 1.14 SUMMARY OF THE CHAPTER

In this chapter the researcher presented the introduction, background of the problem, context of the study, statement of the problem, purpose and objectives, significance of the study, paradigmatic perspectives, theoretical basis of the study, a brief research methodology, ethical considerations, definition of key concepts and an outline of the chapters. In the next chapter, relevant literature will be reviewed and discussed.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 INTRODUCTION

The previous chapter focused on introduction and background of the study. This chapter focuses on a review of relevant literature. It discusses the purpose, scope of the literature review, background of wellness programs, theories in relationship with model development in the workplace, Acts and policies on the facilitation of wellness program at the health facilities, knowledge, practices and experiences among health professionals regarding facilitation of a wellness program; and perceptions of health professional managers about facilitation of a wellness program.

A literature review involves discovering, reading, understanding and forming conclusions about the research and presenting it in an organised manner (57). Furthermore, literature reviews are intended to provide an overview of sources the researcher has discovered while exploring a particular topic and to demonstrate to the readers how the research fits within a larger field of study (65). In this study, the researcher conducted a literature review related to the purpose and objectives of the study. The literature review aided the researcher to determine how the problem has been researched to date in relation to what needs to be done concerning wellness programs for health professionals in the health facilities.

#### 2.2 PURPOSE OF LITERATURE REVIEW

A literature search reveals all relevant knowledge and research methods associated to the research topic or research question, and thus makes a vigorous input to the relevance and

thoroughness of research (66). This process helps to reveal any gaps that are in the existing literature and point the way in fulfilling a need for additional research (65).

Literature review enables the researcher to identify unanswered questions in the existing literature. The literature review in this study was aimed at finding out information on: 1) the background of wellness programs, 2) practice of wellness programs in the workplace, 3) the legal framework and practice of wellness programs, 4) guiding theories for the development of a model, 5) overview of the state health facilities with regard to the facilitation of wellness programs, 6) knowledge, practices and experiences of health professionals about the facilitation of wellness programs and 7) perceptions of health professional managers concerning wellness programs. Overall, the purpose of this literature review is to explore evidence that facilitates the development of a well-coordinated and supportive wellness program for health professionals in the state health facilities of Oshikoto region.

The review assisted the researcher to understand the extent of what had already been done in relation to what needs to be done regarding facilitation of wellness programs for health professionals in the health facilities. The initial literature search revealed that there is no wellness policy in the Ministry of Health and Social Services. This has affected the well-being and performance of health professionals in the state health facilities.

### 2.3 SCOPE OF THE LITERATURE REVIEW

A comprehensive literature review was conducted to compare, contrast, reveal gaps and discuss major debates in the facilitation of a wellness program for health professionals in the health facilities. The scope of this literature review describes how the literature search

was conducted, the literature search strategy used, inclusion criteria and the keywords used for the literature search.

- **Literature search strategy**

The literature search strategy was developed with help from the University of Namibia (UNAM) library staff to identify relevant literature, sources to be searched (list of databases) and to identify keywords used in the literature search (67). The relevant literatures were identified from the following databases: PubMed, Google Scholar, HINARI, Science Direct and SAGE Journals. Keywords were identified representing the main concepts of the research topic to guide literature search. Different standardized search terms that describe the similar concepts were also identified and used to allow efficient and advanced searching. These were assigned to individual database in searching relevant literatures and to help identify potential terms and phrases to include in a search (67). These are Medical subject headings (MeSH) in PubMed. The MeSH terms and key concepts were used to identify relevant articles from the databases to find information regarding the concepts of the study. Search terms were combined in search strategies using Boolean operators 'AND', 'OR' and 'NOT' guided by the key words during searching of electronic databases, to narrow, broaden and restrict the exploratory search of the literature. Search filters were also used to search the literature by date of publication that helped to reduce the number of references retrieved by search.

The researcher developed a supplementary and comprehensive data search strategy to collect all available pertinent literature to the research questions. A progressive search was conducted for grey literature, unpublished documents and conference papers. The UNAM library websites enabled the researcher to identify and access the research articles. Search

in various published and unpublished articles were also helpful. Grey literature to review government / public health acts and policies was used. The government documents and reports regarding wellness program formed part of the source of information for the study. An additional literature search on hard copies was conducted in the UNAM library to collect all important information that was not available on the e-resources.

- **Inclusion criteria**

To avoid excessive amount of literature, the researcher has focused on the literatures that were published from 2010 till to date because wellness programs went global since 2010. The articles related to the research topic and objectives were all included guided by keywords and standardized search terms. The researcher included studies researched in English following either qualitative, quantitative or mixed methods. All the studies that focused on health professionals' (doctors and nurses) perceptions, knowledge, practices and experiences on wellness programs in the health facilities were included. The researcher also included studies conducted in both developing and developed countries

- **The keywords for the literature search**

Key words are central to the research topic and utilized to search a database (68) and they are valuable for searching pertinent literature that will answer the research questions. The researcher identified the keywords of health professional, wellness program, and health facilities that are focused on the areas of the study as defined in Chapter one that helped the process of literature search. Data search strategy using key words was conducted and yielded a wider range of sources, even though many were excluded as incongruous to answer the research questions. The university library staff assisted with the additional standardized search terms related to the keywords. The standardized search terms (MeSH)

of health personnel, nurses, doctors, health promotion program, hospitals were identified for efficient search.

#### 2.4 BACKGROUND OF WELLNESS PROGRAMS

Wellness programs are designed to help employees improve their health and healthy lifestyle (5). In addition, wellness programs raise awareness, provide information and education, and offer incentives that encourage workers and their families to adopt healthier lifestyles (25). Furthermore, these programs help to reduce chronic illnesses. Similarly, these programs could improve the health of employees and at the same time reduce healthcare costs for employers and improve worker productivity (69). Wellness programs can have a positive influence on a number of health behaviours, improve biometric measures like blood pressure and cholesterol levels and can improve financial measures vital to employees (70).

The first wellness centre was opened in California; and since then, wellness programs have become increasingly popular over the past decades (14). The Declaration on Occupational Health for All was adopted at a conference held in Beijing in 1994, which underlines the fundamental rights of every worker (71). Furthermore, the WHO and ILO emphasized the importance of developing policies and programs promoting decent work for employees. This supports the Sustainable Development Goals (SDGs) 3 and 8, which focus on good health and well-being for all; and decent work and economic growth respectively (23). The WHO also initiated the Health Promoting Hospitals (HPH) approach in which hospitals attempt to advance the well-being of patients, staff, and communities by integrating health promotion through wellness programs (14).

In 2010, wellness programs went global, leading to the establishment of the Global Wellness Institute in 2014 (14). Wellness programs were introduced globally to promote employees' health, increase productivity and job satisfaction, and to reduce absenteeism and healthcare costs (14,72). There is evidence indicating that most employers in the healthcare arena are seen as doing too little to promote wellness among their own employees (5). However, employers are required by law to provide employees with a safe and healthy working environment (30).

Dunn, the founder of wellness, highlighted that high level wellness is an integral method of functioning that is oriented towards maximizing the potential that the individual is capable of (73,74). Therefore, wellness requires that the individual maintain a continuum of balance and purposeful direction within the environment where he is functioning. He further emphasized that the environment where a person lives has an impact on one's wellness, rather than physical, psychological and spiritual dimensions. Wellness can be used interchangeably with well-being (75).

Holbrook (76) emphasized five best practices that ensure effective participation in employee wellness programs, namely: leadership involvement and commitment (77); consistent, frequent and timely communication; integration approach to ensure shared vision, goals and involvement of employees in joint planning and shared accountability; environmental influences that support positive behaviour change; as well as data collection and evaluation to determine what to measure, mechanisms and to communicate progress. The Wellness Council of America (WELCOA) (4) emphasized that it is vital to gather information on employees' health interests and risks to guide in the process of

wellness program development. Furthermore, consistent evaluation of the outcome allows institutions to determine whether the goals have been achieved.

Unlike the many noticeable benefits of wellness programs, most employers have yet to face challenges regarding starting and maintaining wellness programs in the workplaces. Schreiner (78) identified the following barriers that hinder the success of wellness programs, namely: insufficient time, lack of interest in wellness programs, undefined purpose and goals of wellness programs and funding challenges that would affect the cost of starting a wellness program. A report by the Institute for Health and Productivity Studies (70) highlighted that many wellness programs are ineffective due to under-investment, poor design, and poor implementation practices.

## 2.5 PRACTICE OF WELLNESS PROGRAM IN THE WORKPLACE

The practice of wellness programs is discussed from the worldwide, Africa and Namibia context.

### 2.5.1 Worldwide

According to the Global Wellness Survey (25), in 2010 wellness programs were most prevalent in North America where 74 percent (n=1248) of surveyed employers were offering these programs compared to other regions in the world, with 41 to 49 percent of employers providing wellness programs for their workers. Furthermore, this survey found that the top business motivation for wellness programs in Canada, Europe and Latin America was to improve workforce morale and engagement while for United States the motivation was to reduce health care or insurance cost (25). A Global Survey on Health Promotion, Workplace Wellness and Productivity Strategies (79) reported that in 2014

more employers worldwide offered wellness programs to their employees, and United states was the highest compared to the other regions in the world.

A survey conducted by Workplace Wellness Initiatives in low and middle-income countries (80) reported that 31 countries had 40 wellness programs implementing 240 different interventions. These include India, Iran, Philippines, Brazil, Bolivia and some African countries. The report further highlighted factors that motivate participation such as encouragement by presence of senior staff members, incentives, high support from top level management and effective communication (80). In their study, Hoert, Herd and Hambrick (81) found that employees experiencing more leadership support reported high participation in wellness program and low stress. The WELCOA (4) highlighted that a commitment from the top level of management and supportive environment encourages employees to participate in wellness programs.

Countries such as India and Burundi reported that funding and fundraising to expand their wellness programs were the main challenges hindering implementation of wellness programs (80). Vietnam, on the other hand, reported that remote location and unavailability of a qualified doctor were the main challenges in the implementation of wellness programs (80).

### 2.5.2 Africa

Despite the establishment of Wellness Africa (82) it was reported that the provision of wellness programs in Africa, especially in Southern Africa, seemed to be low compared to other countries in the world (14). Botswana initiated a Workplace Wellness Program for healthcare workers in 2007, to ensure that they cope with the physical and emotional demands of their jobs, which had been exacerbated by HI/AIDS (33). However, in 2009

evidence showed that only 32% of African countries initiated some form of wellness programs for their workers compared to other countries in the world (14). Similarly, literature also revealed the absence of workplace wellness programs, specifically for HIV/AIDS infected or affected nurses (62).

The Sustainable Development Goals (SDG) (23) report indicated that from 2013 to 2018 all of the developing countries had fewer than 10 medical doctors per 10 000 people, and 98 per cent had fewer than 40 nursing and midwifery personnel per 10 000 people. In addition, WHO stated that the current trends of health workforce recruitment and retention in the African region will be significantly insufficient to tackle the health needs of the population by the year 2030 (83). A study done in Nigeria reported that there is a shortage of nurses, which causes an enormous burden to the healthcare system, population health; and nurses health and well-being (83). These reports highlight the need for wellness programs for health professionals in Africa, which may hold potential for improving their health and well-being.

It was reported that the top motivation for wellness programs in Africa was improving workforce morale and engagement, improving productivity, reducing absenteeism, and improving workplace safety (25). In their report Roberts, Banerjee and Smofsky (80) indicated that several countries such as South Africa, Malawi, Kenya, Sudan, Zimbabwe, Nigeria, Liberia, Burundi and Togo developed wellness programs targeting communicable and non-communicable diseases (NCDs). However, NCDs were more likely to be targeted in upper-middle income countries, compared to the higher burden of communicable disease in low income settings (80). A critical review of literature on

employee wellness programs in Kenya found that the majority of studies done show positive health and financial impacts of worksite health promotion programs (9).

### 2.5.3 Namibia

In Namibia, employee wellness for public services is placed under the umbrella of Public Service Workplace Policy on HIV and AIDS (84), which is overseen by the Office of the Prime Minister (OPM). This policy is more focused on HIV and AIDS and its related problems in the workplace. In addition, the policy makes provision for the inclusion of opportunistic infections such as TB, sexually transmitted infections (STIs), lifestyle diseases and the general well-being of employees. As a result, in 2009, the OPM established an Employee Wellness, HIV and AIDS division to promote employee wellness, focusing on HIV and AIDS.

More broadly, this indicates that many aspects of employee wellness in the public service are highly under-represented in this policy and that employees' well-being needs to be addressed more comprehensively. This policy gives the impression that HIV and AIDS is the most important of all employee issues, which then limits the capacity with which a broad wellness program for public service can be implemented in Namibia.

A study done by Kaputu (85) exploring the implementation and management of employee wellness in the Namibian public service, focusing on the Ministry of Environment and Tourism as a case, reported that their wellness program was mostly ineffective due to lack of support from senior management, very low management involvement in decision making concerning employee wellness and underutilization of funds. This study further found that a uniform employee wellness program is needed in the Namibian public service. Another study done in three ministries in Namibia reported that more barriers to

participation in the wellness program were found compared to the motivating factors (86). This report further indicated that employees were motivated to participate in the wellness program by receiving rewards, getting time to rest and having an opportunity to network with other colleagues.

Another study done by Maletzky (86) among support staff (n=15) working in three government ministries on employee participation in workplace wellness programmes in the Namibian public service focusing on motivational factors and barriers found that employees were not participating in wellness programs due to the following factors: lack of interest in activities, work and time pressure, issues of trust and confidentiality, stigmatization, employee attitudes, communication backlogs, the program not being offered regularly and the qualification level of the wellness officer.

Although employee wellness is a legal requirement, where employers must create a safe working environment with adequate resources for the wellness of the employees, little seems to be done in Namibia. According to a report in The Namibian newspaper (87) health specialists have urged employers in Namibia to take mental health and wellness in the workplace seriously, because it can affect productivity. The report further stated that there should be clear policies that enforce wellness programs in the workplace in Namibia, to guide and protect both employers and employees.

## 2.6 LEGAL FRAMEWORK OF WELLNESS PROGRAM AND PRACTICE

Legal frameworks comprise a set of documents that include the constitution, legislation, regulations, and contracts (88). These laws provide for employee rights and privileges that ensure decent work every day. Legal frameworks define the rules that govern the rights and responsibilities of governments, companies and citizens in response to the needs of

workers (89). The facilitation of a wellness program for health professionals in the health facilities is informed by International Labour Organization (ILO) conventions (90), the Namibian Constitution of 1990 (28) and the Labour Act number 11 of 2007 (29,30) as well as the National Health Policy Framework (NHPF) (31) that regulate the occupational health and safety measures.

#### 2.6.1 WHO/ILO joint effort on Occupational Health and Safety

The ILO is a specialized agency of the United Nations which was established in 1919 (90). Since then, the ILO has brought together governments, employers and workers of 187 member states; to set labour standards, develop policies and devise programmes promoting decent work for all employees (90). This was done in an effort to improve workers' health, safety and well-being (14). Furthermore, the ILO aims to promote employees' rights in the workplace, encourage decent employment opportunities, enhance social protection and strengthen dialogue on work-related issues (91). Also, the ILO stresses the importance of cooperation and encourages tripartism between governments, employers and workers' organisations in fostering social and economic progress in order to encourage and promote social dialogue between trade unions and employers in formulating and implementing national policies on social, economic and other issues (91).

Since 1919, the ILO has approved and published about 190 conventions related to various issues regarding working conditions and workers; which member states are expected to ratify and make formal commitment to ensure implementation thereof (14). Furthermore, the ILO in collaboration with the WHO passed and approved the Occupational Health and Safety convention 155 that required member states to establish national policies on occupational health and safety, dealing basically with the physical work environment (14).

It was reported that many countries have identified Occupational Safety and Health (OSH) as one priority in their decent work country programme in response to occupational accidents, injuries and diseases (92). Moreover, in 1994 a Global Declaration of Occupational Health for All was signed, which expanded occupational health to include not only health and safety but also factors such as psychosocial stress. Member states were encouraged to increase their occupational health activities (14). More recently, the Promotional Framework for Occupational Health and Safety Convention 187 was also approved to strengthen the previous conventions. Despite the fact that conventions were approved, many developed countries have ratified a small number while some developing countries have ratified many of them (14). Namibia, as a member of the ILO, also ratified 17 ILO conventions including the occupational health and safety conventions (90).

#### 2.6.2 Constitution of Namibia 1990

The Republic of Namibia adopted a Constitution in February 1990, which was amended on 24 December 1998. Chapter 11, article 95 of the Namibian Constitution emphasizes the promotion and maintenance of the welfare of the people by adopting inter alia, policies aimed at the membership of and adherence to the International Labour Organization (ILO); and action in accordance with the international conventions and recommendations of the ILO (28). The ILO requires member states to establish national policies on occupational health and safety, dealing with the physical work environment; and to establish legislative and infrastructure support to enforce health and safety in the workplace (14). Accordingly, the ILO requires all employers in member states to establish occupational health services for all workers in the private and public sectors (14). Thus, it

is the responsibility of the government to prevent illnesses and maintain public servants' health.

### 2.6.3 Labour Act No.11, of 2007

Namibia has implemented the Labour Act number 11 of 2007, to give effect on the constitutional commitment to promote and maintain the welfare of the people of Namibia, as stipulated in Chapter 11 of the constitution (article 95) (29). Chapter 4 of the Act stipulates the duty of the employer to ensure the health, safety and welfare of employees; by providing a working environment that is safe, without risk to the health of employees; and has adequate facilities and arrangements for the welfare of employees (29).

In addition, Occupational Health and Safety in Namibia is governed by the Labour Act in conjunction with Regulation 156, relating to the health and safety of employees at work (29). The regulation stipulates clearly that an employer shall, in consultation with the workplace safety representatives, regularly prepare and review a written policy and programme [health and safety policy and programme] on the protection of the health and safety of employees (30). The regulation further indicates that the health and safety policy should specify the aims and objectives, the general approach, means and measures to be adopted in order to achieve the objectives of the policy (30). The health and safety programme is aimed at improving the working conditions in the workplace, including but not limited to health and safety awareness programmes and training programmes as well as the procedures and methods to be adopted to implement the programme and policy (30).

#### 2.6.4 National Health Policy Framework 2010 - 2020

Health, safety and social well-being are fundamental human rights. The National Health Policy Framework [NHPF] was formulated by the Ministry of Health and Social Services [MoHSS] in Namibia for the period 2010 to 2020, as a continuation of efforts that started during the time of independence (1990). NHPF has been informed by Vision 2030 [V2030] goals, the National Development Plan [NDP] and Sustainable Development Goals [SDGs] (31). The NDP is a strategic plan aimed at reaching the goals set in V2030. Vision 2030 is aimed at creating an industrialised nation and improving the quality of life of the Namibian people to the level of their counterparts in the developed world by 2030 (31,93). This is in line with the SDG3 that emphasizes good health and well-being for all by 2030 (23). However, to achieve these goals, the government is required to ensure a well-developed and a healthy workforce for productivity.

Chapter 4 of the NHPF focuses on health and environment, specifically on water, sanitation, waste management, food safety and occupational health (31). Consequently the ultimate goal is to attain a level of health and social well-being by all Namibians, which will enable them to lead economically and socially productive lives (31). This will be achieved through cost-effective developmental social welfare and PHC approach in collaboration with other sectors, communities, individuals and partners (31). This policy further emphasizes that all Namibians will be encouraged to actively participate in activities which promote good health and prevent ill health at the individual, family and community level. Although the legislation emphasizes that health, safety and well-being are fundamental human rights for every Namibian; little seems to have been done

regarding facilitation of wellness programs for health professionals in the state health facilities of Oshikoto region.

## 2.7 GUIDING THEORIES FOR THE DEVELOPMENT OF A MODEL

In this study, three theories and one model were adopted; namely: Practice Oriented theory, Theory generation, WHO framework and model and Management theory.

Descriptions of these theories are presented below.

### 2.7.1 Dickoff, James and Wiedenbach (1968) Practice-Oriented theory

Dickoff et al. (49) initiated the practice oriented theory. These authors indicated that a philosophy is significant in the generation of theory. They further specified that a nursing theory should have three ingredients which are: goal-content, prescription and survey list. Particularly, a nursing theory must specify a goal content, and consider a directive of action to realize the prescription (49), while a survey list focuses on certain significant aspects of activity and to certain dimensions, knowledge or other resources relevant to activity (49). One method to effectively use the survey list is to arrange the significant aspects of activity in accordance with the six significant aspects of activity, namely: agent, recipient, context, terminus, procedure and dynamics as illustrated in chapter 1. A nursing theory should contain a section corresponding to each of these six aspects. In turn, the aspects of activity should correspond to the following questions (49):

- Agency – who might be agents of activity that realize the nursing goal? Or who performs the activity that realizes the nursing goal? (considering internal and external resources)
- Recipient- who receives the activity of any other agent that realizes a nursing goal? Or who is the recipient of the activity?

- Context – in what context is the activity performed? (Both physical and non-physical constitute framework or context).
- Terminus – what is the end result of the activity?
- Procedure – what is the guiding procedure, technique or protocol of the activity? (Steps to be taken towards some accomplishment).
- Dynamics – what is the energy source for the activity, whether chemical, physical, biological, mechanical, or psychological?

These can serve as an organizing principle for a survey list that can function along with goal content and prescription as the three ingredients of a situation producing theory (49). Feasible agents of nursing activity include professionals such as nurses, doctors, social workers, and ministers as well as non-professionals who might theoretically be deemed to be performing an activity that realizes a nursing goal (49). The Practice Oriented theory of Dickoff et al. (49) was used to conceptualize the findings of the study as described in chapter 6.

#### 2.7.2 Chinn and Kramer's theory generation (2011)

Chinn and Kramer (53,64) developed the theory generation method. They further pointed out that theories are developed through empirical knowledge development, based on a systematic, scientific approach to discover a real-life phenomenon being studied. Empirical knowledge refers to knowledge based on personal observation and experience (53). Empirical knowledge comprises three dimensions, namely critical questions, creative processes and formal expressions (53,64). Empirical knowledge is developed through unique creative processes and it is catalyzed through critical questions such as "what is this?" and "how does it work?"(53,64). However, empirical knowledge should

not be separated from other patterns of knowing, for example, personal knowing, ethical knowing, aesthetical knowing, and emancipatory knowing (53) Through the process of empirical knowledge development, phenomena are conceptualized and structured into models and theories (53,64). Conceptualizing involves the creative process of making meaning, exploring a wide range of possible meanings for a concept and creating or designating a meaning that is relevant to the purpose (53).

Steps of theory generation are:

- identification and analysis of concepts
- construction of a relationship statement
- description and evaluation of a model and
- guidelines for operationalizing the model (as outlined in Chapter 1).

Structuring involves organizing concepts into a linguistic or visual structure in a way that represents them fully (53,64). Structuring and contextualizing involve identifying the assumptions of the theory, clarifying the context of the theory and designing a relationship statements (64).

From the perspective of the authors, theory is a creative and rigorous structuring of ideas (53). These ideas and concepts are the basic building blocks of conceptual frameworks such as typologies, models and theories (56). The concepts contained in the theory must be defined and they must have a logical relationship with each other to form a coherent structure or pattern (53). Chinn and Kramer (53) emphasized that the researcher should clarify the definitions of the model and the theory because these views constitute how they are developed. They further argued for a critical reflection on the methods used when

developing and using nursing knowledge. These authors defined empiric theory as a creative and rigorous structuring of ideas that projects a tentative, purposeful, and systematic view of phenomena (53). The theory generation method of Chinn and Kramer (53,64) formed the basis of the model development process for state health facilities to facilitate a wellness program for health professionals in the Oshikoto region.

### 2.7.3 WHO Framework and Model (2010)

The WHO framework and model is a global, comprehensive framework that was developed after a systematic review of literature on healthy workplaces; to promote health and safety for employees at work (14,54). The World Health Organization developed the WHO framework and model, in collaboration with the International Labour Organisation (ILO), experts, countries, international worker and employer representatives as well as Non-governmental Organizations (NGO) (14). The overall goal is to promote health, safety and well-being of employees in the psychosocial and physical work environment, personal health resources in the workplace and ways of participating in the community to improve the health of workers, their families and other members of the community (14).

Moreover, the WHO framework and model was developed with the aim of providing guidelines for the creation of a healthy workplace program that can be used by any workplace of any size in any country based on their own culture (14). An expression at the global situation tells that a lot of, probably most, enterprises, organizations and governments have either not understood the advantages of healthy workplaces, or do not have the knowledge, skills or tools to improve their situations (14). It was further stated that there is a general agreement among global agencies that the health, safety and well-

being of workers is of supreme importance to individual workers, their families, the community at large as well as the global economy.

The WHO framework and model facilitates the creation of a healthy workplace program.

It is comprised four avenues of influence which are: (14)

- Psychosocial work environment,
- Physical work environment,
- Personal health resources and
- Enterprise community involvement.

The WHO framework and model emphasizes core principles of leadership engagement based on core values and ethics as well as worker involvement; and the integration of healthy workplace initiatives in the organization, to ensure the success of healthy workplace programs and initiatives (54). Workplaces are guided by the 8 step process contained in the WHO framework and model (mobilize, assemble, assess, prioritize, plan, do, evaluate and improve) through a continual improvement process designed to create awareness, provide education and skills development opportunities, offer environmental support and assist with policy development (14,94). In this study, the WHO framework and model was used to classify the central concepts that guided the development of a model. This framework and model is outlined in Chapter 1 and its application is presented in Chapter 6.

#### 2.7.4 Fayol's Management theory (1920)

Fayol (known as the father of modern management) (52) introduced the following managerial levels: administrative, security, accounting, financial, commercial and

technical. The focus was on managerial activities such as planning, organizing, directing, coordinating and controlling. Fayol developed a management theory focusing on how management interacts with employees, which covers concepts in a broad way so that any organization can apply it (52). The four commonly accepted functions of management theory include planning and forecasting focusing on drawing up an action plan; organizing, which is aimed at establishing resources, directing activities and controlling to ensure conformity to the rules, instructions and objectives. The management functions form the basis of the management process. In this study, the Management theory by Fayol (51,52) was applied in phase 2 of model development, chapter 7. The detail description of its application is contained in chapter 6 of the thesis.

## 2.8 OVERVIEW OF THE STATE HEALTH FACILITIES WITH REGARD TO THE FACILITATION OF WELLNESS PROGRAMS

The WHO endorsed the Global Strategy on Occupational Health for All; which encouraged countries, with guidance and support from WHO and ILO, to establish national policies and programs with the essential infrastructures and resources for occupational health (14). In the same vein, the Global Plan of Action (GPA) on Workers Health was ratified for the period of 2008 – 2017 to move from strategy to action (14,95). The GPA on Workers Health provided a political framework for the development of policies, infrastructure, technologies and partnerships for linking occupational health with public health to achieve an optimal level of health for all workers (14). However, the GPA on Workers Health survey revealed that in one third of the surveyed countries, ministries of health had insufficient staff capacity to deal with workers' health; especially in South-east Asia and the Eastern Mediterranean Region (96).

According to the WHO/ILO joint effort on Occupational Health and Safety in Africa, it was found that many African countries were faced with barriers such as inadequate human resources, insufficient collaboration between ministries of health and labour, weak policies and insufficient budget to effectively develop and implement policies (14). Uchendu, Windle and Blake (83) in their study on perceived facilitators and barriers to Nigerian nurses' engagement in health promoting behaviours, found the following barriers amongst others: lack of policies and interventions to support health and well-being within healthcare institutions, inadequate infrastructure, poor access, low quality of hospital food and perceived lack of value accorded to nurses' health by employers.

In agreement with the above findings, Görgens-Ekermans and Brand (97,98) revealed that a work environment with insufficient resources and heavy workload are threatening the wellbeing of staff and may contribute to stress, emotional exhaustion and burnout. It is evident that the situation in the health facilities of developing countries is disconcerting due to lack of resources, high reported levels of stress, depression and health risks, lower nutritional habits and physical activity (8). In this study, the findings indicated that the following challenges hinder the facilitation of a wellness program in the state health facilities of Oshikoto region in Namibia: inadequate resources, inadequate provision of wellness interventions, unavailability of policy and health promotion programs, and irregular dissemination of information on wellness. Therefore, it is important for the government to formulate, implement, regulate and monitor health promotion policies.

## 2.9 KNOWLEDGE, PRACTICES AND EXPERIENCES OF HEALTH PROFESSIONALS CONCERNING THE FACILITATION OF WELLNESS PROGRAMS

Health professionals are expected to have adequate knowledge and to implement good practices with regard to the facilitation of a wellness program in the health facilities. They should also have good experience regarding management support that encourages them to participate in the facilitation of wellness program. Blake, Malik, Phoenix and Pisano (99) in their study titled “Do as I say, but not as I do: are generation nurses role models for health?”, found that most nurses had a high level of knowledge about the benefits of physical activity even though only less than half of the participants met the recommendations for levels of physical activity. Similar to Uchendu et al. (83), this study also indicated that nurses expressed that they have health related knowledge that serves as a facilitator for their practice; however, this does not automatically turn into commitment in to healthy eating and physical activity. Conversely, a similar study reported that many nurses lacked knowledge of national guidelines for a healthy lifestyle.

The result of a quasi-experimental study conducted by Jacques et al. (100) on wellness rooms as a strategy to reduce occupational stress among nurses in Brazil, indicated that participants reported an increase in the social support at work and advancement of knowledge (100). A study conducted in South Africa reported disequilibrium between the theoretical knowledge and practical realities of therapists by way of experiencing personal obstacles that hamper the self-management of their individual wellness (101). This study further revealed that participants had adequate knowledge on self-care and what it encompasses, yet expressed an inability to take care of themselves. This is similar to the

findings in this study, which revealed that the adequate knowledge score among health professionals was n=156 (95.1%) and poor practices score was n=52 (31.7%). These indicate that at times health professionals may find themselves in situations that require them to put other people's needs before their own. Therefore, employers in the healthcare arena should support health and well-being of the health professionals.

Chiou, Chiang, Huang and Chien (102) in their study on health behaviours and participation in health promotion activities among hospital staff in Taiwan stated that nurses attended lectures about stress more often than other health professionals but reported to have the worst health behaviors and lowest participation in health promotion activities of all occupational groups in the hospital. This study further indicated that only 38.8% (n=1730) of doctors and 26.5% (n=8386) of nurses reported more than three days per week of physical exercise exceeding 30 minutes. Similarly, a study in UK among 325 pre-registration nurses showed that only 45.98% of nurses met the recommended levels of physical activity (99). Their study further reported barriers to engaging in physical activity such as not having time (70.6%), cost of participation (57.4%), feeling tired (48.6%) and lack of motivation (36.4%). Blake et al. indicated that 18.8% of nurses were smokers, 76.8% did not consume five servings of fruits and vegetables per day, 53.9% ate food high in fat and sugar, while 57.2% had a standard drink containing alcohol more than twice a week (99). By contrast, a study conducted by Perry, Gallagher and Duffield (103) in Australia among 381 nurses found that 82% of nurses met the recommendations for physical activity. It was further reported that only 6.6% of nurses met both fruit and vegetable intake, 25.1% consumed full fat milk, more than one-third indulged in risky alcohol intake, and health monitoring and screening was less than desirable; with more

than 80% nurses indicating that they checked their blood pressure, around half checked their blood glucose while cholesterol and even fewer participants had undergone cancer screening (103). Their study further recommended that wellness programs should be implemented in hospitals, especially for nurses.

The results of an analytic review conducted by Lobelo and de Quevedo (104) on the evidence in support of physicians and healthcare providers as physical activity role models, found that physicians reported higher compliance with physical activity guidelines, ranging from 45% to 90% , while nurses and dieticians ranged from 39% to 70%. A study done in Nigeria also reported that nurses made an effort to eat healthy food and execute physical activity although these were not done on a regular basis (83). The results of the study conducted by Blake, Leighton and Batt (105) on employee perceptions of a pedometer intervention in a hospital workplace in the UK revealed that employees experienced barriers to participation in the exercise such as lack of time and technical difficulties with the pedometer. On the other hand, some employees in a similar study (105) reported benefits resulting from participating in the pedometer intervention, for example, evaluation regarding physical activity for self-monitoring and goal setting, being part of the team and being more active.

According to Abiye, Yitayal, Abere and Adimasu (106), 62.4% (n=264) of the participants (health professionals) surveyed in Ethiopia were willing to pay for Hepatitis B vaccination, while 37.6% (n=159) were not willing to pay (106). Their study further reported that the reasons for the lack of willingness to pay, amongst others, were the perception of unavailability of Hepatitis B Virus (HBV) vaccine in the health institution (47.8%), perceiving themselves as not being at risk of HBV infection (10.1%), lack of

awareness (16.4%), peer pressure (8.8%), lack of time (3.8%) and perceiving the vaccination process as time consuming (9.4%). In addition, they reported that high cost was the main hindrance preventing them from being vaccinated, especially in low income countries. The study therefore recommended that an affordable vaccine should be made available for health professionals.

Ledikwe et al.(8), in their study conducted in 27 health districts of Botswana among healthcare workers (n=38), found that participate in Workplace Wellness Programs (WWP) was more likely if healthcare workers were of older age, had worked longer in a health service or at a facility, and they were doctors or other health professionals. Their study further reported that the most attended WWP activity was psychosocial and spiritual care (13.6%) while only 2.8% attended Occupational Health and Safety (OHS).

Literature on the facilitation of wellness programs in health facilities seems to be limited for middle and low income countries compared to high income countries (8,62). In conclusion, from the literature above, leadership engagement and support is very important to ensure health and well-being of health professionals in the health facilities.

## 2.10 PERCEPTIONS OF HEALTH PROFESSIONAL MANAGERS CONCERNING WELLNESS PROGRAMS

Perceptions refer to the ability to understand the true nature of something or an idea, a belief or an image people have as a result of how they see things or understand something (107). Besides their role and job expectations that they should have knowledge and skills in order to facilitate wellness program in the health facilities, health professional managers are also expected to have good perceptions concerning wellness programs to fully address the dynamics that hinder facilitation of wellness programs and provide support to the

health professionals in the health facilities. Ortiz-Prado et al. (98) in their study on attitudes and perceptions of medical doctors (n=607) towards the local health system found that the challenges reported by the doctors in their work environment of public hospitals included resource limitations, unmanageable workload, lack of understanding, lack of communication and feedback; and lack of teamwork. In this study, these were some of the perceived challenges revealed by the health professional managers in the state health facilities of Oshikoto region in Namibia that hinder the facilitation of wellness programs.

The results of the twelve in-depth interview conducted by Wright, Zakarin and Blake (108) on nurses' views on workplace well-being programs indicated that some participants perceived wellness programs as beneficial to reduce stress and sickness. On the contrary, some participants in a similar study viewed this as being contrary their cultural and spiritual beliefs.

Some studies reported that nurses cited time constraints, lack of motivation, time pressure, lack of adequate infrastructure, lack of policies, lack of planning, lack of advocacy, lack of interest and concern for healthy lifestyle, occupational stress, fatigue, cost of attendance, lack of prioritization of public health by government and lack of government's implementation, regulation and monitoring of health promotion policies as barriers that hinder engagement in healthy lifestyle behaviours (83,108). In this study, the researcher has observed that similar barriers were perceived in the state health facilities of Oshikoto region in Namibia.

A study conducted by Rice, Glass, Ogle and Parsian (109) in Australia exploring physical health perceptions, fatigue and stress among health care professionals, revealed that

participants perceived that their physical health was impacted upon by their work responsibilities, which in turn affected the quality of their diet and eating habits. This study further reported that participants regarded physical health as their own responsibility, but they believed that support in the workplace was needed. This study suggested that wellness programs should include fitness as one of the interventions. A study conducted by Iellamo (110), on n=131 staff nurses to determine their perceptions on administrative support to the existing workplace wellness promotion reported that nurses in Philippines perceived administration as generally supportive for the existing hospital health promotion program.

The conclusion from this literature review is that health professionals in the health facilities are faced with a number of obstacles that hinder the facilitation of wellness programs; however, government and management support in the workplace as well as more efforts from the employees (health professionals) are needed.

## 2.11 SUMMARY OF THE CHAPTER

The literature review indicates that there is limited information on the knowledge, practices, experiences and perceptions of health professionals concerning the facilitation of wellness programs in the health facilities, more so for middle- and low-income countries compared to high income countries. Chapter 3 describes the research method and reasoning used in this study.

## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3.1 INTRODUCTION

In the previous chapter a review of relevant literature was presented. This chapter presents the methodology and approach used in this study for model development. The reasoning strategies used in the development of facilitating a psychosocial, physical and personal environment model that would facilitate a wellness program for health professionals in the state health facilities of Oshikoto region is also described. The process of developing a model using a mixed methods approach focusing on the design, study population, sample and sampling technique, research instruments, data collection, data analysis, measures to ensure validity, reliability and trustworthiness is also discussed. Phase 1, which comprises identification and analysis of concepts; Phase 2, which involves the construction of relationship statements; phase 3, which entails description and evaluation of the model as well as phase 4, which offers a description of guidelines for operationalizing the model are discussed. Lastly, ethical considerations are also discussed.

#### 3.2 APPROACH FOR MODEL DEVELOPMENT

The purpose of this study was to develop a model for health professionals to facilitate a wellness program in the state health facilities of Oshikoto region. This study used a mixed method approach. Mixed method research refers to the use of two or more methods in a single research project (111). Cresswell and Plano Clark (44) define mixed method as an approach of inquiry that combines both qualitative and quantitative forms of research. This approach includes: philosophical assumptions, the use of quantitative and qualitative approaches as well as the integration of both approaches in one study. A mixed method

approach embraces the pragmatic world view of collecting both quantitative and qualitative data in one study.

In this study, the researcher employed a convergent parallel design to identify concepts based on the three research objectives that guide the process of model development. In the convergent parallel design, the researcher collected both quantitative and qualitative data concurrently but then analysed data separately and findings were linked up from both data sets (44). Moreover, a convergent parallel design was used in this study to obtain a more comprehensive understanding of facilitating a wellness program for health professionals in the selected state health facilities in Oshikoto region (44). Additionally, the rationale for this approach is to increase the accuracy of the research findings and the level of confidence in them (111). The approach used in the development of a model is shown in figure 3.1 below.

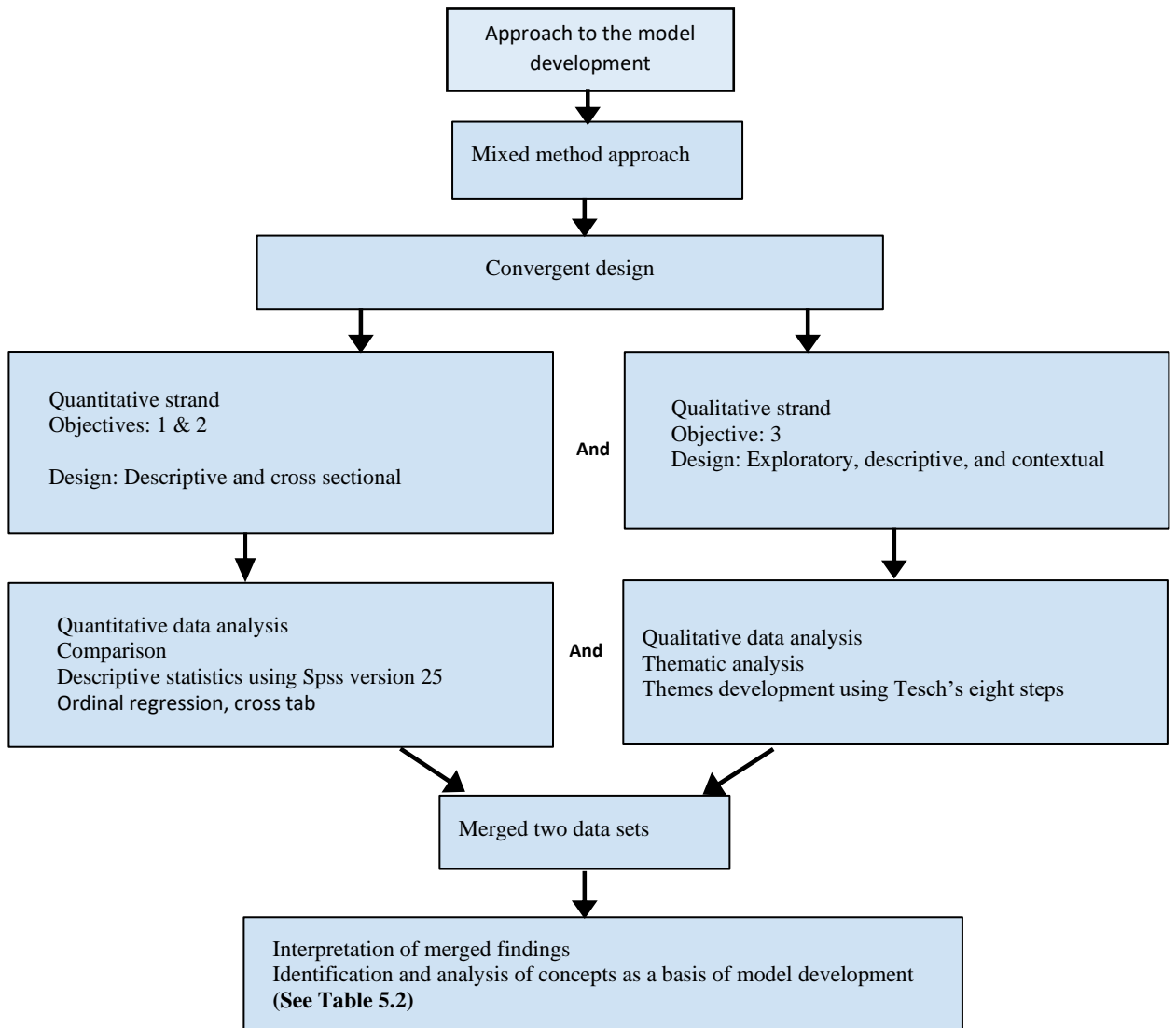


Figure 3. 1 Flowchart showing the approach for model development and implementing convergent mixed method design adopted from Cresswell and Plano Clark (44).

### 3.3 REASONING STRATEGIES

The reasoning strategies used in the four phases of this study were inductive reasoning, deductive reasoning, synthesis, derivation, analysis, inferences, bracketing, reflexivity and flexibility. These strategies abetted the researcher in the organization of data during the analysis process, conceptualization of the findings, description of the guidelines for operationalization of the model, and with the conclusion and recommendations.

### 3.3.1 Inductive reasoning

Inductive reasoning or induction moves from the particular to the general, from concrete observations to a general theoretical explanation (50,112). In inductive reasoning people use specific instances or occurrences to draw conclusions about entire events (113). That means the researcher begins with observing the empirical world and then reflects on what is taking place, moving toward theoretical concepts. In this study, inductive reasoning was applied during phase 1 where the researcher collected data through assessment and individual in-depth interviews. It was used to derive meaning from the concepts that were identified and formulated into themes by interacting with health professional managers in the health facilities. Induction is thus a creative reasoning process by which the researcher seeks to add to the existing scientific knowledge base (113). The situations in the state health facilities were also assessed. The application of inductive reasoning led to the development of the model.

### 3.3.2 Deductive reasoning

Deductive reasoning can be explained as reasoning from the general to the specific or particular (50,53,113). It is further explained that from a general theoretical understanding, the researcher deduces an expectation and finally a testable hypothesis (112). Quantitative researchers often use deductive reasoning. It means that the researcher begins with abstract concepts or a theoretical proposition that outlines the logical connection among concepts and then moves toward concrete empirical evidence (113).

The researcher applied deductive reasoning by using a checklist to assess the state health facilities concerning the facilitation of a wellness program in Oshikoto region. A questionnaire was also used to describe the knowledge, practices and experiences of health

professionals concerning the facilitation of a wellness program in the state health facilities. The general concern was about the facilitation of a wellness program for health professionals. Deductive reasoning assisted the researcher to pinpoint the challenges experienced. Concepts were identified and analysed that facilitated the development of a model. This reasoning was also used in the development of guidelines for the implementation of the model.

### 3.3.3 Synthesis

Scientific synthesis refers to integration of existing knowledge and research findings pertinent to a particular issue, with the aim of increasing the generality and applicability of, and access to those findings (114). Walker and Avant (56) indicated that concept synthesis is a process of combining concepts and statements from the data which has been acquired through qualitative and quantitative approaches, and literature. In addition, the purpose of concept synthesis is to generate new ideas and provide a method of examining data for new insights that can add to the model development.

Synthesis was employed by examining the sets of related concepts for similarities or differences; discovering new dimensions and observing new phenomena (56). A convergent mixed method approach was employed. Based on the analysis of findings acquired through interviews, checklists, questionnaires and literature, concepts were synthesized in order to produce meanings through the interpretation of findings. This assisted the researcher to draw conclusions and recommendations; describe the model using interrelation statements; and construct relationship statements.

### 3.3.4 Derivation

Derivation is an approach to developing new concepts, statements and theories (56). Furthermore, concept derivation is a process of transposing or transferring a concept from one field of inquiry to another; whereas statement derivation is a strategy for developing a statement or set of statements about a phenomenon by use of an underlying analogy between two fields of inquiry (56). The concept and statement derivation processes were applied after data analysis. The concept derivation process involves adopting and borrowing related concepts from other fields by adjusting them to fit the phenomenon under study. This means that concepts were redefined in order to fit the new field of inquiry. The researcher applied statement derivation by developing new statements about the topic of interest from the content and structure of the existing parent statement. This process assisted the researcher with the formulation of meaningful relationship statements that led to the development of a model. The researcher applied derivation through the process of literature review; and adopting the components of Dickoff et al.'s Practice-Oriented theory (49), WHO Framework and model (14) and Fayol's Management theory (51).

### 3.3.5 Analysis

Analysis is a process of examining and describing the basic elements of a concept, which is aimed at refining and clarifying vague concepts in a model (56). Moreover, concept analysis is a way of clarifying the meaning of concepts for various purposes. Analysis was used both inductively and deductively in phase 1 of the study. Concept analysis assisted the researcher to clearly identify, define and analyse the concepts that yield a basic understanding of the underlying attributes of the concepts. This allowed the researcher to

construct relationship statements. Analysis also helped the researcher to understand the raw data collected from the samples better, which in turn led to the achievement of the study purpose. Concepts and statements formed the basis for the development of a model.

### 3.3.6 Inferences

Drawing inferences is a process whereby a conclusion is drawn without complete certainty, but with some degree of probability relative to the evidence on which it is based (50). Inferences are used to make sense of things people say or do, and to open up new ways of inquiry. In this study, inductive and deductive inferences were drawn by interpreting the data collected through interviews with health professional managers, assessment of health facilities concerning the facilitation of a wellness program, and knowledge, practices and experiences shared by health professionals through the questionnaires. These inferences from the information collected supported the process of model development because of the evidence gathered.

### 3.3.7 Bracketing

This process entails deliberately putting aside one's own beliefs about the phenomenon under investigation or what one already knows about the subject prior to and throughout the phenomenological investigation (115). Also, bracketing is used in qualitative research to demonstrate validity of data collection and analysis; whereby the researcher should be aware of own values, interests, perceptions and thoughts; then put them aside so as not to influence the research process.

In this study, the researcher applied bracketing by not letting her beliefs, values, interests and perceptions influence the study. She did not prejudice or deviate from the questions in the interview guide. During individual face to face interviews, the researcher focused

on the main question and additional questions in the interview guide, and probing was only done by asking questions related to the topic, based on the response from the participants. The researcher remained neutral and honest about her own beliefs and thoughts to minimize the possibility of altering the research interpretation. During writing up of the data, bracketing was used to give voice to the participants' thoughts, and the interview themes, thus reporting the researcher's critical analysis and understanding.

### 3.3.8 Reflexivity

Reflexivity involves thoughtful, analytical, self-awareness of the researcher's experiences, reasoning, and overall impact throughout the research process (116). It is a process of reflecting on oneself [the researcher], to provide more effective and impartial analysis (115). In addition, it involves examining and consciously acknowledging the assumptions the researcher brings into the research and that therefore shape the outcome. Reflexivity is one of the bracketing strategies, and it is important in qualitative research as the researcher's experiences can inherently influence the research decisions. Consequently, interpreting qualitative data requires reflection on the entire research context.

Reflexivity was used throughout the qualitative research process, by reflecting on oneself. This made the research process a point of analysis and reduced the risk of being misled by the researcher's own experiences, reasoning and interpretations. During face to face individual interviews with health professional managers, the researcher reflected on her reactions and feelings towards the participants' responses on their perceptions about the facilitation of a wellness program that would have influenced the type of questions to ask and how to ask them. Therefore, the researcher recognised these and ensured that she

minimized the influence this had on conducting the interviews and the interpretation of findings during report writing and the entire research project.

### 3.3.9 Flexibility

Flexibility is the individual's ability to be proactive, adaptable, and resilient (117). The qualitative research approach allows for flexibility throughout the research process. The advantage of flexibility is that there is a relationship between data and theory and sensitizing concepts are not fixed. In this study, flexibility was used by interviewing health professional managers, which permitted a participative method and involvement in the field. It allowed a favorable environment for participants to respond to research questions. Perceptions of health professional managers were explored and interpreted based on the findings. Flexibility allowed the researcher to be creative, interpretative and imaginative, which facilitated the process of concept identification, definition, and analysis.

## 3.4 PROCESS OF DEVELOPING A MODEL

The study was conducted in four phases: phase 1 comprised identification and analysis of concepts; phase 2 involved construction of relationships statements; phase 3 included description and evaluation of the model and phase 4 explained the guidelines for operationalizing the model. The concepts identified from the findings of the study formed the basis of model development. The Theory generation (53), Practice-Oriented theory (49), WHO framework and model (14); and Management theory (51) guided the development of the model. The methodology for each phase is described below.

### 3.4.1 Identification of concepts [Phase 1]

The concepts were identified from the findings of the three objectives matched to the three populations of the study: the health facilities, the health professionals and the health

professional managers. Two objectives of the quantitative approach allowed the researcher to assess the situation at the health facilities; and to describe knowledge, practices and experiences of health professionals concerning facilitation of wellness program, while one objective of the qualitative approach aimed at exploring and describing the perceptions of health professional managers regarding the facilitation of a wellness program. The methodologies for the two objectives of quantitative and one objective of qualitative approaches are described below.

#### *3.4.1.1 Assessment of health facilities concerning facilitation of a wellness program.*

The first quantitative objective aimed to assess the situation at the state health facilities in Oshikoto region regarding facilitation of a wellness program.

Sub-objective 1: Assess the state health facilities in Oshikoto region regarding facilitation of a wellness program

#### ✚ Design

Research design is a procedure for collecting, analyzing, interpreting and reporting data in research studies (44). For this objective, a quantitative and descriptive research design was used. Quantitative research refers to a means for testing objective theories by examining the relationship among variables that can be measured, typically on instruments, so that numbered data can be analyzed using statistical procedures (8).

**Descriptive designs:** Descriptive designs are studies in which phenomena are described or the relationship between variables is examined; no attempt is made to determine cause and effect relationships (57). A descriptive research design was used to describe the

situation at the state health facilities regarding the facilitation of a wellness program for health professionals. Descriptive studies are also used in order to answer the research question or to develop theories (57). Therefore, the findings from this study led to the identification of concepts that formed the basis of a model development.

#### ✚ Population:

Population refers to the entire group of persons or objects that is of interest to the researcher and meets the criteria that the researcher is interested in studying (57,113,118). For this objective, the population was three state health facilities (one intermediate and two district hospitals) in Oshikoto region. This included Onandjokwe Intermediate Hospital, Omuthiya District Hospital and Tsumeb District Hospital. Other categories of health facilities such as health centres and clinics were excluded.

#### ✚ Sampling and sample size:

Sampling is the researcher's process of selecting the sample from a population in order to obtain information regarding a phenomenon in a way that represents the population of interest (57). Sample refers to a subset of the population that is selected to represent the population (57). Alternatively, a sample can be defined as a small portion of the total set objects, events or persons from which a representative selection is made (113). For this objective, an all-inclusive sampling method was used because there is only one intermediate hospital and two district hospitals in Oshikoto region. All three state health facilities in Oshikoto region were therefore included in the study because these are the only main state health facilities in the region and reported to be most under-staffed (32).

#### ✚ Instruments for data collection

Research instruments are research tools or devices used to collect data in research studies (57). A checklist was used to collect data from each health facility.

**A checklist** is a list of factors, properties, aspects, components, criteria, tasks or dimensions that are considered by a respondent and rated while completing the checklist (113).

The researcher developed a structured checklist based on the concepts of WHO healthy workplace model (2010) and the research questions (refer to Annexure E). Phase 1 of the study was guided by WHO healthy workplace model; therefore, the development of the data collection instruments followed the notions of this model. The checklist was used to collect quantitative data on the state of state health facilities in relation to the facilitation of a wellness program. The checklist consisted of 18 item-scale questions which were close-ended with Yes / No options. The researcher assessed various items and thereafter ticked the correct responses on the checklist, based on the information provided by the health professional managers. The checklist was written in English. It consisted of four sections. Section A collected information on the health facility demographic data. Section B focused on offering or provision of a wellness program in the state health facilities, which measured nine variables. Section C collected information on policies and environmental support, which measured six variables. Finally, section D collected information on communication, which measured eight variables (see Annexure E).  
constructs

#### ✚ Procedure for data collection

Data collection is a process of gathering evidence to answer a research question (44). After approval of the research proposal, the researcher wrote a letter to the Medical Superintendent and Senior Medical Officers to request permission to conduct research at the identified facilities. The researcher made phone calls to each of the hospital managers to arrange dates and times for visiting the health facilities. Three health facilities were assessed using a checklist. During data collection, the researcher ticked the correct response in the checklist and confirmed with either the Senior Medical Officer or the Nurse Manager for each health facility.

#### ✚ Data analysis and presentation

Data analysis refers to the systematic organization, synthesis, evaluation, and interpretation of research data as well as the testing of research hypotheses using that data (119,120). After data collection, each checklist was checked and manually edited to ensure quality (113). For this objective, data from the checklist of three health facilities was summarized and various variables of the checklist were presented in Tables 4.1, 4.2, 4.3 and 4.4 in order to compare responses to demographic characteristics of health facilities, provision of wellness interventions among health professionals, policies and environmental support and communication across the three hospitals in the Oshikoto region.

*3.4.1.2 Knowledge, practices and experiences of health professionals concerning the facilitation of a wellness program*

The second quantitative objective sought to describe knowledge, practices and experiences of health professionals regarding facilitation of a wellness program.

Sub-objective 2: Describe the knowledge, practices and experiences of health professionals concerning the facilitation of a wellness program in the state health facilities

 Design:

Design is defined as an overall plan for gathering data and answer a research question in a study (57). For this objective, a quantitative descriptive and cross-sectional research design was used. Quantitative research generates numbers and data is collected in real-world settings such as in health facilities (119). This study employed a survey strategy using a questionnaire to produce quantitative data on knowledge, practices and experiences of health professionals.

**Descriptive design:** A descriptive design assists the researcher to justify current practices and answer the research questions (57). A descriptive design was used to describe the knowledge, practices and experiences of health professionals concerning the facilitation of a wellness program in the health facilities. In addition, a descriptive design was used to obtain more information regarding the facilitation of a wellness program in the state health facilities.

**Cross sectional design:** According to Brink et al. (57) a cross-sectional study refers to a research study that collects data on participants at one point in time. This study was cross-

sectional because a single round of data collection was done at one point in time to describe what is happening regarding facilitation of wellness program for health professionals in the state health facilities of the Oshikoto region (57).

#### Population:

Population refers to a particular group of individuals or elements that a researcher is interested in (118). The population for this objective comprised health professionals and health professional managers. The total population for this objective was 359 (6 x health professional managers and 353 x health professionals) who met the inclusion criteria. For this study, the term ‘health professionals’ refers to doctors and nurses working in the three state health facilities in Oshikoto region. Health professionals were targeted in this study because they are experts in health-related matters and the consequences of being unfit, thus their knowledge and experience added value and contributed to the development of the model that would facilitate a wellness program (57,112).

The population for this study consisted of 31 doctors (2 Senior Medical Officers, 1 Principal Medical Officer and 28 doctors) and 328 nurses (3 nurse managers and 325 health professionals) working in the three state health facilities (Onandjokwe Intermediate Hospital, Omuthiya and Tsumeb District Hospitals) of Oshikoto region in Namibia. The inclusion and exclusion criteria for this objective are outlined below.

#### Inclusion criteria:

- The respondents should be health professionals working in Onandjokwe Intermediate Hospital, Omuthiya and Tsumeb District Hospitals.

- They should have had at least one year of working experience in the health facility, because this will help to enrich the content of the findings.

#### Exclusion criteria:

- Health professionals who were not available during the time of data collection.
- All those that were not willing to participate in the study.

#### ✚ Sampling and sample size:

Sampling is a process of selecting cases to represent an entire population, while a sample is a subset of the population elements, the most basic units about which data is collected (118). The reason for sampling is feasibility (113). A sample size of 186 ( $n = 186$ ) calculated by Epi Info version 4.5 at 95% CL [confidence level] was selected from the total population. For the nurses a probability stratified random sampling method was used to ensure that nurses in each health facility were adequately represented within the whole sample population of the research study. The advantage of stratified random sampling is that it ensures representation of a particular segment of the population, but the disadvantages are that it requires extensive knowledge of the population in order for it to be stratified and it can be costly and highly complex (57). The Nurse Managers assisted the researcher to identify the nurses working in different units. Population groups were created for nurses in each health facility based on districts, namely: Onandjokwe, Omuthiya and Tsumeb districts. Nurses were divided into sub-groups of categories (strata), namely: nurses and doctors (57). A sample from each stratum was taken. Proportional stratification was calculated using the following formula:  $\text{sample size} \div \text{population size} \times \text{stratum size}$ . The doctors were conveniently sampled based on their availability during the time of data collection. This was necessitated by the small

population of doctors in the three health facilities. The summary of the study population and sample size of health professionals per health facility is presented in table 3.1 below.

Table 3. 1: Summary of population and sample size of participants per health facility

Health facility	Nurses		Doctors	
	Population per stratum	Sample per stratum		
Onandjokwe Intermediate Hospital	218	113	N=23	n=12
Omuthiya District Hospital	53	27	N=3	n=2
Tsumeb District Hospital	57	30	N=5	n=3
<b>Total nurses per stratum</b>	<b>328</b>	<b>169</b>	<b>Total population=31</b>	<b>Total sample=17</b>
<b>Overall total population &amp; Sample</b>	<b>359 186</b>			

✚ Instrument for data collection:

**Questionnaire:** A questionnaire is a tool that is used to collect and record data about an issue that you are interested to find out about that is appropriate for analysis (112,121). Polit, Beck and Hungler (119) point out that when a questionnaire is used, respondents complete the instrument themselves in a paper and pencil format. Also, self-administered questionnaires can be mailed, sent online or personally distributed by the researcher. The basic objective of a questionnaire is to obtain facts and opinions about a phenomenon from people who are well-informed on the particular issue (113).

For this objective the researcher adopted a self-administered questionnaire from Benefit Management Solutions (BMS) (77) which is freely available online. BMS is fully

acknowledged. The questionnaire was developed guided by WHO healthy workplace model and research questions. The researcher adopted and developed the questionnaire to fit the context of state health facilities in Oshikoto region in Namibia. The tool was designed to collect data from health professionals (refer to Annexure F).

The questionnaire was written in English. It consisted of four sections. Section A had six questions on demographic data. In this section, participants were required to tick and complete their demographic information. In sections B, C and D, a five-point Likert scale, with two types of Likert scale responses was used with the following scales: strongly agree (5), agree (4), unsure (3), disagree (2) and strongly disagree (1); and very high (5), high (4), unsure (3), low (2) and very low (1). Section B had ten questions on health professionals' knowledge on wellness programs. This section measured health professionals' knowledge on wellness programs in the health facility.

Section C had twenty-eight questions on health professionals' practices regarding the facilitation of a wellness program. This section was divided into three subsections: the first sub-section comprised eight variables on the current health professionals' nutritional status; the second sub-section had ten variables that measured the health professionals' level of physical and emotional activity and health habits; and the last sub-section had ten variables on health screening or medical examination undertaken by health professionals in the past 12 months. The first two sub-sections consisted of five-point Likert scale questions while the last sub-section consisted of questions requiring yes and no answers.

Section D had thirty-six questions on health professionals' experiences regarding the support from management concerning the facilitation of a wellness program as well as their interest in a wellness program. The section was divided into three sub-sections, of

which the first part was on the wellness program offered at the health facility, the second part measured the health professionals' experience on management support, while the last part required health professionals to rate their interest in a workplace wellness program. Section D, sub-section three had the following scales regarding interest in wellness programs: very high (5), high (4), unsure (3), low (2) and very low (1). The last part had one open ended question on suggestions about health professionals' other interests regarding wellness interventions.

#### Procedure for data collection:

Data collection is the process of acquiring subjects and collecting information for a research study (118). After research proposal approval from UREC and MoHSS, the researcher wrote a letter to the Medical Superintendent and Senior Medical Officers of the three state health facilities to request permission to conduct research at the facilities. In addition, telephone calls were made to the nurse managers to arrange dates and times for the researcher's visits. The researcher distributed 186 questionnaires to the participants, who completed them on their own. Explanations were given before distribution of the questionnaires. The researcher was available to explain whatever the participants needed clarity on. For the health professionals who were on night shift on the day of data collection, questionnaires were given to unit supervisors, and the researcher collected them a day after completion. The health professional managers were interviewed first before they completed the questionnaires.

#### ✚ Data Management:

This is the process of making sense of the material by breaking down raw data into variables (122). A variable is an attribute of a person or object that varies or takes on different values (120). After data collection, the researcher started a process of making sense of the material. Each questionnaire was checked and manually edited to ensure quality (113). Questionnaires were pre-coded to translate respondents' answers into numbers for subsequent statistical analysis (122). Codes were pre-assigned to each of the responses and respondents only had to mark in the boxes to save time. SPSS version 25 software was used to capture the data in the variable view. A data set was created with 81 variables, and names were given to each variable. Value labels were assigned to each response in the data view of the data editor. These labels describe the codes that have been assigned to each response (122).

#### ✚ Data analysis and presentation:

Data analysis is a process of examining the data to address the research question or hypotheses (44). Responses to the questionnaires were converted into numerical data so that they could be quantitatively analysed. The researcher captured and statistically analysed data using Statistical Package of Social Sciences [SPSS] version 25. Statistical analysis assisted the researcher to organize, interpret and communicate numerical data.

Descriptive statistics allowed the researcher to organize data in ways that gave meaning and enabled insight, and also to help to describe and synthesize the data (119). Polit and Beck(118) indicated that statistics are calculated to describe the sample and key study

variables. The descriptive statistics that were used were frequency distributions and percentages (Chapter 4).

For this study the researcher used self-rating score to rate the extent of health professionals' knowledge, practices, experiences and level of interest in the wellness program (refer to tables 4.7, 4.18.1, 4.125.1 and 4.26.1).

To gain insight on the association between demographic data and knowledge and practices concerning the facilitation of a wellness program, cross tabulations of dependent variables and independent variables were used to establish if there was a significant relationship between the dependent and independent variables. In addition, ordinal regression was used to model the dependent variables of the study for a given independent variable. A Chi-Square Goodness of fit test was applied to measure how good the fitted ordinal regression models fit the data. The findings were presented using frequency distribution tables and bar charts. Data analysis was done with the assistance of a statistician from the Faculty of Science at the University of Namibia, Windhoek campus.

#### Validity:

Validity is the degree to which an instrument measures what it is intended to measure (57). To ensure validity of both the checklist and questionnaire the three types of validity namely: content, face and construct validity were observed.

**Content validity:** Content validity is the degree to which an instrument covers the scope and range of information that is sought (57). Moreover, content validity is an assessment of how well the instrument represents all the components of the variable to be measured. For sub-objective 1, to ensure content validity, the checklist (Annexure E) covered the

following: demographic data, offering of workplace wellness, policies and environmental support as well as communication concerning the facilitation of a wellness program. Sub-objective 2 focused on describing knowledge, practices and experiences of health professionals concerning the facilitation of a wellness program. To ensure content validity, the content on knowledge, practices and experiences in the questionnaire (Annexure F) were adopted and modified from Benefit Management Solutions (BMS) (77) and acknowledged. The development of the questionnaire was guided by WHO health and framework model. In addition, the content for both instruments was approved by the University of Namibia Research Ethics Committee (UREC) (Annexure A) and the MoHSS (Annexure B). Also, the supervisors reviewed the checklist and the questionnaire to ensure that it covers the content and measures what it is supposed to measure.

**Face validity:** Face validity is a subjective determination that an instrument is adequate for obtaining the desired information. On the surface, or on the ‘face’ of it, the instrument appears to be an adequate means of obtaining the desired data (57). Additionally, face validity means that the instrument appears to measure what it is supposed to measure (57). To ensure face validity, the check-list and the questionnaire were reviewed by two statisticians to ensure that the instruments measure what they are supposed to measure. For sub-objective 2, stratified random sampling was done to select doctors and nurses to ensure that the sample was representative of the target population. Representativeness enhances generalization of the findings to the target population.

**Construct validity:** Construct validity measures the relationship between an instrument and related theory (118). In this study, to ensure construct validity, the researcher ensured that the questions were clear and measured the construct that they were intended to

measure. Two statisticians reviewed the checklist and the questionnaire. A pilot study was also done to ensure that the questions were correctly worded and clear and to identify flaws (57). Pilot testing before conducting the main study improved the construct as well as external and content validity of the instrument (113). An essential modification was made to the original research instruments.

#### Reliability

Reliability refers to the degree of dependability or the consistency with which an instrument measures the attributes that it is designed to measure (112). Brink et al. (57) defined reliability as the degree to which the instrument can be depended upon to yield consistent results if used repeatedly over time by the same person, or if used by two researchers. Types of reliability are stability, equivalence and internal consistency (57). The researcher ensured that the checklist was clearly written for easier understanding. The reliability of the questionnaire was ensured by adopting a questionnaire from BMS (77) and running Cronbach's alpha test. Cronbach's alpha (coefficient alpha) is a measure of internal consistency that indicates to what extent the items on a scale are measuring the same underlying dimension (120). The researcher tested the Cronbach's alpha and achieved a range from 0.78 and 0.88, which shows that there is a high level of reliability and consistency in the instrument. The researcher also ensured that the questionnaire is consistent and clearly written for easier understanding. The researcher was the only person who administered the questionnaires and collected data in order to minimise data collector bias. Clear instructions were given to the participants before completing the questionnaires. The researcher was available to explain whatever the respondents needed clarity on.

*3.4.1.3 Perceptions of health professional managers concerning the facilitation of a wellness program. The qualitative part of the study consisted of one objective which explored and described perceptions of health professional managers regarding the facilitation of a wellness program.*

Sub-objective 3: Explore and describe the perceptions of health professional managers concerning the facilitation of a wellness program in the state health facilities.

researcher intends to conduct the research. Qualitative research is a means for exploring and understanding the meaning individuals or groups ascribe to social or human problems (57). Creswell (45) states that qualitative research focuses on participants' perceptions and experiences, and the way they make sense of their lives. Babbie and Mouton (123) highlighted some of the following key features of qualitative research:

- Research is conducted in a real-life situation.
- The purpose of qualitative research is in-depth description and understanding of people's beliefs, actions, and events in all their complexity.
- The rationale of the research is not to generalize the findings, but to understand them in context.
- The researcher is seen as the instrument in qualitative research and is subjectively involved in the research process.

For this objective, qualitative exploratory, descriptive and contextual designs were employed.

**Exploratory and descriptive** designs assisted the researcher to explore and describe the insight of health professional managers regarding the facilitation of a wellness program in the health facilities. The study was **contextual** because it was conducted in the three health facilities of Oshikoto region (Onandjokwe Intermediate Hospital, Omuthiya and Tsumeb District Hospitals).

#### Population

The total population for this objective was six ( $N = 6$ ) health professional managers in the three health facilities, namely: Onandjokwe Intermediate Hospital (1x Principal Medical Officer and 1x Nurse Manager); Omuthiya District Hospital (1x Senior Medical Officer and 1x Nurse Manager) and Tsumeb District Hospital (1 x Senior Medical Officer and 1x Nurse Manager). Health professional managers were considered because of their knowledge and experience that contributed to the development of a model that would facilitate a wellness program for health professionals in the state health facilities. The inclusion criteria for this interview were health professionals in management positions who were willing to participate in the study. Health professionals who are not managers and those who were on leave during the time of data collection were excluded from the interview.

#### Sampling and sample size

Sampling is a process of selecting the sample from the population in order to obtain information regarding a phenomenon in a way that represents the population of interest (57), while a sample is a part of a whole set selected by a researcher to participate in a study (57). For this objective, due to the small population of health professional managers,

an all-inclusive sampling method was used. Therefore, a sample of six (6) health professional managers was interviewed. All the SMOs, PMO and Nurse Managers for the three health facilities in Oshikoto region were interviewed. Health professional managers were considered for in-depth interviews because of their knowledge of the phenomena being studied (57).

#### Instrument for data collection

**Interview schedule:** Interview schedule is defined as an instrument containing a set of questions, directions for asking those questions and space to record the respondents' answers (57). An interview guide with open ended questions was used to collect data (refer to Annexure G). The main question was “*What is your perception regarding the facilitation of a wellness program for health professionals in the hospital?*” Probing questions were asked based on the responses, to assist in getting more insight. Probing questions that were used are:

- How do you understand the concept of workplace wellness?
- Is there a wellness program that promotes well-being among health professionals in the hospital?
- If yes, what wellness activities/sessions are offered in the hospital to facilitate a wellness program for health professionals?
- If no, what is currently done to meet the wellness needs of health professionals in the hospital?

- Is there a focal person leading the wellness activities in the hospital? In your opinion, do you think what is being done or offered is enough to meet wellness needs and promote health among health professionals?
- What are the challenges towards effective facilitation of wellness program for health professionals in the hospital?
- What do you think can be done to facilitate a wellness program for health professionals in the hospital?

**Field notes:** Field notes are descriptions of events observed during fieldwork in a social setting and recorded at the time of observation, or shortly thereafter (111). Field notes supplemented data collection by capturing information that could not be detected by an audio tape recorder such as non-verbal communication as well as descriptions of the circumstances in the health facilities. Field notes also assisted the researcher to recall the information and events that happened during the interviews to ensure trustworthiness.

**Audio recorder:** Audio recording provided a good record of factual data with referential adequacy that ensured credibility (123). All the individual in-depth interviews were recorded in the audio recorder. The audio recorder supplemented the research instruments for individual interviews. The benefit of audio recording is that it allowed the researcher to concentrate on the interview rather than just taking field notes, and prevented distractions during the interview process.

 Procedure for data collection

**Interviews:** An interview involves a small number of people being interviewed on their perceptions on the situation at stake (123). In-depth face to face individual interviews were

conducted to collect qualitative data from health professional managers, by exploring their perceptions concerning the facilitation of a wellness program in the state health facilities. Interviews were conducted after permission had been obtained from the Regional Director, Medical Superintendent and SMOs. Two SMOs, one PMO and three Nurse Managers were interviewed. The researcher made arrangements with each health facility before data collection, to agree on date and time of interviews. A consent letter (refer to Annexure I) was given to participants before interviews. Participants signed the consent for voluntary participation in the interviews. The researcher explained all the ethical issues such as confidentiality, anonymity, the use of an audio recorder, privacy, beneficence and non-maleficence prior to interviews (57). Interviews were conducted in private offices.

The researcher asked the main question and probing was done to get in-depth information. Field notes were taken during data collection to record the information that could not be captured by audio recorder. After receiving written permission from participants, an audio recorder was used to record the individual face to face interviews. Recorded interviews were used for verbatim transcriptions (refer to Annexure J).

#### Data analysis


Qualitative analysis involved systematic consideration of the data to identify themes and concepts that contributed to the researcher's understanding (124). After each interview, the researcher transcribed the recorded interviews verbatim. The researcher started preparing and organising raw data for analysis by reading and re-reading through all the data (the field notes and transcripts). Themes and concepts that were identified in one interview were compared and contrasted with similar material in the other interviews.

Data analysis was done as per Tesch' s eight steps of data analysis (45), as shown in table 3.2 below. This assisted the researcher to search for general statements about relationships among different categories of data. The data was compared line by line and interview by interview to identify codes and determine the final theme. Coding is a process of finding patterns and producing explanations using both inductive and deductive reasoning to categorise data into segments (57). Creswell defined coding as the process of organizing the material into chunks or segments of text and assigning a word or phrase to the segment in order to develop a general sense of it (45). Codes were identified by highlighting the aspects of the transcripts using different colours. An abstract concept of codes was written in the margin of the transcript, and then codes were merged into categories. After qualitative data analysis, three main themes, six themes and twenty-two sub-themes were identified and presented in Table 5.1, Chapter 5.

Table 3. 2: Tesch’s steps of data analysis and its application to the study.

Tesch’s steps	Application to the study
1. Read the entire transcript carefully to obtain sense of the whole and jot down some ideas.	The researcher read through the transcripts from individual interviews several times, one at a time. Important ideas were noted. Field notes were used to compare the information from the transcripts.
2. Select one interesting and short transcript, read through and jot down the interesting ideas on the margins.	The researcher chose one transcript and read through, then jotted down the ideas on the margin.
3. Make a list of all topics, cluster together similar topics into columns and arrange them as main, unique, and left over topics.	The researcher grouped topics with similar ideas and put them in appropriate columns as main themes, sub-themes and themes.
4. Assign each topic with a code and write the code next to the appropriate segments of the transcripts, and see whether new categories and codes emerge.	Topics were assigned codes written next to the appropriate segments. The researcher re-checked the data if new codes emerged to ensure credibility.
5. Find the most descriptive wording for the themes or topics and categorise them. Reduce the total list by grouping related or similar topics.	After the process of coding, similar topics were grouped and turned into themes and sub-themes.
6. Make a final decision on the abbreviation for each category and alphabetizes the codes.	Themes and sub-themes were created in columns finally.
7. Assemble data material belonging to each category to reduce data and conduct preliminary analysis.	Preliminary analysis was conducted and similar codes were then assigned to the descriptions in order to reduce data.
8. Recode existing material if necessary.	The researcher re-read and recoded the data where necessary.

(Adopted from Cresswell (45)).

 Measures to ensure trustworthiness

Trustworthiness of qualitative research seeks to establish whether the findings are authentic and can produce similar results when applied in other settings (125). The researcher applied the following criteria to ensure trustworthiness as suggested by Lincoln and Guba (125): dependability (reliability), credibility (internal validity), confirmability (objectivity) and transferability (external validity).

- **Credibility** is related to internal validity that is allied to the true picture of the phenomenon (57). Brink et al. (57) highlighted that credibility refers to confidence in the truth of the data and the interpretation thereof. Confidence in the truth of the data

in this research was ensured through having prolonged engagement with the participants, early familiarity with participants before data collection, observing their behaviours during interviews, triangulation of data collection methods and peer debriefing (125). Table 3.3 presents the summary of application of credibility below.

Table 3. 3: Application of credibility criterion

Technique	Practical application
Prolonged engagement	The researcher spent more time on participants’ face to face individual interviews and gained in-depth understanding of their perceptions concerning wellness in the health facilities.
Persistent observation	The researcher explored details of the phenomena to a deep enough level and decided what was important, then focused more on the most relevant aspects
Triangulation	Different data collection methods such as face to face interviews, field notes, observation and audio recording were used to enrich the data collection process.
Peer debriefing	Consultations with the supervisor and other research experts were done throughout.
Member checking	Participants were allowed to ask questions for clarification on the purpose of the study during interviews. Also, participants were allowed to listen to the audio-recorder immediately after the interview for accuracy. Transcribed results were returned to participants to confirm on what they have said and to ensure accuracy.
Audio recording	All the interviews were audio recorded to prevent the risk of missing information.

- **Transferability** refers to the extent to which the findings from the data can be transferred to other settings or groups and is thus similar to the concept of generalizability (119). Transferability was ensured by providing sufficient descriptive data in the research findings (125).

The researcher ensured that the information represents the accuracy, relevance, and meaning of data as provided by the participants and not the researcher’s imagination.

Table 3.4 presents the application of transferability to the study.

Table 3. 4: Application of transferability criterion

Technique	Practical application
Thick description	The researcher provided sufficient descriptive data in the research findings.
Enriching data collection	Different data collection methods were used such as interview, field notes and audio recorder.

**Confirmability** is the potential for congruency of data in terms of accuracy, relevance or meaning (57). Congruency was ensured by applying bracketing and request clarification for unclear information from participants (125).

Table 3. 5: Application of confirmability criterion

Technique	Practical application
Reflexivity and bracketing	The researcher requested for clarifications to ensure the accuracy, relevance and meaning of data as provided by the participants and not the researcher’s imagination.
Triangulation	Different data collection methods such as face to face interviews, field notes, observation, and audio tape recording were used to ensure that the data reflects the voices of the participants and not the researcher’s perceptions or biases

- **Dependability** of a research study refers to the provision of evidence such that if it were to be repeated with the same or similar participants in the same or similar context, its findings would be similar (57). This denotes the stability of data over time, similar to reliability as described in quantitative approach. Application of the dependability criterion is presented in the table below. The researcher’s supervisors checked the appropriateness of the procedures used to ensure dependability (121).

Table 3. 6: Application of dependability criterion

Technique	Practical application
Enquiry audit	The researcher ensured that the data, findings, interpretations and recommendations are checked and examined by the supervisors and examiners to ensure acceptability of the study.

## Pilot study

A pilot study is a procedure for testing and validating an instrument by administering it to a small group of participants from the intended test population (113). Piloting is done to ensure that questions are well worded, clear, and reliable and they contained clear instructions (113,121). It also determines the feasibility of the intended study (45). A pilot study was conducted to identify flaws in the research instruments, the time needed to complete the questionnaire and to determine the feasibility of the study. In addition, the pilot study was done to ensure that questions are clear and the interview guide is acceptable.

- **Piloting:** A pilot study was conducted to test all the three research instruments at Intermediate Hospital Oshakati [IHO] since the characteristics are similar as the health facilities where the main study was conducted. IHO was not included in the main study population (123). Piloting was conducted after permission was obtained from the Medical Superintendent of IHO (see Annexure D).

For the checklist, pilot testing was done with (n=1) one hospital, that is IHO. This assisted the researcher to fine-tune the checklist and to ensure that questions were well worded, clear and with clear instructions (113,121). The questions in the checklist were all clear and no adjustment was necessary before the actual data collection. A questionnaire was pilot tested with (n=5) five health professionals including 3 registered nurses and 2 enrolled nurses, who were selected using simple random sampling from the hospital wards' lists. The nurse manager assisted the researcher with the allocation list of health professionals who were available. Health professionals at IHO were not included in the main study population (123). Questionnaires were distributed and health professionals

completed them then they were later collected by the researcher. A small-scale pretest was done for the interview guide at IHO. Two in-depth individual interviews were conducted with two-unit supervisors who were randomly selected during the pilot study and field notes were taken. Data from the pilot study was analysed and pertinent amendments were made on the instruments.

The qualitative findings of the pilot study revealed that health professionals are faced with personal and family related problems as well as work-related challenges that negatively impact their daily work. These include, among others, lack of trust between health professionals and the supervisors, use of alcohol and late coming at work, mismanagement of finance among young health professionals, lack of sporting activities, unavailability of wellness programs and non-conducive work environment. The quantitative results indicated that there was no wellness policy; and the majority (60%) of health professionals had adequate knowledge on wellness programs but the practice was poor. It was revealed that 80% of the respondents experienced insufficient support from management concerning the facilitation of a wellness program. The findings also showed that 60% of the health professionals have significant interest in wellness interventions.

One of the challenges addressed was that health professionals needed more time to complete the questionnaires, due to workload in their units. The researcher allowed them to complete the questionnaires and collected them after some time. Questions were clear in the questionnaire. Section A question 2 and 6 were adjusted by reducing the options. The pilot study assisted the researcher to modify the questionnaire and to ensure that questions were clear and with clear instructions. An adjustment was made to the final version of the interview schedule and questionnaire before the actual data collection.

## ✚ Merging of the findings and concepts identified

After data collection, a separate data analysis for quantitative and qualitative datasets was conducted. The findings from the quantitative and qualitative data analysis were then merged in order to compare the two (44). Merging of findings involved matching research questions with quantitative and qualitative data in order to interpret the significance of the two types of data. The content areas represented in quantitative and qualitative datasets were identified and compared to identify similarities, differences or contradictory results (44). The researcher made a comparison within a discussion in Chapter 5, to answer the research questions. Table 5.2 presents merging of the qualitative and quantitative findings. Discussion of the findings led to the identification of concepts that guided the development of a model. Figure 3.1 represents the steps involved in implementing the convergent mixed method approach and merging of the two sets of findings.

- **Concepts identified:** Chinn and Kramer highlighted that concept selection is guided by your purpose and it expresses value related to your purpose (53). The central concepts were identified from the findings of the study, directed by research objectives. Psychosocial environment, physical environment and personal environment concepts were identified and conceptualized. The findings of the study revealed that health professionals are faced with psychosocial, physical and personal challenges in the work environment that affect their well-being and hamper the facilitation of a wellness program in the state health facilities. Concepts identified form the basis of model development. The details of concept identification are presented in Chapter 6 of the thesis.

### 3.4.2 Analysis of concepts [Phase1]

Walker and Avant (56) indicate that the results of concept analysis yield to the researcher a basic understanding of the underlying attributes of the concepts. Concept analysis is aimed at examining the structure and function of a concept. It is also aimed at clarifying the meaning of an existing concept and developing an operational definition. The process of concept analysis assisted the researcher in the development of a model that would facilitate a wellness program in the state health facilities. Concepts were identified and conceptualized, followed by theoretic definitions of concepts. Theoretic definitions formed the basis for and reflected empirical indicators as well as operational definitions for concepts needed to develop a model (53). In addition, they conveyed the general meaning and usage of the concepts. Empirical indicators refer to how this meaning is observed and assessed in a particular research study (53). Chinn and Kramer (50,53) further point out that theoretic definitions provide a basis for understanding concepts and relationships in any number of situations, while empirical or operational definitions limit meaning to the specific observable tools used in research. Concepts were examined in detail from dictionaries, followed by subject and then context definitions. The concepts that were analysed are:

- Psychosocial;
- Physical;
- Personal; and
- Environment

A detailed process of concept analysis is presented in Chapter 6 of the thesis.

### 3.4.3 Construction of relationship statements [Phase 2]

Chinn and Kramer (53) define relationships as linkages among and between concepts. Walker and Avant (96) specified that a relational statement declares a relationship of some kind between two or more concepts. This implies the nature of interactions among concepts that formed the basis of a model development as well as the ways in which the emerging relationships provide clues regarding the model purposes and the assumptions on which the model is based. The relationships began to take form as the concepts of psychosocial environment, physical environment and personal environment emerged and were identified. After the concepts had been identified, they were classified. Walker and Avant (96) point out that concepts assist researchers to identify how their experiences are similar or equivalent by categorizing all things that are alike about these concepts. Classifying experiences is a useful and efficient way to express a relationship between two or more concepts. A statement is the result of classifying concepts. Relations between concepts were made among the following: essential concepts identified and analysed (phase 1), Practice-Oriented theory, WHO framework and model and Management theory as presented below. These formed the basis of model development. The description of construction of relationship statements is covered in Chapter 7 of the thesis.

#### *3.4.3.1 Identified concepts and statements*

The psychosocial environment, physical environment and personal environment concepts were identified from the findings of the study and analysed according to the Practice-Oriented theory (49), WHO framework and model (14) and Management theory (51). Concepts identified were based on the findings regarding the situation in the health facilities in Oshikoto region with regard to the facilitation of a wellness program;

knowledge, practices and experiences of health professionals concerning the facilitation of a wellness program and perceptions of health professional managers concerning the facilitation of a wellness program. The linkage among concepts facilitated the construction of relationship statements.

#### *3.4.3.2 Adoption of theories*

Three theories were adopted to guide the development of a model, namely Practice-Oriented theory (49), WHO framework model (14) and Management theory (51) as presented below:

##### *Practice-Oriented theory of Dickoff et al. (1968)*

The identified concepts were classified and conceptualized according to the six elements of Practice-Oriented theory of Dickoff et al. (49)

- **Agent:** The agent is described in terms of who performs the activities. In this study the agent refers to the researcher who conducted the study and developed the model, management and stakeholders such as policymakers, non-governmental organisations and the regulatory body.
- **Recipients:** The recipients in this study are health professionals (doctors and nurses) in the state health facilities in the Oshikoto region. It includes family members who provide support to the health professionals. These are the recipients of the activities.
- **Context:** The context refers to the setting in which the activities are to be performed. The context for this study is the state health facilities in Oshikoto region, namely: Onandjokwe Intermediate Hospital, Omuthiya district and Tsumeb district hospitals.
- **Dynamic:** Dynamic is the power or energy source of the activities. For the purpose of this study the dynamic refers to the challenges or barriers experienced by health

professionals that hinder the facilitation of a wellness program in the state health facilities of Oshikoto region.

- **Procedure:** Procedures are the guiding steps to be taken towards some accomplishment. In this study the procedure is the facilitation of a wellness program, including the development of a model and development of guidelines.
- **Terminus:** This is the end result of the activity. The outcome is a well-coordinated and supportive wellness program that enables well-being of health professionals in the state health facilities of Oshikoto region that would increase productivity and improve service delivery.

#### *WHO Framework and Model (2010)*

The WHO framework and model was modified and adopted to facilitate the construction of relationship statements for the development of a model. Concepts were linked to the avenues of influence for a healthy workplace identified by WHO (14). These include:

- **Physical work environment:** the factors that can affect the health professionals' physical and mental safety, health and well-being in the workplace, such physical structures of the health facilities.
- **Psychosocial work environment** is also referred to as workplace stressors that may cause emotional and mental stress for health professionals and affect their mental as well as physical well-being. These include workload, lack of policies, and lack of communication.
- **Personal health resources** in the workplace include a supportive environment, health services, information, resources, opportunities and flexibility that an organization provides to workers to support and motivate their efforts to improve and maintain

healthy personal lifestyle practices; as well as to monitor and support their ongoing physical and mental health

- **Enterprise community involvement** includes the activities, expertise and other resources an enterprise engages in and provides to the social and physical communities in which it operates; and which affect the physical and mental health, safety and well-being of health professionals and their families (22). It involves a multi-stakeholder approach to address the health professionals' health, safety and well-being.

#### ✚ *Management theory of Fayol (1920)*

Management theory guided the construction of relationship statements for the development of a model. Concepts identified were linked to the four basic management functions of planning, organizing, directing and controlling that form the basis of management processes to facilitate wellness program in the state health facilities (51).

- **Planning:** Setting of goals and priorities, planning, implementing and evaluating strategies to address the psychosocial, physical and personal needs; and make informed decisions to achieve goals.
- **Organizing:** Assigning responsibilities and authority and organizing resources needed for the facilitation of a wellness program.
- **Directing:** Leading, guiding and directing the activities in the facilitation of a wellness program; Leading by example and motivating health professionals to actively participate in the facilitation of the wellness program.
- **Controlling:** Monitoring and evaluating the quality of activities according to the set standards; Performance appraisal and giving feedback for possible adjustments.

#### *3.4.3.3 Proposed structure of the model*

The concepts identified from the findings of the three sub-objectives of the study, the six components of Practice Oriented theory (49), the WHO Framework and Model (14); and the four functions of Fayol's Management theory (51) guided the proposed structure of the model. The proposed structure of the model followed three inter-related phases: phase 1: needs assessment, phase 2: managing and maintaining conducive environment and phase 3: outcome. The detailed description of the proposed structure of the model is presented in Chapter 6 of the thesis.

#### 3.4.4 Description and evaluation of model [Phase 3]

The processes of concept identification, definition and classification as well as construction of relationship statements are followed by the model description. The process of describing a model forms the basis for critical reflection. The model developed in this study was guided by theory generation method espoused by Chinn and Kramer (64), and the concepts identified. The purpose of the model was to facilitate a wellness program for health professionals in the state health facilities of Oshikoto region. The model was described according to the following six elements identified by Chinn and Kramer (53). The details of model description are in Chapter 7 of the thesis.

- **Purpose:** This refers to the aim of the model development. In this study the model was developed to facilitate the creation of a psychosocial environment, physical environment and personal environment that is conducive to the facilitation of wellness programs for health professionals in the state health facilities of Oshikoto region.

- **Concepts:** The concepts of this model have been identified as psychosocial environment, physical environment and personal environment as presented in chapter 6.
- **Concept definitions:** The model is described in terms of concept definitions. All the central concepts and statements used to develop a model were defined. How the concepts are defined in this model is presented in detail in chapter 7.
- **Nature of relationships:** This is the description of how concepts are linked together in this model. The relational statements were formulated based on the concepts identified, Practice Oriented theory (49), WHO framework and model (14) and Management theory (51).
- **Structure:** The structure of the model is explained in terms of the meanings of shapes, features and colours used in its development.
- **Assumptions:** The assumptions of the model for facilitating the psychosocial, physical and personal environment were based on the assumptions derived from the Health Promotion Theories (126). The details are described in chapter 7.
- **Evaluation of the model:** The description of the model was followed by an evaluation process. The purpose of evaluation was to assess the model in relation to its objectives. The model was evaluated in accordance with the criteria proposed by Fawcett (55) for model evaluation, which addressed questions regarding its significance, internal consistency, parsimony, testability, empirical adequacy and pragmatic adequacy as illustrated in chapter 7 of the thesis.

#### 3.4.5 Guidelines for operationalizing the model [Phase 4]

After the model description and evaluation, guidelines were developed to determine the realisation of the wellness model in the context of state health facilities in the Oshikoto region. The implementation of the model was guided by the guidelines. The guidelines to operationalize the model are described in terms of the purposes, activities and strategies for each phase to provide direction to the management, health professionals and stakeholders involved in the facilitation process of the model as discussed in Chapter 7.

### 3.5 ETHICAL CONSIDERATIONS

The Nuremberg Code and Declaration of Helsinki (57) provided the foundation for various ethical research guidelines, for the conduct of research on human participants. Creswell (45) emphasized that researchers should consider the relevant code of ethics prior to the beginning of the study. Ethics refers to a set of moral principles suggested by an individual or group, which offer rules and behavioral expectations about the most correct conduct towards experimental subjects and respondents, sponsors, other researchers and students (113). Research ethics involve the protection of dignity of subjects and the publication of the information of the research (127). The researcher adhered to the following major ethical issues: permission to conduct research, informed consent, and the principles of beneficence, justice and respect.

#### 3.5.1 Permission and ethical clearance process

Prior to the study, approval and the necessary permissions were obtained from UNAM (UREC), MoHSS, Oshikoto Regional Director and three health facilities (Onandjokwe, Omuthiya and Tsumeb) to gain access to the sites and the study participants.

- **UREC - University of Namibia:** The University of Namibia Research Ethics Committee (UREC) aims to protect human subjects who participate in research studies, so research students are required to get ethical clearance before data collection. UREC reviewed and approved the research proposal. Ethical clearance was granted by UREC before data collection (refer to Annexure A).
- **MoHSS:** Permission was obtained from the Executive Director of the Ministry of Health and Social Services to conduct the research study at the three health facilities (refer to Annexure B).
- **Institutions:** Letters were written to the Regional Director of Oshikoto, Medical Superintendent of Onandjokwe Intermediate Hospital, Senior Medical Officers of Omuthiya and Tsumeb district hospitals. The ethical clearance from UREC and a permission letter from MoHSS were sent to these institutions to confirm approval from UNAM and MoHSS. Telephone calls were made to the Senior Medical officers and Nurse Managers to confirm the dates and times of the scheduled interviews. Permission was obtained from the Regional Director of Oshikoto (refer to Annexure C).

### 3.5.2 Voluntary informed consent

Informed consent is given by a respondent or informant to participate in data collection, in full knowledge of the implications of his or her involvement (127).

A participant voluntarily agrees to participate in a research study in which he or she has full understanding of the study before the study begins (57). Participants were provided with adequate information about the research and their right to decide whether to participate or not. The purpose of the study was explained.

Participants were assured that they could withdraw any time without any punishment and that confidentiality and anonymity were guaranteed as they were assigned numbers for identification and not the names. Participants were assured that only the researcher had access to the information as the computer where the information was stored was protected via a password only known by the researcher. Informed consent forms were signed before participants engaged in the study to confirm that their rights were protected during data collection (refer to Annexures H and I).

### 3.5.3 Application of principle of beneficence

The principle of beneficence ensures that researchers design studies that will generally benefit the people involved and minimize possible risks (113). The researcher hopes that health professionals will benefit from the study if the facilitation of a psychosocial, physical and personal environment model is successfully implemented. The researcher was also obliged to ensure the well-being of the participants who have the right to protection from discomfort and harm, be it physical, psychological, emotional, spiritual, social, economic or legal (57). Questions were carefully structured and no sensitive questions were asked to avoid emotional harm to participants. The researcher demonstrated good manners by not invading participants' privacy during data collection.

### 3.5.4 Application of principle of justice

The principle of justice ensures participants' right to fair selection and treatment (57). All participants were fairly and equally treated. Participants were selected with fairness, for reasons directly related to the research problem, and not because they were readily available or could be manipulated. The agreements made with participants were respected. Participants' right to privacy was ensured and respected.

Adequate explanation was given to the participants concerning confidentiality and anonymity before data collection. After data collection, participants' identity was protected with codes.

#### 3.5.5 Application of the principle of respect

An individual has the right to decide whether or not to participate in a study, without the risk of penalty (57). In addition, any participant has the right to withdraw from the study at any time or to refuse to give information and to ask for clarification about the purpose of the study. The researcher respected all the participants' rights, as participation in this study was voluntary. No one was forced to participate. Also, participants were informed about their right to refuse or withdraw at any time without any coercion or penalty. The purpose of the study was explained adequately before data collection. Written informed consent was obtained from the participants.

### 3.6 SUMMARY OF THE CHAPTER

In this chapter, the methodology used to develop a model for facilitating a psychosocial, physical and personal environment model was discussed. The approach to the model development, reasoning strategies and process of model development were described. The research design and methods used in phase 1 of the study to identify concepts that form the basis of model development were described. The population, sample and sampling, data collection, data analysis for each objective, validity, reliability and trustworthiness were also discussed. The other three phases of the study (phase 2, 3 and 4) that guided the development of the model were also discussed. Finally, ethical considerations were also explained. The next chapter presents the quantitative findings of the study.

## CHAPTER 4

### PRESENTATION AND DISCUSSIONS OF QUANTITATIVE RESULTS [PHASE 1]

#### 4.1 INTRODUCTION

The previous chapter described the research methodology and reasoning strategies used by the researcher to address the research objectives. This chapter describes the results of the quantitative part of the study first and then discusses the findings. The chapter presents results of the quantitative analysis from the concept identification phase of the study, which addresses the first two sub-objectives which are: assessment of the state health facilities in Oshikoto region regarding facilitation of a wellness program; as well as the description of knowledge, practices and experiences of health professionals concerning wellness programs in the state health facilities. Findings from both quantitative and qualitative analyses were merged and discussed in Chapter 5. The presentation of findings led to identification of concepts, which contributed to the formation of the central concepts that formed the basis of a model development.

#### 4.2 PRESENTATION AND DISCUSSION OF FINDINGS

The presentation and discussion of quantitative results was two-fold because a checklist and the questionnaire were used for data collection. A checklist was used to assess the situation at the state health facilities of Oshikoto region concerning the facilitation of a wellness program for health professionals; while the questionnaire was used to collect data on knowledge, practices and experiences of health professionals regarding the facilitation of a wellness program in the state health facilities.

4.2.1 Sub-objective 1: Assess the state health facilities in Oshikoto region regarding facilitation of a wellness program.

This section focuses on a presentation and discussion of quantitative findings from sub-objective 1 of the study. Data was collected through a structured observational checklist. The findings from three state health facilities in Oshikoto region namely, Onandjokwe Intermediate hospital, Omuthiya and Tsumeb district hospitals are presented. Results are discussed according to the four sections in the checklist, namely: health facility demographic data, provision of wellness interventions, policies and environmental support and communication. Quantitative data from the checklist was summarized and presented in Tables 4.1 through 4.4 in order to compare responses to health demographic characteristics of health facilities, provision of wellness interventions among health professionals, policies and environmental support as well as communication across the three state health facilities in Oshikoto region.

#### *4.2.1.1 Demographic data of health facilities*

The demographic information included questions related to the number of health professionals such as medical doctors, number of nurses, number of social workers, number of physiotherapists, number of radiographers and number of pharmacists in each state health facility in the Oshikoto region.

Table 4. 1: Health facilities demographic data

Characteristic	Name of health facility			Total
	Onandjokwe	Omuthiya	Tsumeb	
Number of medical doctors	24 (67%)	6 (17%)	6 (17%)	36
Number of nurses	248 (71%)	62 (18%)	41 (12%)	351
Number of social workers	2 (29%)	2 (29%)	3 (43%)	7
Number of physiotherapists	0	1 (50%)	1 (50%)	2
Number of radiographers	5 (63%)	2 (25%)	1(13%)	8
Number of pharmacists	2 (40%)	2 (40%)	1 (20%)	5

Table 4.1 revealed that the three state health facilities had a total of 36 medical doctors, of which 67% (n=24) were stationed at the Onandjokwe Intermediate hospital, whereas Omuthiya and Tsumeb district hospitals had 17% (n=6) each. For the nurses, Onandjokwe Intermediate hospital had 71% (n=248), Omuthiya had 18% (n=62) while Tsumeb district hospital had 12% (n=41). It was found that Onandjokwe Intermediate and Omuthiya district hospitals each had only two social workers while Tsumeb district hospital had 3. There was, surprisingly, no physiotherapist in Onandjokwe, while Omuthiya and Tsumeb hospitals each had 1. Onandjokwe Intermediate hospital was served by 5 radiographers, Omuthiya 2, while Tsumeb had only 1. The results indicated that there were 2 pharmacists at Onandjokwe and Omuthiya whereas Tsumeb had only 1. This is consistent with WISN (32) report which found that all district hospitals have shortage of nurses than they need on the basis of their workload, with Onandjokwe having the least staff. Similarly, other studies support these findings as they found that shortage of nurses and doctors is a serious issue in many countries (83,128,129).

#### 4.2.1.2 Provision of wellness interventions

The comparison of the provision of wellness interventions across three health facilities is presented below in Table 4.2.

Table 4. 2: Comparison of information on provision of wellness interventions for the three health facilities in Oshikoto region.

PROVISION OF WELLNESS INTERVENTIONS	NAME OF HEALTH FACILITY		
	Onandjokwe	Omuthiya	Tsumeb
Does the hospital currently have a wellness program?	No	No	No
Does the hospital have other initiatives to improve well-being for health professional?	Yes	No	Yes
Is there a focal person leading the wellness activities in the hospital?	No	No	No
In the last 12 months, has your hospital provided education and resources for healthy living?	No	Yes	No
In the last 12 months, has your hospital offered an onsite screening for blood pressure?	No	No	Yes
In the last 12 months, has your hospital offered an onsite screening for blood sugar?	No	No	Yes
In the last 12 months, has your hospital offered an onsite screening for cholesterol?	No	No	No
In the last 12 months, has your hospital offered an onsite screening for Body Mass Index?	No	No	No
Does the hospital serve deep fried products either in the cafeteria or to patients?	No	No	No

The findings revealed that there is no wellness program or focal person leading the wellness activities in any of the three selected state health facilities of Oshikoto region. This indicates unavailability of wellness programs and focal persons for wellness activities in all the state health facilities of Oshikoto region. Ledikwe et al. (33) oppose the findings of this study as their study shows that there were wellness programs and focal persons overseeing the workplace wellness activities in each of 27 health districts of Botswana. However, Onandjokwe Intermediate and Tsumeb hospitals indicated that they have other alternatives to improve the well-being of health professionals. On a contrary Jacques et al. (100) quasi experiment study on wellness room as a strategy to reduce

occupational stress among Brazilian nurses (n=60) concluded that health promotion programs in the work environment present low and moderate evidence for improved mental health, well-being and decreased absenteeism. The results indicated that in the last 12 months, Omuthiya district hospital provided education and resources for healthy living to health professionals; and only Tsumeb district hospital that offered onsite screening for blood pressure and blood sugar to health professionals. In addition, none of these health facilities offered an onsite screening for cholesterol and body mass index (BMI) in the past 12 months. That is an indication that there is inadequate health screening and education to promote well-being among health professionals. All of the three health facilities indicated that they do not serve deep fried products either in the cafeteria or to the patients.

#### *4.2.1.3 Policies and environmental support*

The comparison of the information on policies and environmental support for the three health facilities is presented in Table 4.3 below.

Table 4. 3: Comparison of information on policies and environmental support for the three health facilities in Oshikoto region

<b>Policies and environmental support</b>	<b>Name of health facility</b>		
	<b>Onandjokwe</b>	<b>Omuthiya</b>	<b>Tsumeb</b>
Are there written wellness policies in the hospital?	No	No	No
Does your hospital have Employee Assistance programs?	No	No	No
Does your hospital have fitness programs?	No	No	No
Does it have immunization programs for health professionals?	No	Yes	No
Are there any Educational programs i.e. cancer prevention, managing chronic pain, etc.?	No	No	Yes
Are there any nutrition education programs?	No	No	No

The study found that there was no wellness policy in any of the selected health facilities. In addition, there were no employee assistance programs, nutrition education programs and fitness programs to promote well-being among health professionals in any of the three state health facilities. Omuthiya district hospital had an immunization program for health professionals in place, while Tsumeb hospital had an educational program for cancer prevention (refer to Table 4.3). The findings revealed unavailability of a wellness policy and inadequate wellness interventions in the state health facilities.

#### 4.2.1.4 Communication

The information on communication for the three health facilities in Oshikoto region is compared in table 4.4 below

*Table 4. 4: Comparison of information on communication for the three health facilities in Oshikoto region.*

Communication channels	Name of health facility		
	Onandjokwe	Omuthiya	Tsumeb
Does the hospital post signs that promote healthy choices?	Yes	Yes	Yes
Does the hospital post nutritional information about the food it serves?	No	No	No
Does your hospital use Bulletin boards to communicate worksite wellness to its employees?	Yes	No	Yes
Does your hospital use E-mails to communicate worksite wellness to its employees?	No	Yes	Yes
Does your hospital use Direct mailing to communicate worksite wellness to its employees?	No	No	No
Does your hospital use flyers to communicate worksite wellness to its employees?	Yes	Yes	No
Does your hospital use meetings to communicate worksite wellness to its employees?	Yes	No	Yes
Does your hospital disseminate worksite wellness information regularly?	No	No	Yes

The health facilities were assessed on the ways of disseminating wellness related information and the types of wellness information shared among health professionals. The

results indicated that all three state health facilities post signs that promote healthy choices, but none of them shares nutrition-related information about the food it serves. Furthermore, the following ways were used to communicate wellness matters to health professionals in the health facilities: Onandjokwe uses bulletin boards, flyers and meetings; Omuthiya uses emails and flyers; and Tsumeb uses bulletin boards, emails and meetings. None of the health facilities use direct mailing to communicate worksite wellness to their employees. Only Tsumeb district hospital disseminates worksite wellness information on a regular basis. This indicates that there is irregular dissemination of wellness information or poor communication in the health facilities at Onandjokwe and Omuthiya hospitals. In their study Zhang et al.,(130) agree with the above in their sentiment that poor communication, limited frontline employee participation and top-down decision-making structure are barriers for a participatory occupational health promotion program in three nursing homes.

Table 4.5 below presents the comparison of information regarding the facilitation of a wellness program across the three health facilities.

Table 4. 5: Comparison of information on provision of wellness interventions, policies and environmental support; and communication for the three health facilities in Oshikoto region.

CHARACTERISTICS PROVISION OF WELLNESS INTERVENTIONS	NAME OF HEALTH FACILITY				FINDINGS
	Onandjokwe	Omuthiya	Tsumeb		
Does the hospital currently have a wellness program?	No	No	No	No (100%)	Unavailability of wellness programs (100%) No focal person for wellness activities (100%)  Inadequate health screening and education to promote well-being (66.7%)
Does the hospital have other initiatives to improve well-being for health professional?	Yes	No	Yes	Yes (66.7%) No (33.3%)	
Is there a focal person leading the wellness activities in the hospital?	No	No	No	No (100%)	
In the last 12 months, has your hospital provided education and resources for healthy living?	No	Yes	No	No (66.7%) Yes (33.7%)	
In the last 12 months, has your hospital offered an onsite screening for blood pressure?	No	No	Yes	No (66.7%) Yes (33.7%)	
In the last 12 months, has your hospital offered an onsite screening for blood sugar?	No	No	Yes	No (66.7%) Yes (33.7%)	
In the last 12 months, has your hospital offered an onsite screening for cholesterol?	No	No	No	No (100%)	
In the last 12 months, has your hospital offered an onsite screening for Body Mass Index?	No	No	No	No (100%)	
Does the hospital serve deep fried products either in the cafeteria or to patients?	No	No	No	No (100%)	
<b>POLICIES AND ENVIRONMENTAL SUPPORT</b>					
Are there written wellness policies in the hospital?	No	No	No	No (100%)	Unavailability of wellness policies (100%)  Inadequate wellness interventions in place (66.7%)
Does your hospital have Employee Assistance programs?	No	No	No	No (100%)	
Does your hospital have fitness programs?	No	No	No	No (100%)	
Does it have immunization programs for health professionals?	No	Yes	No	No (66.7%) Yes (33.7%)	
Are there any Educational programs i.e. cancer prevention, managing chronic pain, etc.?	No	No	Yes	No (66.7%) Yes (33.7%)	
Are there any nutrition education programs?	No	No	No	No (100%)	
<b>COMMUNICATION</b>					
Does the hospital post signs that promote healthy choices?	Yes	Yes	Yes	Yes (100%)	Irregular dissemination of wellness
Does the hospital post nutritional information about the food it serves?	No	No	No	No (100%)	
Does your hospital use Bulletin boards to communicate worksite wellness to its employees?	Yes	No	Yes	Yes (66.7%)	

				No (33.3%)	information / poor communication (66.7%)
Does your hospital use E-mails to communicate worksite wellness to its employees?	No	Yes	Yes	Yes (66.7%) No (33.3%)	
Does your hospital use Direct mailing to communicate worksite wellness to its employees?	No	No	No	No (100%)	
Does your hospital use flyers to communicate worksite wellness to its employees?	Yes	Yes	No	Yes (66.7%) No (33.3%)	
Does your hospital use meetings to communicate worksite wellness to its employees?	Yes	No	Yes	Yes (66.7%) No (33.3%)	
Does your hospital disseminate worksite wellness information regularly?	No	No	Yes	No (66.7%) Yes (33.7%)	

4.2.2 Sub-objective 2: Describe the knowledge, practices and experiences of health professionals concerning facilitation of wellness program in the state health facilities.

The presentation and discussion of findings for this objective includes analysis of demographic data, knowledge on wellness programs, health professionals' practices regarding the facilitation of a wellness program and health professionals' experiences regarding management support and interest in the wellness programs. In addition, cross tabulation to determine if there is a significant association between experience, knowledge and practice and various demographic characteristics of the respondents is presented. Also, ordinal regression is used to determine how much each category of the outcome variables can be explained by a set of explanatory variables.

*4.2.2.1 Demographic data of the participants*

The demographic data of participants comprised information related to which health facility and district they work in, age, marital status, rank/position, working department and years of working experience, as presented in Table 4.6 below.

Table 4. 6: Demographic Data of the participants

Variable	(N)	%
Health facility		
Intermediate Hospital Onandjokwe	126	(76.8%)
Omuthiya hospital	21	(12.8%)
Tsumeb hospital	17	(10.4%)
Gender		
Female	133	(81.1%)
Male	31	(18.9%)
Age		
20-29	41	(25.0%)
30-39	69	(42.1%)
40-49	20	(12.2%)
50-59	34	(20.7%)
Marital Status		
Married	90	(54.9%)
Unmarried	68	(41.5%)
Divorced	3	(1.8%)
Widow	3	(1.8%)
Rank/Position		
Registered Nurse	78	(47.6%)
Enrolled Nurse/Midwife/Accoucher	69	(42.1%)
Doctors	17	(10.4%)
Working Department		
Outpatient	58	(35.4%)
Inpatient	72	(43.9%)
Maternity	25	(15.2%)
Theatre	9	(5.5%)
Years of Working Experience		
1-5 years	62	(37.8%)
6-10 years	46	(28.0%)
11 +years	56	(34.1%)

One hundred and twenty-six (76.8%) of the respondents were working at Onandjokwe Intermediate Hospital in Onandjokwe district, 21 (12.8%) at Omuthiya district hospital and seventeen (10.4%) at Tsumeb district hospital. The names of the health facilities correspond with the health district where the respondents work. The vast majority (81.1%) of the respondents were females and (18.9%) were males. The findings show that 42.1% of the respondents were aged between 30 and 39 years; 12.2% were aged between 40 and 49 years and approximately 20.7% were aged between 50 and 59 years. More than half (54.9%) of the participants were married, whereas 41% were unmarried. Divorced and widowed categories constituted 1.8% each.

Table 4.6 shows that 43.9% of the respondents were working in the inpatient department and 35.4% were working in the outpatient department. Those who work at the Maternity and Theatre departments represent 15.2% and 5.5% respectively. The findings revealed that health professionals with 1 to 5 years of working experience represent 37.8%, while 6 to 10 years and more than 11 years represent 28% and 34.1% respectively.

#### *4.2.2.2 Health professionals' knowledge on wellness program*

The respondents were asked to indicate the extent of their agreement or disagreement on knowledge regarding wellness programs at the health facility they were based at. Health professionals rated their knowledge on ten statements on a five-point Likert scale (strongly agree [5 points], agree [4 points], unsure [3 points], disagree [2 points] and strongly disagree [1 point]). Descriptive statistics and self-rating to rate knowledge of health professionals is presented in Table 4.7 below.

The self-rating maximum score for the ten statements was 50 points and the minimum score for the ten statements was 10 points. The rating score was decided as follow: participants who scored 30 points for all ten statements were in the range of unsure, cut off point and considered as having inadequate knowledge. While participants who scored above 31 were considered as having adequate knowledge. Hence, knowledge was rated adequate (AK) for participants who scored a total of 31– 50 points for all ten statements, and knowledge (IK) was rated as inadequate if a total score of 10 – 30 points was obtained for all ten statements.

Table 4. 7: Respondents’ rating of knowledge on wellness programs

Statement	Strongly agree	Agree	Unsure	Disagree	Strongly disagree	Total	Scores: AK (35 – 50) IK (10 – 34)
Wellness refers to physical and emotional health only	24 (14.6%)	37 (22.6%)	31 (18.9%)	25 (15.2%)	47 (28.7%)	164 (100%)	Adequate knowledge (AK) scores 156 (95.12%) Inadequate knowledge (IK) 8 (4.88%)
Workplace wellness is education and activities that a worksite may do to promote healthy lifestyles to employees and their families.	28 (17.1%)	56 (34.1%)	21 (12.8%)	25 (15.2%)	34 (20.7%)	164 (100%)	
Wellness programs are key components to the health and well-being of employees.	91 (55.5%)	57 (34.8%)	12 (7.3%)	2 (1.2%)	2 (1.2%)	164 (100%)	
The core of wellness program is physical activity, nutrition and stress management	28 (17.1%)	61 (37.2%)	48 (29.3%)	14 (8.5%)	13 (7.9%)	164 (100%)	
Workplace wellness programs decrease healthcare costs and increase productivity.	70 (42.7%)	47 (28.7%)	26 (15.9%)	8 (4.9%)	13 (7.9%)	164 (100%)	
A successful worksite wellness program needs leadership support.	126 (76.8%)	26 (15.9%)	6 (3.7%)	5 (3.0%)	1 (0.6%)	164 (100%)	
Poor nutrition and physical inactivity increase the risk of metabolic diseases and musculoskeletal diseases.	119 (72.6%)	31 (18.9%)	7 (4.3%)	1 (0.6%)	6 (3.7%)	164 (100%)	
Poor health consequently impacts on work performance	23 (14.0%)	7 (4.3%)	14 (8.5%)	16 (9.8%)	104 (63.4%)	164 (100%)	
High levels of stress result in lower levels of professional performance.	111 (67.7%)	24 (14.6%)	6 (3.7%)	6 (3.7%)	17 (10.4%)	164 (100%)	
There is a relationship between high workload, staff shortage and job satisfaction.	104 (63.4%)	33 (20.1%)	10 (6.1%)	5 (3.0%)	12 (7.3%)	164 (100%)	

On the knowledge whether wellness referred to physical and emotional health only, 28.7% of the respondents strongly disagreed whereas 14.6% strongly agreed. However, 18.9% of the respondents were unsure. On whether workplace wellness was education and activities that a worksite may do to promote healthy lifestyles to employees and their families, 34.1% of the respondents agreed while 12.8% of the respondents were unsure. On the statement whether there was a relationship between a heavy workload, staff shortage and job satisfaction, 63.4% of the respondents strongly agreed whereas 3.0% disagreed.

Overall, the self-rating findings of the study indicated that 95.12% of the respondents had adequate knowledge on wellness programs because their total rating was in the range 31 to 50, whereas 4.88% were classified as having inadequate knowledge (with their total scores of the ratings ranged between 10 and 30).

Based on ordinal regression and cross tabulation analysis, statistically significant results are highlighted. The three variables which were statistically significant are presented.

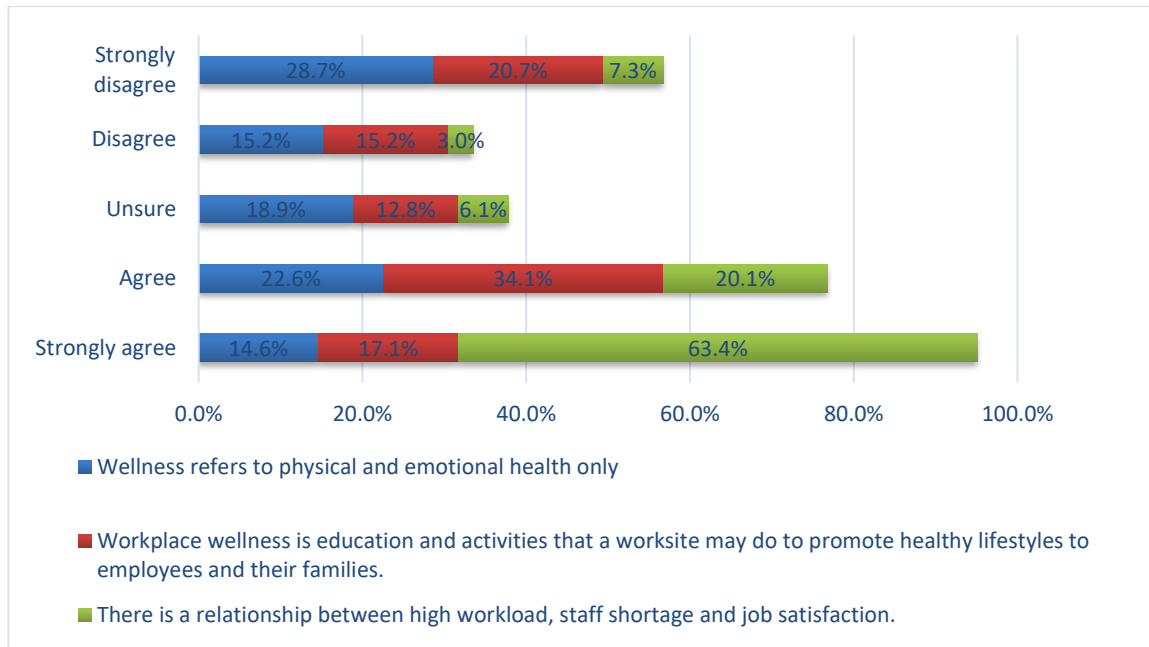


Figure 4.1 Health professional’s knowledge on wellness programs

Wellness refers to physical and emotional health only

*Ordinal regression analysis was carried out to determine the statistically significant effect of the independent variables (age, gender, marital status and working department) on the dependent variable (level of agreement on knowledge regarding wellness).*

The results for model fit and goodness of fit are shown in Tables 4.8 and 4.9 in (Annexure K)

There was a significant improvement in fit of the final model relative to the intercept only model. The Chi-Square value was 20.931 with 11 degrees of freedom and a p-value of 0.034, which is lower than 0.05. Under the null hypothesis, the data fit the model well because the significant p-value associated with Pearson Chi-Square was 0.071, which was greater than 0.05, with 373 degrees of freedom. Therefore, we do not reject the null hypothesis and the goodness of fit is consistent with the fitted model.

From Table 4.10, the value of beta 4.459 indicated that we were more likely to observe a high response (strongly agree) for health professionals in the age group 50 – 59 years, compared to the responses of other age groups. The age group 50 - 59 was found to be significant in the model with p-value of 0.008. The estimate of 4.459 means that we are 86.4 (exponent raised to the power of 4.459) times more likely to observe a high response (strongly agree) for the health professionals in the age group 50 – 59 years, compared to those in other age groups.

The beta value of 0.975 indicated that we were more likely (p-value = 0.018) to observe a higher response (strongly disagree) for males compared to the response for females. This result means that we are (exponent raised to the power of 0.975) 2.65 times more likely to observe a high response (strongly disagree) for the male health professionals compared to their female counterparts.

The beta value of 3.575 indicated that we were more likely to observe a high response (strongly agree – p-value = 0.039) for health professionals who were divorced compared to those who were widowed.

For the working department, the beta value of 1.806 (p-value = 0.015) indicated that we were more likely to observe a high response (strongly disagree) for health professionals working in the maternity department compared to health professionals working in the theatre. The odds of health professionals working in the maternity department to strongly disagree are 6.01 times compared to those who worked in the theatre department. Being male, divorced and working in the maternity department seemed to explain the level of agreement on whether wellness refers to physical and emotional health only.

- ✚ Workplace wellness includes education and activities that a worksite may do to promote healthy lifestyles to employees and their families.

*Cross tabulation analysis to determine if there is a relationship between the department as well as age and the level of agreement on workplace wellness.*

- ✚ There is strong evidence of a relationship between age and the level of agreement on workplace wellness as education and activities that an employer may perform to promote healthy lifestyles to employees and their families. The p-values associated with the Likelihood Ratio and Linear-by-Linear Association Chi-Square test are 0.044 and 0.018 respectively which is significant at 0.05 level of significance (refer to Table 4.14, see Annexure K). The findings in this study revealed that more than half (51.2%) of health professionals have knowledge on wellness program because they either strongly agree or agree that workplace wellness includes education and activities that a worksite may do to promote healthy lifestyles to employees and their families. However, there is more than one-third (48.7%) of the participants who have inadequate knowledge. Similarly, Uchendu et al. (83) support the current study findings as their study shows that many nurses lacked knowledge of national guidelines for health.

- ✚ There is a relationship between high workload, staff shortage and job satisfaction

*Ordinal regression analysis to determine if the independent variables (department and rank) have a significant effect on the dependent variable (level of agreement on the relationship between high workload, staff shortage and job satisfaction).*

There is a significant improvement in fit of the final model relative to the Intercept only model. The Chi-Square value is 14.954 with 5 degrees of freedom and a p-value of 0.011, which is less than 0.05 and therefore the null hypothesis is rejected (refer to Table 4.15, Annexure K). The significant p-value associated with Pearson Chi-Square is 0.075 with 131 degrees of freedom, which is greater than 0.05, and therefore the null hypothesis is accepted. This means that the goodness of fit is consistent with the fitted model. The statistics are presented in Table 4.16 (Annexure K).

As reflected in Table 4.17 (Annexure K), the beta value of 1.503 indicates that we are more likely to observe a high response (strongly disagree) for health professional working in the outpatient department compared to the responses of health professionals working in the inpatient department (reference category).

The beta value of 1.257 indicates that we are more likely to observe a high response (strongly disagree) for nurses compared to the responses of the doctors (reference category). In terms of the magnitude:  $\exp^{(1.503)} = 4.4952$  which means we are 4.4952 times more likely to observe a lower response (strongly disagree) for health professionals in the outpatient department compared to the responses of the health professionals in the inpatient department (reference category).

For the males,  $\exp^{(1.257)} = 3.519$ , which means we are 3.519 times more likely to observe a high response (strongly disagree) for nurses compared to the responses of the doctors (reference category). The current findings also show that doctors and health professionals in the in-patient department confirmed that there is a relationship between high workload, staff shortage and job satisfaction. This is consistent with studies

(83,102,130) that indicate high workload and staff shortage as barriers to engage in health promotion programs.

#### *4.2.2.3 Health professionals' practices regarding facilitation of a wellness program*

This section presents the participants' nutritional status; level of physical and emotional activity; health habits; and health screening/examination in the past 12 months.

Health professionals were asked to indicate the extent to which they were practicing wellness interventions on nutrition; their level of physical and emotional activities; and health habits. They rated their level of agreement regarding practice on 16 statements (7 statements on nutritional status and 9 statements on physical and emotional activity and health habits) on a five-point Likert scale from strongly agree (5 points) to strongly disagree (1 point). Respondents also rated their level of practice with YES or NO on 10 statements regarding health screening/examination in the past 12 months. Descriptive statistics in the form of frequencies and self-rating to rate practice of health professionals are presented in Table 4.18.1 below. The self - rating overall maximum score for practice was 100 and the minimum score was 26. In this study a score of 58 (unsure), is considered as poor practice. Therefore, practice was rated as “good” if the participant scored 59 – 100, and “poor” if a score of 26 –58 was obtained. Cross tabulation and ordinal regression analysis on both practice and categorized practice 2 are presented in Tables 4.20 and 4.21 respectively (Annexure K).

Table 4.18 1: Respondents' nutritional status; level of physical and emotional activity; and health habits

Statement	Strongly agree	Agree	Unsure	Disagree	Strongly disagree	Scores: Good practices (59- 100) Poor practices (26 – 58)
I eat breakfast every day.	49 (29.9 %)	41 (25.0 %)	10 (6.1 %)	37 (22.6 %)	27 (16.5 %)	Good practices score 112 (68.29%)  Poor practices score 52 (31.70%)
I eat fruits and vegetables regularly.	46 (28.0 %)	63 (38.4 %)	18 (11.0 %)	30 (18.3 %)	7 (4.3 %)	
I cook, eat or purchase low-fat food.	39 (23.8 %)	53 (32.3 %)	31 (18.9 %)	26 (15.9 %)	15 (9.1 %)	
I cook, eat or purchase whole grain food.	45 (27.4 %)	48 (29.3 %)	33 (20.1 %)	29 (17.7 %)	9 (5.5 %)	
I buy snacks/fast food from the cafeteria for lunch most of the time.	18 (11.0 %)	28 (17.1 %)	22 (13.4 %)	46 (28.0 %)	50 (30.5 %)	
I prepare my own food from home every day.	62 (37.8 %)	51 (31.10 %)	17 (10.4 %)	23 (14.0 %)	11 (6.7 %)	
I have been eating healthy food for the past 6 months.	21 (12.8 %)	52 (31.7 %)	48 (29.3 %)	31 (18.9 %)	12 (7.3 %)	
I exercise or walk regularly.	53 (32.3 %)	56 (34.1 %)	15 (9.1 %)	28 (17.1 %)	12 (7.3 %)	
I regularly smoke cigarettes.	3 (1.8 %)	3 (1.8 %)	6 (3.7 %)	4 (2.4 %)	148 (90.2 %)	
I have at least three drinks containing alcohol every day.	7 (4.3 %)	7 (4.3 %)	4 (2.4 %)	22 (13.4 %)	124 (75.6 %)	
I practice some stress management on a regular basis.	14 (8.5 %)	50 (30.5 %)	27 (16.5 %)	33 (20.1 %)	40 (24.4 %)	
I feel fatigued as a result of my current work.	38 (23.2 %)	39 (23.8 %)	27 (16.5 %)	32 (19.5 %)	27 (16.5 %)	
I am satisfied with my work.	48 (29.3 %)	64 (39.0 %)	20 (12.2 %)	18 (11.0 %)	14 (8.5 %)	
I often find my work stressful.	31 (18.9 %)	47 (28.7 %)	17 (10.4 %)	39 (23.8 %)	30 (18.3 %)	
In general, I would say my health is good.	46 (28.0 %)	66 (40.2 %)	34 (20.7 %)	14 (8.5 %)	4 (2.4 %)	
The demand of my work interferes with my family life.	26 (15.9 %)	53 (32.3 %)	18 (11.0 %)	26 (15.9 %)	41 (25.0 %)	

Table 4.19 1: Respondents' health screenings/examination in the past 12 months

<b>Health screenings in the past 12 months</b>	<b>YES</b>	<b>NO</b>	<b>TOTAL</b>
Blood pressure	144 (88.3 %)	19 (11.7 %)	163 (100%)
Blood sugar	113 (68.9 %)	50 (30.5 %)	163 (100%)
Cholesterol	46 (28.0 %)	111 (67.7 %)	157 (100%)
Electrocardiogram (ECG) screening	15 (9.1 %)	134 (81.7 %)	149 (100%)
Prostate examination	3 (9.7 %)	28 (90.3 %)	31 (100%)
Mammogram	18 (14.8 %)	104 (85.2 %)	122 (100%)
Pap smear	77 (57.9 %)	56 (42.1 %)	133 (100%)
Body mass index (BMI) screening	96 (60.4 %)	63 (39.6 %)	159 (100%)
Flu vaccination	28 (18.1 %)	127 (81.9 %)	155 (100%)
Hepatitis B vaccination	81 (50.6 %)	79 (49.4 %)	160 (100%)

Table 4.18.1 shows that 27.4% of the health professionals strongly agreed, whereas 29.3% agreed that they cook, eat or purchase whole grain food, while 5.5% strongly disagreed, and 17.7% disagreed. The remaining 20.1% were unsure. Nearly forty five percent of the health professionals either agreed (31.7%) or strongly agreed (12.8%) that they have been eating healthy food for the past 6 months, (29.3%) were unsure; and 18.9% disagreed while 7.3% strongly disagreed. There was a strong disagreement (75.6%) that health professionals have at least three drinks containing alcohol every day, 13.4% disagreed, while (7%) were equally in strong agreement and agreement. Furthermore, 23.2% and 23.8% of the health professionals indicated that they strongly agreed and agreed respectively with the statement “I feel fatigued as a result of my current work”. However, 19.5% strongly disagreed and 16.5% disagreed with the statement. Most of the health professionals often find their work stressful: 28.7% agreed, 18.9% strongly agreed, 23.8% and 18.3% disagreed and strongly disagreed respectively that their work is often stressful. There was agreement (32.3%) and strong agreement (15.9%) that the demand of work interferes with the health professionals’ family, while 25.0% strongly disagreed and 15.9% disagreed.

Based on self-rating, the majority (112) (68.29%) of the respondents scored 59 to 100 which indicates good practices; and more than one-third (52) (31.70%) scored 26 to 58 for poor practices. According to Tables 4.20 and 4.21 (Annexure K), fourteen variables on practices on wellness were not statistically significant with the demographic variables ( $p > 0.05$ ) while the remaining twelve variables were statistically significant and presented based on cross tabulation and ordinal regression analysis.

*Cross tabulation analysis to determine correlation between the independent variables (age, years of experience, position of participants, department and gender) and the dependent variable (level of agreement on categorized practice 2 and practice).*

Table 4.21 (Annexure K) shows that there is evidence of a significant relationship between age and the categorized practice 2. The Pearson and Linear-by-Linear Association Chi-Square values are 6.828 and 6.224 respectively; with 2 and 1 degrees of freedom and p-values of 0.033 and 0.013 respectively, which are significant at 0.05 level of significance. The likelihood ratio value is 7.603 with 2 degrees of freedom and p-value of 0.022.

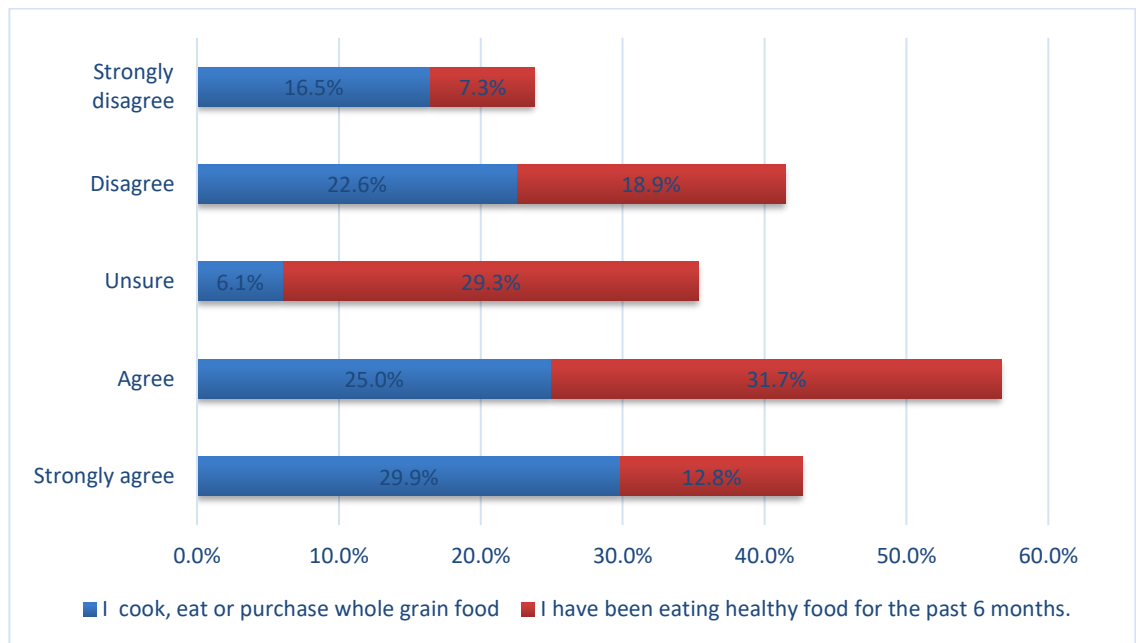


Figure 4.2 Health professionals’ practice regarding nutrition

The years of experience were found to be a significant predictor of the statements “I cook, eat or purchase whole grain food”; and “I have been eating healthy food for the past 6 months [p-value = 0.033 and p-value = 0.015].

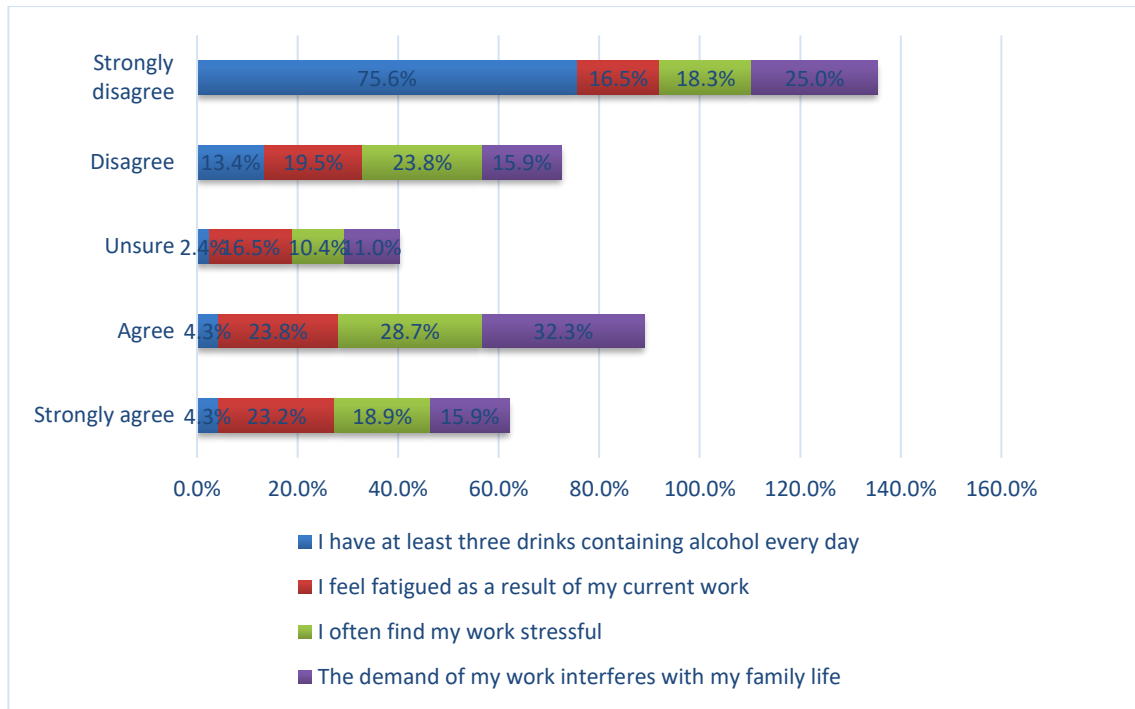


Figure 4.3 Health professionals’ practice regarding health habits

There was an association between the years of experience and the statement “I feel fatigued as a result of my current work” (p-value = 0.035). The variable relating to the statement “I have at least three drinks containing alcohol every day” shows a strong statistically significant correlation with the gender with a p-value of 0.001. The two relational variables that were statistically significant were participants’ age and the statement “I often find my work stressful” (p-value = 0.024); and participants’ age and the statement “the demand of my work interferes with my family life” (p-value = 0.020). The other five variables, namely regular exercise, regular smoking of cigarettes, regular stress management practice, “I am satisfied with my work”, and “in general I would say my health is good” were not statistically significant (p-value > 0.05).

Less than ten percent (8.6%) of the male health professionals indicated that they have at least three drinks containing alcohol every day. This finding confirms with Baer et al. (131) their study shows moderate alcohol consumption among nurses. Health professionals might be expected to practice healthy lifestyles and behaviour, eat healthy and be role models for health. However, this is not the case with some health professionals. The current findings revealed that only health professionals with less than five years of experience were found to have been cooking, eating and purchasing healthy food for the past 6 months compared to the ones with more than five years of experience, while health professionals with more than 11 years of working experience feel fatigued as a result of their current work. This is consistent with a study done in Nigerian shows that nurses influenced unhealthy behaviours such as unhealthy diet and poor food choice among their colleagues (83). Similarly, previous studies found that physical inactivity, poor nutrition and fatigue impact physical health among nurses (109,131). Correspondingly, Chiou et al. (102) found that nurses have the worst health behaviours and lowest participation in health promotion activities in a Taiwan hospital compared to the doctors. The researcher felt that nurses could be motivated to reflect on their practice regarding health habits and behaviours as an individual and a professional group. The current findings revealed that health professionals older than 30 years found their work stressful and that their work demand interferes with family life. This might be because of excessive workload (109,132). Previous studies support these findings as they found that work stress is common among health professionals (40,83,128,133,134).

#### ✚ Health screening/examination in the past 12 months

In Table 4.19.1 on health screening/examination in the past 12 months, participants were asked to indicate whether they were screened/examined or received any vaccination as a preventive measure for health promotion at their workplaces, by selecting *yes* or *no*. The variables on blood pressure, electrocardiogram (ECG), mammogram and hepatitis B vaccination were not statistically significant ( $p\text{-value} > 0.05$ ).

More than half (68.9%) of the participants indicated that their blood sugar had been tested in the past twelve months and 30.5% of them said that the blood sugar test was not done. Nearly one third (28.0%) of the health professionals had undergone a cholesterol test, while the majority (67.7%) indicated that the cholesterol test was not done in the past 12 months. Only 1.8% of the male participants indicated that they had gone for prostate examination and 17.1% were not examined in the past twelve months. Forty seven percent (47.0%) of the female participants had a Pap smear test and 34.1% were not tested in the past 12 months. More than half (58.5%) of the health professionals indicated that they were screened for Body Mass Index (BMI) and 38.4% were not screened in the past 12 months. Approximately 17.1% of them received flu vaccination in the past 12 months, while 77.4% were not vaccinated.

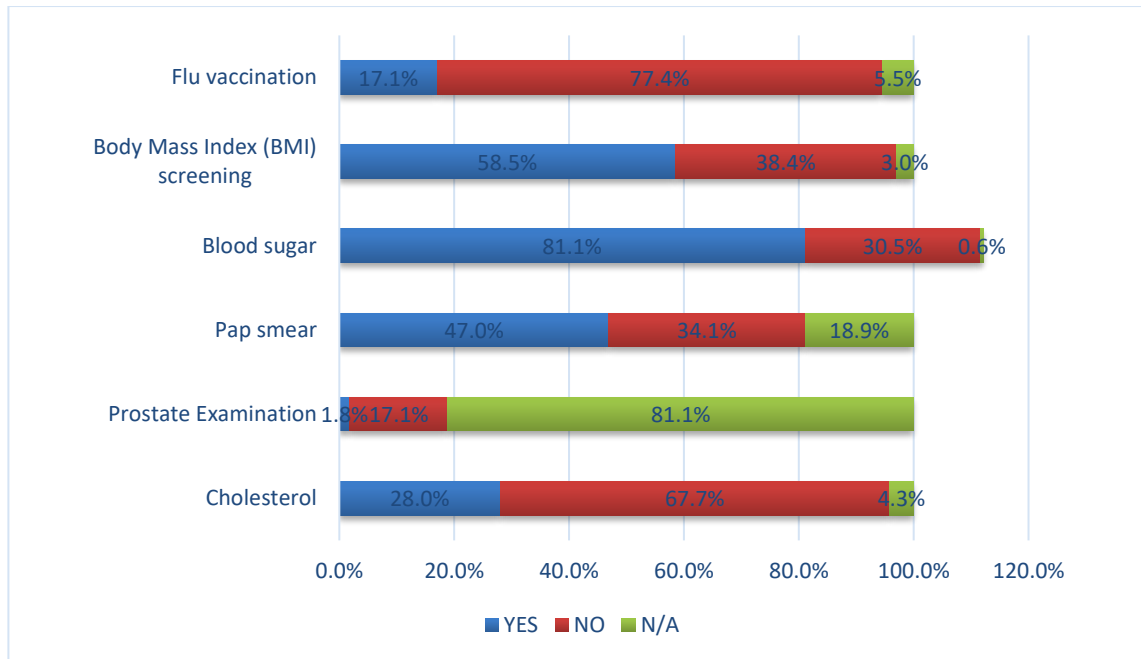


Figure 4.4 Health screening in the past 12 months

The results suggest that there is an association between age, experience, participant position and department of the participants and health screenings/examinations in the past 12 months. There were strong associations between the participants' age and blood sugar testing (p-value = 0.020, Pearson Chi-squared value = 7.846), recoded age and cholesterol testing (p-value = 0.001, Pearson Chi-square = 14.823); position of the respondents and cholesterol testing (p-value = 0.015, Pearson Chi-square statistic = 8.405); department and flu vaccination (p-value = 0.008, Chi-square value = 7.005); while there were borderline correlations between experience and blood sugar (p-value = 0.044, Linear by linear statistic = 4.045) and department and BMI (p-value = 0.045, Pearson Chi-square value = 4.021).

The findings revealed that older people (40+) are more likely (83.3%) to go for blood sugar testing compared to younger people (20 – 29) (61%).

Younger people (20 – 29) are less likely (12.2%) to go for Cholesterol testing compared to older people (40+) (46.3%). Doctors are almost three times more likely to go for Cholesterol testing compared to enrolled nurses, midwives and accoucheurs.

There is a significant correlation between marital status and prostate examination (p-value < 0.001). The findings revealed that the Nagelkerke Pseudo R-Square is 0.614, which means that 61.4% of the variation in the dependent variable (prostate examination) can be explained by the variation in the independent variables (gender and marital status).

*Ordinal regression analysis to determine the statistically significant effect of independent variables (rank and gender) on the dependent variables (level of agreement on categorized practice 2 and practice)*

The categories nurses and males are significant predictors of the practice, with significant p-values of 0.037 and less than 0.005 respectively. The 95% confidence intervals for the parameters (nurses and males' categories) are [-2.020, -0.063] and [-2.509, -0.912] respectively. The beta value of -1.042 indicates that a lower response (poor practice) is more likely to be observed for nurses compared to the responses of the doctors (reference category). The beta value of -1.710 indicates that a lower response is more likely to be observed (bad practice) for males compared to the responses of the females (reference category).

In terms of the magnitude:  $\exp^{-1.042} = 0.3527$ , which means we are 0.3527 times more likely to observe a lower response (poor practice) for nurses compared to the responses of the doctors (reference category).

For the males,  $\exp^{-1.710} = 0.1809$ , which means we are 0.1809 times more likely to observe a lower response (poor practice) for males compared to the responses of the females (reference category). The information is presented in Table 4.22 (Annexure K).

There is a significant improvement in fit of the final model relative to the Intercept only model. The Chi-Square value is 25.198 with 5 degrees of freedom and a p-value less than 0.005. The Table 4.23 (Annexure K) shows model fit information. The null hypothesis states that the model fits the data well. The significant p-value associated with Pearson Chi-Square is 0.717 with 369 degrees of freedom, which is greater than 0.05 and therefore the null hypothesis is accepted. The Goodness-of-Fit Table 4.24 (Annexure K) shows the results of the analysis.

#### *4.2.2.4 Health professionals' experiences regarding management support and interest in the facilitation of a wellness program*

The respondents were asked to indicate their level of agreement regarding support from management on a five-point Likert scale, from strongly agree (5 points) to strongly disagree (1 point). They rated their level of agreement regarding management support on 15 statements. Respondents also rated their level of interest in the wellness programs at the health facilities on a five-point Likert scale from very high (five points), high (4), unsure (3), low (2) to very low (1) interests. They rated the level of interest on 21 statements. Health professionals' responses and self-rating scores regarding management support and interest in the wellness programs are presented in Tables 4.25.1 and 4.26.1 below. The maximum score for self-rating regarding management support was 75 and the minimum score was 49. The management support was rated as sufficient if the participant scored 50 – 75, and insufficient if the participant scored 15 – 49. The maximum score for

interest in the wellness program was 105; and the minimum was 21. Participants were rated as having high interest if they scored 68 – 105; and low interest if they scored 21 – 67. Ordinal regression and cross tabulation analysis on experience is presented.

Table 4.25 1: Participants’ experiences regarding management support at the health facility

Statement	Strongly agree	Agree	Unsure	Disagree	Strongly disagree	Scores: Sufficient support (50 - 75) Insufficient support (15 - 49)
<i>Our employer cares about our health and wellness because the following are offered:</i> Diseases education program	25 (15.2 %)	39 (23.8 %)	32 (19.5 %)	37 (22.6 %)	31 (18.9 %)	Sufficient support 39 (23.78%)
Nutrition education program	22 (13.4 %)	22 (13.4 %)	34 (20.7 %)	50 (30.5 %)	36 (22.0 %)	
Work stress management session	9 (5.5 %)	25 (15.2 %)	28 (17.1 %)	49 (29.9 %)	53 (32.3 %)	
Financial management session	8 (4.9 %)	13 (7.9 %)	29 (17.7 %)	49 (29.9 %)	65 (39.6 %)	
Worksite fitness program	11 (6.7 %)	15 (9.1 %)	27 (16.5 %)	49 (29.9 %)	62 (37.8 %)	
Immunization program	53 (32.3 %)	43 (26.2 %)	15 (9.1 %)	24 (14.6 %)	29 (17.7 %)	
Time management session	22 (13.4 %)	43 (26.2 %)	30 (18.3 %)	29 (17.7 %)	40 (24.4 %)	
Management is concerned about the wellness of health professionals and considered as a high priority.	15 (9.1 %)	25 (15.2 %)	43 (26.2 %)	40 (24.4 %)	41 (25.0 %)	Insufficient support 125 (76.2%)
Management members serve as role models for healthy lifestyles.	16 (9.8 %)	36 (22.0 %)	45 (27.4 %)	40 (24.4 %)	27 (16.5 %)	
Relationship between management and subordinates is quite good.	10 (6.1 %)	64 (39.0 %)	47 (28.7 %)	21 (12.8 %)	22 (13.4 %)	
Management frequently does things to demonstrate that they value subordinates.	9 (5.5 %)	40 (24.4 %)	55 (33.5 %)	34 (20.7 %)	26 (15.9 %)	

I am encouraged to take work breaks as allowed in my job description.	40 (24.4 %)	53 (32.3 %)	18 (11.0 %)	24 (14.6 %)	29 (17.7 %)	
I am encouraged to take adequate time for lunch away from my work.	31 (18.9 %)	43 (26.2 %)	14 (8.5 %)	38 (23.2 %)	38 (23.2 %)	
We are encouraged to balance work and home life.	23 (14.0 %)	44 (26.8 %)	31 (18.9 %)	32 (19.5 %)	34 (20.7 %)	
Health professionals who work extra hours are not seen as “harder-working” employees than those who work regular hours.	40 (24.4 %)	25 (15.2 %)	49 (29.9 %)	25 (15.2 %)	25 (15.2 %)	

The findings based on self-rating indicated that more than half (76.22%) of the respondents received insufficient support from management because they scored from 15 to 49; and less than a quarter (23.8%) scored 50 to 75 for sufficient support. Ten variables on management support were not statistically significant with the demographic independent variables ( $p\text{-value} > 0.05$ ), while the remaining five variables were statistically significant and are presented based on cross tabulation analysis.

Almost seventy percent of the participants either disagreed or strongly disagreed that their employer offered them a financial management session at work (29.9% disagreed and 39.6% strongly disagreed); and nearly thirteen percent either strongly agreed or agreed that financial management session is offered (4.9% strongly agreed and 7.9% agreed); while 17.7% were unsure. Approximately, thirty-seven percent of the respondents either disagreed or strongly disagreed that the management frequently does things to demonstrate that they value subordinates (20.7% disagreed and 15.9% strongly disagreed); while about thirty percent either strongly agreed or agreed (5.5% strongly agreed and 24.4% agreed) and 33.5% were unsure. About forty-six percent of the individuals either disagreed or strongly disagreed on the statement that “I am encouraged

to take adequate time for lunch away from my work” (23.2 % disagreed and 23.2% strongly disagreed); and forty-five either strongly agreed or agreed (18.9% strongly agreed and 26.2% agreed). About 20.7% of the health professionals strongly disagreed that they are encouraged to balance work and home life while 19.5% disagreed; and almost forty-one percent either strongly agreed or agreed (14.0% strongly agreed and 26.8% agreed). More than half of the participants either strongly agreed or agreed that health professionals who work extra hours are not seen as “harder working” employees than those who work regular hours (24.4% strongly agreed and 15.2% agreed).

*Cross tabulation analysis to determine correlation between the independent variables (department, gender, and experience) and the dependent variables (level of agreement on management support)*



#### Figure 4.5 Health professionals experience regarding management support

The four relational variables that were statistically significant were participants' department and offering of financial management session (p-value = 0.049); participants' department and the statement "I am encouraged to take adequate time for lunch away from my work" (p-value = 0.005); participants' department and "we are encouraged to balance work and home life" (p-value = 0.014); participants' department and "health professionals who work extra hours are not seen as "harder-working" employees than those who work regular hours" (p-value = 0.019). There was a borderline association between gender of participants and "management frequently does things to demonstrate that they value subordinates" (p-value = 0.047); participants' years of experience and "I am encouraged to take adequate time for lunch away from my work" (p-value = 0.047); and gender of participants and "I am encouraged to take adequate time for lunch away from my work" (p-value = 0.039).

The findings in this study revealed that male health professionals experienced insufficient management support in the health facilities. This is consistent with Uchendu et al. (83) their study reported that nurses perceived that their employing organizations did not value their health and well-being. Ito et al. (128) is consistent with their findings show that doctors had mild stress of quantitative and qualitative work overload because they had sufficient support from their supervisors compared to nursing staff who had high stress and insufficient support from their supervisors. Leadership and management support are key factors supporting health professionals well-being and their participation in health promotion program (102,130,135,136). Similarly, studies reveal that being supported,

appreciated and having reliable working relationship enhance resilience among health professionals (137,138).

Table 4.26 1: Participants' level of interests in the wellness programs at the health facilities.

Statement	Very high	High	Unsure	Low	Very low	Scores: High interests (68 - 105) Low interests (21 - 67)
<i>Educational programs:</i> Cancer prevention	90 (54.9 %)	34 (20.7 %)	14 (8.5 %)	15 (9.1 %)	11 (6.7 %)	High interests 104 (63.41)  Low interests 60 (36.59%)
Heart disease prevention	74 (45.1 %)	42 (25.6 %)	16 (9.8 %)	18 (11.0 %)	14 (8.5 %)	
Cholesterol reduction	67 (40.9 %)	39 (23.8 %)	25 (15.2 %)	15 (9.1 %)	18 (11.0 %)	
Cold/flu prevention	63 (38.4 %)	52 (31.7 %)	16 (9.8 %)	16 (9.8 %)	17 (10.4 %)	
Managing chronic health conditions (e.g. diabetes, hypertension)	81 (49.4 %)	53 (32.3 %)	15 (9.1 %)	6 (3.7 %)	9 (5.5 %)	
Managing chronic pain such as backache.	65 (39.6 %)	48 (29.3 %)	28 (17.1 %)	10 (6.1 %)	13 (7.9 %)	
<i>Employee assistance programs:</i> Work stress management	55 (33.5 %)	33 (20.1 %)	33 (20.1 %)	20 (12.2 %)	23 (14.0 %)	
Financial management	50 (30.5 %)	33 (20.1 %)	34 (20.7 %)	21 (12.8 %)	26 (15.9 %)	
Controlling anger/emotions	57 (34.8 %)	31 (18.9 %)	32 (19.5 %)	20 (12.2 %)	24 (14.6 %)	
<i>Fitness programs:</i> Workplace recreation (volleyball, netball, soccer etc.)	46 (28.0 %)	33 (20.1 %)	19 (11.6 %)	22 (13.4 %)	44 (26.8 %)	
Regular presentations on physical activity topics	50 (30.5 %)	42 (25.6 %)	18 (11.0 %)	21 (12.8 %)	33 (20.1 %)	
Walk-fit-program	52 (31.7 %)	25 (15.2 %)	25 (15.2 %)	20 (12.2 %)	42 (25.6 %)	
<i>Immunization programs:</i> Flu shots/ vaccination	67 (40.9 %)	27 (16.5 %)	22 (13.4 %)	17 (10.4 %)	31 (18.9 %)	
Hepatitis B vaccination	105 (64.0 %)	36 (22.0 %)	10 (6.1 %)	6 (3.7 %)	7 (4.3 %)	
<i>Nutrition Education program:</i> Healthy cooking	63 (38.4 %)	31 (18.9 %)	24 (14.6 %)	19 (11.6 %)	27 (16.5 %)	
16. Healthy eating	66 (40.2 %)	33 (20.1 %)	23 (14.0 %)	20 (12.2 %)	22 (13.4 %)	
Weight management programs (diet & exercise)	71 (43.3 %)	37 (22.6 %)	22 (13.4 %)	7.9 (7.9 %)	21 (12.8 %)	
Regular presentations on nutrition topics	63 (38.4 %)	29 (17.7 %)	22 (13.4 %)	23 (14.0 %)	27 (16.5 %)	
<i>Screening programs:</i> Stress reduction programs	64 (39.0 %)	23 (14.0 %)	21 (12.8 %)	27 (16.5 %)	29 (17.7 %)	
Smoking cessation programs	47 (28.7 %)	31 (18.9 %)	21 (12.8 %)	25 (15.2 %)	40 (24.4 %)	
Time management programs	66 (40.2 %)	27 (16.5 %)	25 (15.5 %)	22 (13.4 %)	23 (14.0 %)	

The self-rating score in Table 4.26.1 above shows that more than half (63.1%) of the respondents were highly interested in the wellness programs because they scored 68 – 105; while 36.6% scored 21 – 67, indicating low interest. Nearly seventy-one percent of the health professionals either showed very high or high interest in the heart disease prevention educational program (45.1% very high and 25.6% high); while almost twenty percent indicated low or very low interest in the program (11.0% low and 8.5% very low). Almost half of the individuals revealed very high or high interest in the work stress management as part of employee assistance programs (33.5% very high and 20.1% high); and about one fourth indicated either very low or low interest in the program (12.2% low and 14.0% very low). Approximately sixty percent of the health professionals indicated either very high or high interest in the nutrition education program “Healthy Eating” (40.2% very high and 20.1% high), while fifty-six percent of the health professionals indicated either very high or high interest in the nutrition education program “regular presentations on nutrition topics” (38.4% very high and 17.7% high). However, about twenty-six percent (12.2% low and 13.4% very low) and thirty-one percent (14.0% low and 16.5% very low) had either low or very low interest in the nutrition programs.

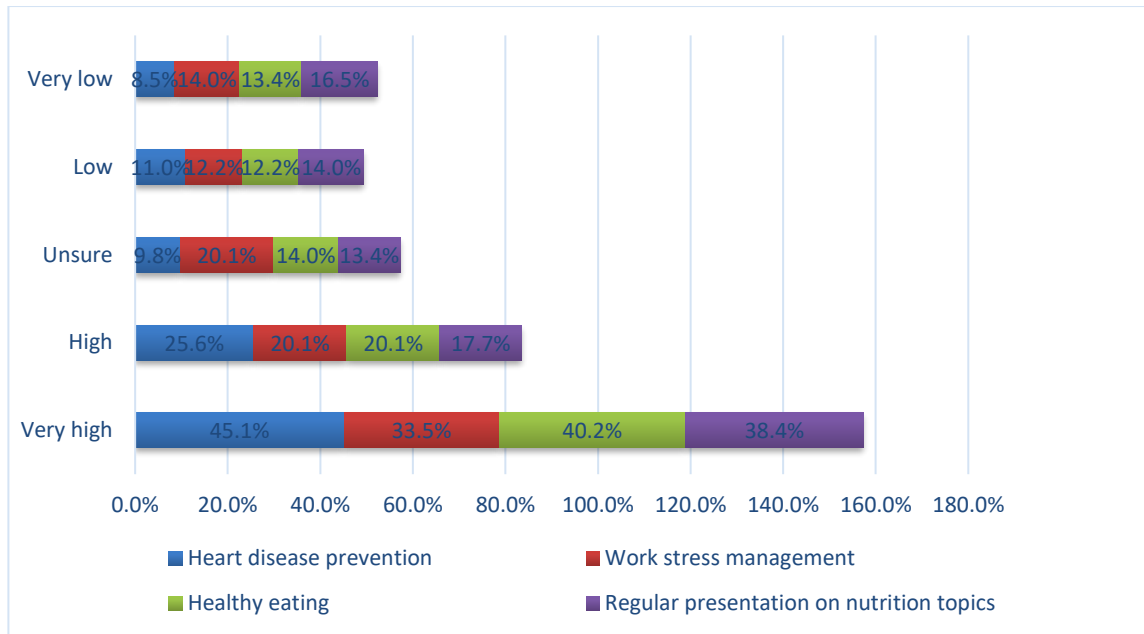


Figure 4.6 Health professionals' interest in wellness programs

The findings indicated a significant correlation between heart disease educational programs, work stress management programs; and nutrition education programs (healthy eating and regular presentations on nutrition topics) with the selected demographic profiles. The remaining seventeen variables on the level of interest in the wellness programs were not statistically significant ( $p > 0.05$ ). There was borderline correlation between the participants' department and educational program on heart disease prevention ( $p$ -value = 0.037); participants' age and work stress management ( $p$ -value = 0.047); participants' age and nutrition education program on healthy eating ( $p$ -value = 0.037); and participants' years of experience and presentations on nutrition topics ( $p$ -value = 0.042).

The findings show that health professionals are more interested in heart disease prevention (70.70%), followed by healthy eating intervention (60.30%), regular presentations on nutrition topics (56.10%) and work stress management (53.6%). Heart diseases were identified as one of the top three health issues in Africa (25). Also, health professionals

especially nurses are prone to chronic diseases, and the common risk factors are inadequate vegetable and fruit intake, overweight and obesity as well as alcohol intake (103). Therefore, health professionals might show their interest in wellness interventions because of the risk of exposure to work-related stress (134) due to workload and exhaustion (83). In addition, developed countries reported that workplace health programs lowered disease prevalence (26).

#### 4.3 SUMMARY OF THE CHAPTER

The findings from this analysis revealed that there was no wellness policy in the health facilities and there was insufficient support from the management to health professionals as well as poor communication, poor practices on health habits and health screening among health professionals. Based on the findings, there are statistically significant correlations between the gender of participants; marital status and department with knowledge. Although the findings revealed that most of the health professionals have adequate knowledge on the facilitation of wellness programs, some had inadequate knowledge. The findings indicated that the age of participants, rank/position, years of experience, department of respondents and gender are predictors of practice regarding workplace wellness. It was revealed that health professionals have significant interest in wellness programs. The next chapter presents qualitative results on the perceptions of health professional managers regarding the facilitation of a wellness program.

## CHAPTER 5

### PRESENTATION AND DISCUSSION OF QUALITATIVE RESULTS, AND

#### MERGING OF FINDINGS [PHASE 1]

##### 5.1 INTRODUCTION

The preceding chapter discussed the results of quantitative analysis from the first two objectives. This chapter presents findings of qualitative analysis generated through face to face individual interviews that address the third objective, which is: exploration and description of perceptions of health professional managers concerning the facilitation of wellness programs. Furthermore, in this chapter the findings and concepts identified as well as the concluding remarks from sub-objectives 1, 2 and 3 for both quantitative and qualitative analysis are merged.

##### 5.2 PRESENTATION OF FINDINGS

Six health professional managers, consisting of two Senior Medical Officers (SMOs), one Principal Medical Officer (PMO) and three Nurse Managers, were interviewed from the three state health facilities (Onandjokwe Intermediate Hospital, Omuthiya District Hospital and Tsumeb District Hospital) in Oshikoto region. Five of the health professional managers were males and one was female. Informed consent was obtained before data collection. Data was collected using an unstructured interview guide. The main question was: *“What are your perceptions with regard to the facilitation of a wellness program for health professionals in the health facility?”* Probing questions were used to obtain more in-depth information. Six steps suggested by Cresswell (45), guided the qualitative data analysis. Open coding was adopted, and then codes were created, categorized and organized into themes. Themes from SMOs, PMO and Nurse managers were generated

and used to discuss the findings regarding health professional managers' perceptions concerning the facilitation of a wellness program in the health facilities. Three main themes, six themes and twenty-two sub-themes emerged from the interviews as presented in Table 5.1 below. Themes and sub-themes were discussed together with supporting verbatim quotes from participants and literature. Discussion of findings led to the identification of concepts which contributed to the formation of main central concepts that guided the development of a model.

Table 5. 1: Main themes, themes and sub-themes from SMOs, PMO and Nurse Managers

Main themes	Themes and sub-themes
1. Participants perceived challenges that affect facilitation of a wellness program for health professionals in the health facilities.	<p><b>1.1 Psychosocial challenges</b></p> <ul style="list-style-type: none"> <li>✚ Organizational challenges               <ul style="list-style-type: none"> <li>• Unavailability of wellness policy and program (NM, SMO, PMO)</li> <li>• Pressure from public demanding for service delivery (PMO)</li> <li>• Lack of consultation regarding staff recruitment (PMO)</li> </ul> </li> <li>✚ Stress and burnout (NM, SMO, PMO)               <ul style="list-style-type: none"> <li>• Workload (NM, SMO, PMO)</li> <li>• Lack of advocacy and leadership support (PMO, NM)</li> <li>• Lack of co-worker support (PMO, NM)</li> <li>• Scope of practice issues (SMO)</li> <li>• Time pressure (NM)</li> <li>• Long hours and turn over (SMO)</li> <li>• Excessive night shift for extra earning (SMO)</li> </ul> </li> </ul> <p><b>1.2 Physical (resources) challenges</b></p> <ul style="list-style-type: none"> <li>• Staff shortage (NM, SMO, PMO)</li> <li>• Inadequate facilities and equipment (SMO, PMO)</li> </ul> <p><b>1.3 Personal challenges</b></p> <ul style="list-style-type: none"> <li>• Lack of knowledge (SMO, NM)</li> <li>• Illnesses and lack of self-care (SMO, NM)</li> </ul>
2. Participants express knowledge regarding wellness/ wellness programs in the health facilities.	<p>2.1 Conducive working environment (PMO)</p> <p>2.2 Provision of care and support to health professionals (NM, SMO)</p>
3. Participants recommend approaches to facilitate a wellness program for health professionals in the health facilities.	<p>3.1 Create conducive working environment</p> <ul style="list-style-type: none"> <li>✚ Policy development to institute wellness program</li> <li>✚ Establish a wellness directorate at the National level</li> <li>✚ Staffing and staff development</li> <li>✚ Adequate equipment to deliver service</li> <li>✚ Awareness creation and in-service training on wellness</li> <li>✚ Strengthening support and team work among health professionals</li> </ul>

5.2.1 Main theme 1: Participants perceived challenges that affect the facilitation of a wellness program for health professionals in the health facilities.

Health professionals expressed that they perceived psychosocial, personal and physical (resources) challenges that affect the facilitation of a wellness program in the health facilities. A challenge is defined as a situation in which one is faced with something that

needs great mental or physical effort in order to be done successfully and therefore tests a person's ability (139).

### **Theme 1.1 Psychosocial challenges**

Participants reported that the work environment is non-conducive and therefore affects the facilitation of wellness programs in the state health facilities. According to Burton (14), the psychosocial work environment comprises the organization of work and organizational culture, attitudes, values, beliefs and practices that are demonstrated on a daily in the organization, and that affect the mental and physical well-being of employees. In this study, participants highlighted unavailability of a wellness policy, pressure from public demanding service delivery, lack of consultation on decisions regarding staff recruitment, stress and burnout, workload, lack of advocacy, lack of leadership and management support, lack of co-workers' support, scope of practice issues, time pressure, long hours and shift work as psychosocial work environment challenges that hinder the facilitation of a wellness program.

#### **Sub-theme 1.1.1 Organizational challenges**

Health professional managers expressed the view that the facilitation of wellness programs is affected by challenges relating to the organization, including unavailability of a wellness policy and wellness programs, pressure from the public demanding service delivery and lack of consultation and decision latitude for staff recruitment. Mosadeghrad (40) indicated that there is a strongest correlation between occupational stress and organizational policies. It was further revealed that the working environment,

organizational policies and the relationship between employees and customers are stressful.

- **Unavailability of wellness policy and program**

Participants indicated that there is no wellness policy and wellness program in any of their health facilities. They also mentioned that there are no specific units for wellness in the health facilities to address the issues faced by the health professionals. They pointed out that they make use of Social Workers in cases where health professionals need assistance. They further stated that if the National level could have a specific directorate for wellness, then their voices would be heard.

*“...because there is no policy in my office or in the district. We have never receive[d] such a thing from the region through National level... there is no program catering wellness in general (Participant 5, NM).”*

*“...there is no program that can ... assist them, for their well-being... (Participant 3, NM)*

*“...those are some of the things we may change if we have an organized program or directory... (Participant 2, PMO).”*

*“...we discuss, as immediate supervisors and listen to what are the concerns but sometimes you may need to bring in the social worker to see how they address the concern... (Participant 2, PMO).”*

- **Pressure from public demanding service delivery**

One health professional manager highlighted that health professionals experience a challenge of not being appreciated for good work that happens at the health facility, yet

any concerns raised immediately attract media attention. The participant further mentioned that if there is a concern, the public will talk about health professionals endlessly because they are expected to deliver quality service. Health professionals' wellness is not considered to be a priority; the expectation is only that clients should get the highest standards of care.

*"...and the things get[s] aggravated actually by even the media, you should really hear people speak of ... things on health care givers because we are expected to deliver quality services and nothing less... (Participant 2, PMO)."*

▪ **Lack of consultation regarding staff recruitment**

Participants expressed the opinion that they do not have independence in decision making regarding staff recruitment. They stated that staff recruitment is done in a top down decision-making process by people who are not on the ground, and this is frustrating and leads to job dissatisfaction.

*"... I think there are some concern regarding the centralization with decentralization; I think with the Ministry of Education for example... the regional council, they have the mandate and they have the capacity to recruit according to their needs. But within the Ministry of Health [and Social Services] we don't have that flexibility, so the recruitment process is too tedious and is done by the people who are not on the ground to see what is actually happening on the ground (Participant 2, PMO)."*

These findings are consistent with Schrijver, Brady and Trockel (136) study among physicians (n=64) to explore academic physicians' perceptions about their work-related

wellness showed that restricted autonomy and not participating in decision making process were barriers to physicians' wellness.

### **Sub-theme 1.1.2 Stress and burnout**

Participants reported that health professionals are predisposed to stress and burnout, which adversely affects the facilitation of wellness programs. Health professionals' well-being is adversely affected by different stressors at work such as workload, lack of advocacy and leadership support, lack of co-workers' support, scope of practice issues, time pressure, long hours and turnover and excessive night shifts in order to earn extra income.

A study done in Iran among nurses (n=296) to explore the status of occupational stress amid hospital nurses showed that 34.90% of nurses reported that their job was very or extremely stressful, and they listed inadequate pay, inadequate staff, insufficient regular breaks at work, excessive workload, lack of management support and time pressure among the main causes (40).

#### **▪ Workload**

Participants stated that excessive workload and high service delivery expectations made them prone to stress and burnout. They explained that in order to deal with this challenge, they needed to be backed up by additional staff.

*"...if you are sitting on the table and you are alone and there comes one hundred patients, the expectations is that you are going to serve all of them and if it happens that one of them goes home and to come possibly tomorrow this will be an issue; because the expectation is that you deliver services to all of them... you could hear some complains on the background ... people are complaining they are getting burnout they are getting*

*stressed... there are some issues man which are related to even the payment, they all contribute to wellness of the caregivers (Participant 2, PMO)."*

*"... is true it happens due to those problems of ... overworked, some of the staff use to develop stress...this is a stressful environment...especially the hospital, there is a lot of stress, due to too much work or due to our clients our customers because sometimes they come here stress us also... (Participant 5, NM)."*

*"...there was a study done by the Ministry of Health [and Social Services] called WISN, this is a Work Load Indicators for Staffing Needs... they proposed [that]Onandjokwe should have at least 69.3 Medical Officers...that was 2015...that time there were 18 Medical doctors, you know. So, we tried to see how we can get this number because we have the work load already. What we need is to be backed up with the staff...it did not happen until now (Participant 2, PMO)."*

*"...because you are going to burn from that... (Participant 4 SMO)"*

Previous studies found that there was an association between working conditions and stress among nurses due to too much work, insufficient time to rest, inadequate staff to cover duties, tiring job and inadequate pay (40,109,132,134). Similarly, a study done in India highlighted that nurses were found to have high levels of stress due to always being under supervision and carrying out doctors instructions (72). Ideally, the workload should be in line with health professionals' abilities and resources to carry out their tasks and provide optimal patient care. It is evident that workplace efficiency is promoted if the workload is eased via sufficient resources to maintain quality, productivity and work-life balance (135).

## **Lack of advocacy and leadership support**

During the interviews, health professional managers reported that health professionals have been left out and leaders do not care or speak on their behalf regarding their well-being. Therefore, lack of advocacy and lack of management support in the health facilities were identified as challenges experienced by health professionals.

*“...we are neglecting the employees... they are being neglected... if there was a committee or a group that deals with specific issues, they can easily advocate for employees (Participant 1, NM).”*

*“...the professionals have been left out...with regards to wellness, you know, quite often you hear people speak of priorities of right of the patients, you know...the only missing link is that, there is no one who is listening (Participant 2, PMO).”*

*“If you are talking of the patient, what doctor or nurse ratio according to WISN...there are those standards which are not OK; so, I will not be inclined to believe that the leaders are not aware of those... I do not think these things are not known, but I think we do not have the mouthpiece or something like that, the advocacy, [and] the kind of advocacy to tell the PS [Permanent Secretary now Executive Director] what is happening and what the solution is (Participant 2, PMO).”*

*“... if we had someone to say or the specific program which is speaking on behalf of the staff members probably this would have been addressed already (Participant 2, PMO).”*

*“One is looking at patient[s], patient only and forgetting that there is people who are rendering care, and they are human beings, they need to be taken care of ...in the*

*conducive environment that they can be more productive. So, wellness for healthcare workers is an important concept (Participant 6, SMO)."*

*"But you have some staff here, once he/she reaches 65; you look at the person you think it is a very old person, because they were not taken care of and that concept was not really utilized and people take just to work (Participant 6, SMO)."*

These findings are consistent with previous studies that found that lack of management support was one of the causes of stress among nurses (40,132). It is vital for the leadership to advocate and provide essential support to ensure the health professionals' well-being and provision of quality care. Wellness among health professionals should be a priority because if they are well they will deliver the service that is expected.

- **Lack of co-workers' support**

Participants also mentioned that there is discrimination and lack of support among health professionals. It was highlighted that some doctors are discriminated against and poorly supported by the nurses in terms of task shifting and sharing.

*"For them it seems like you have to do that because you are not a [Namibian] citizen...because you are receiving for instance [allowance] after hours, you know...I do not know how it can be addressed but it is really affecting...for instance you realize patient having headache and...you are sleeping... you have to come because you are the one on call, you are receiving such allowance. No, but if the patient is stable this Panado can be given by the nurse. Is the doctor who is coming will give the same Panado. Okay, because is not really from the country and people are trying ... to influence others ...we are trying to cope, although it is not really easy (Participant 4, SMO)."*

Studies found that poor social support and relationships, conflict with physicians and discrimination among health professionals in the health facilities are a major cause of occupational stress (7,40). Therefore, good relationships in the workplace are essential for the prevention of stress among health professionals. It is evident that there is a correlation between high levels of support from co-workers and lower levels of emotional exhaustion; and social support is important in relation to stress and burnout (140).

- **Scope of practice issues**

The participants further reported that even though skills transfer is conducted, nurses are reluctant to accept task shifting and sharing. Nurses have a tendency of refusing to carry out some duties when requested by the doctors to assist in order to reduce the time that patients had to stay in hospitals. They are required to share tasks in cases of staff shortage, but nurses refuse, saying that things are not in their scope of practice.

*“But on the other hand, is that the people are reluctant, if something happen you know, I will be in a problem with the medical or the Health Professional Council, why did you do that because this is not [in] your scope of practice...I taught you how you supposed to apply a back slab. So, you can proceed with this procedure while I am busy with another patient. A nurse will totally refuse; [that] no is not [in] my scope of practice. And when you are saying we have to reduce the time that the patient they are spending here in the hospital... (Participant 4, SMO).”*

- **Time pressure**

Participants expressed their concern that even if the wellness program could be introduced they might not be able to participate because of time pressure. Health professionals are

always overloaded with work and therefore they do not know whether there will be sufficient time for wellness activities.

*“On the other hand, we are overloaded, no time to spend on that principle [wellness] (Participant 5, NM).”*

*“The first challenge is the time you don’t know, which time will you start because in most cases when you start, you focus more on clinical, that’s when you start, after your morning briefing with your colleague[s] then you start with clinical, you are not... the time for wellness, you don’t know which time (Participant 5, NM).”*

*“When it comes to physical wellness, most of the time people are just on duty at work, so they don’t have time even to exercise for themselves. And they don’t have time to socialize, even to talk to share...I try [ied] to ask staff in the department, at least to make use of our rehabilitation center, just even to exercise for 30 minutes, few of them tried but it did not work... for them is just work, but they don’t have time at least to relax, so that they can recover (Participant 6, SMO).”*

Previous studies have found that work overload and time pressure are some of the leading causes of stress among health professionals in the health facilities (40,134).

- **Long hours and turnover**

Health professional managers also pointed out that working for extended hours predisposes staff members to severe exhaustion that causes them to make mistakes on duty. They indicated that at the district level, health professionals may find themselves working every day without resting and this eventually leads to staff turnover.

*“...for people who are working at the district hospitals for example, I will tell you Okongo ... it is about 200km from here [Onandjokwe] and then that hospital was having, 2, 3, 4 months ago, one Medical Officer, one lady Medical Officer from X [country], I don't want to mention her name... working, literally being on duty all the day, every day, all the time, every day because any case that will come, they call you... Now, I was informed recently that she decided to give up and go home, because I consider it is fine, it was a tortured ... (Participant 2, PMO).”*

*“If you are [working] 7-7 for a week, you get tired, mentally and physically so your performance will be... and that person will not even...by the time that person reaches 60 years it is a finished person (Participant 6, SMO).”*

*“When I came here, I found there were staff, working throughout, no leave nothing ... it is tiresome. I have seen people walking around here, you see that this person is tired. And that is why a lot of mistakes come in, when someone is not fit mentally and physically, they make a lot of mistakes (Participant 6, SMO).”*

*...is true it happens due to those problems of ... overworked, some of the staff use to develop stress (Participant 5, NM).”*

These findings are consistent with a study done in Australia among health professionals to explore experiences and perceptions on the relationship between physical health and job satisfaction, and the relationship between health status and stress levels revealed that long hours and shift work cause fatigue and exhaustion, which in turn lead to poor physical health among health professionals (109). They have a negative impact on clinical decision making and workplace responsibilities. The study further revealed that stress has been

identified as being prevalent among health professionals in all workplace settings and linked to job dissatisfaction as well as intention to leave. A study done in South Africa indicated that long working hours are commonly associated with being a health professional, which is a clear hurdle in health professionals' self-management of individual wellness (101).

### **Excessive night shift for extra income**

The study found that some nurses work night shifts for more than three consecutive months, even if they are not fit to do so, because they need more money. That exposes them to exhaustion and it affects their family life.

*“I picked at a time, where people, [when they] need some money you find some nurses doing night duty, but ... not fit... Because it puts the person in danger, this is a married person; this is someone who is in relationship. If you do your night duty for more than 3 months, what are you expecting your partner is doing there? Because when you get... your partner will not wait for someone... also, when they need money, they have to work a night shift, they kept more their need then just to work in day shifts (Participant 6, SMO).”*

### **Theme 1.2 Resource challenges**

The study findings revealed that health professionals work in a stressful working environment, which is aggravated by insufficient resources that hinder service delivery. Participants reported that there are challenges of inadequate facilities and equipment as well as staff shortage.

### **Sub-theme 1.2.1 Staff shortage**

Health professional managers mentioned that some staff members develop stress due to staff shortages. They also indicated that some wards are run by Enrolled nurses only because there are not enough Registered nurses. They further explained that there is a shortage of staff in terms of the number and training capabilities. This causes health professionals not to get their days off or take vacations as they are supposed to.

*“... I mean in terms of the numbers and in terms of the...the training capabilities, you know like you may find sometimes a ward being run by only enrolled nurses not because you want to, no! It is because we don't have enough number of the registered nurses. Participant 2, PMO).”*

*“And the expectation is the client should get the standards, the highest possible standards of care, you know, regardless of the means on the ground or the capability of the facilities on the ground in terms of... the number of staffs (Participant 2, PMO).”*

*“... with a lot of activity, that you have to run, but on the other hand there is no enough people or enough staff, worker to complete and implement as such kind of activity happening within the ward (Participant 4, SMO).”*

*“Now the other problem is the staff establishment...if [we] were well staffed and fully staffed, you find that yes people will be getting their days off they can travel, they can do their thing[s]... (Participant 6, SMO).*

### **Sub-theme 1.2.2 Inadequate facilities and equipment**

Participants also expressed the view that there is inadequate equipment to deliver the service. They further highlighted that there are insufficient essential facilities for the

facilitation of a wellness program and that this adversely affects the well-being of health professionals.

*“The structure itself, we as a hospital we don’t have the resource center, that is one, you cannot have a sit to read, you know sometime you cannot read in your office. Secondly, there’s no tea room, so that is the infrastructure, the structure itself really it is not allowing a number of things... but now because of the structure that is really putting us under pressure, then it is a bit difficult (Participant 6, SMO).”*

*“If you do not have this one [equipment], you see, sometimes we may have nothing to do but improvise and use what is at your disposal to deliver the job.... you may have certain number of clients who need a Caesarian section, but you only have, ...may be fewer than the number you are expected to deliver... (Participant 2, PMO).”*

### **Theme 1.3 Personal challenges**

Participants stated that health professionals do not have adequate knowledge on wellness or wellness programs. They further mentioned that illnesses and lack of self-care affect the well-being of health professionals in the health facilities and this in turn has an adverse impact on the delivery of service to patients.

#### **Sub-theme 1.3.1 Lack of knowledge**

One health professional manager indicated that a wellness program is essential in the health facilities, but the concern is only that they are not knowledgeable about it and do not know how to initiate the program because there is no guiding tool.

*“Only because I am not familiar with where to start the wellness... (Participant 4, SMO).”*

*“... because for us we are not trained on it [wellness]... I think most of the staff do not know about the wellness, because there is no guiding document in the district*

*(Participant 5, NM).”*

*“The story of exercising, I have tried but up to now, you know people are not buying it, because it is not in the mentality, and this is a new concept by the way... (Participant 6, SMO).”*

### **Sub-theme 1.3.2 Illnesses and lack of self-care**

Participants indicated that personal factors such as illnesses and lack of self-care affect the well-being of health professionals and sometimes they tend to forget about their own health while providing care to others.

*“You will find that those are people who are booked off most of the time, just because they are tired, (P6, SMO).”*

*“...some are having hypertension, some are diabetic patients, some are HIV, “... they give care to the clients but they seem to forget themselves that they also need care (Participant 3, NM).”*

*“...only few reach the infection control nurses for medical checkup, some of them they just ignore (P5, NM).”*

5.2.2 Main theme 2: Participants express knowledge regarding wellness programs in the health facilities.

The researcher asked participants to share their opinions and understanding on wellness programs for health professionals in the health facilities. They mentioned that wellness

programs ensure the creation of a conducive working environment as well as provision of care and support to employees. However, some health professional managers explained wellness programs in narrow terms such as elimination of occupational hazards and care for employees to deal with difficulties. This is an indication that there is inadequate knowledge on wellness programs among health professional managers.

### **Theme 2.1 Conducive work environment**

Participants indicated that wellness programs help to create and safeguard a conducive working environment in all aspects so that the employees can deliver quality services. They also mentioned that wellness programs assist employees to cope with their difficulties.

*“Like seeing the ...environment where staff member placed. ...is the staff member happy with the environment... What can we change in terms of the social aspect of the person of home, the family... the environment that is conducive in all aspects ...for the employee to deliver quality services while at the same time being prospective or gain ... her or his needs being adequately taken care of (Participant 2, PMO).”*

*“...that program supposed to be assisting these employees to deal or to cope with whatever difficulties he or she is having... (Participant 1, NM)*

*“An environment that is created so that physically, mentally a worker should be able to be productive but at the same time to benefit from that environment and to be productive (Participant 6, SMO).”*

## **Theme 2.2 Provision of care and support**

Health professional managers stated that wellness programs ensure that workers are taken care of and supported so as to reduce work related stress.

*“...workplace where the workers are taking [taken] care of... (Participant 3, NM).”*

*“It is a concept whereby certain activity have to be put in place at the workplace so that it can support the nurses, doctors all the health care worker in the institution. Yeah, they can either support them physically, psychologically or social... the concept can also reduce some of the stress, work stress... (Participant 5, NM)”*

5.2.3 Main theme 3: Participants recommend good practices and approaches to facilitate wellness programs for health professionals in the health facilities.

## **Theme 3.1 Create a conducive work environment for health professionals**

The researcher asked the participants to share their views on what can be done to facilitate wellness programs and to improve the well-being of health professionals in the health facilities. They mentioned that for health professionals to deliver the services required of them, they need to be well, and therefore there is a need for the development of a wellness policy that can lead to the establishment of wellness programs in the health facilities. They also indicated that the following issues should be addressed: a need for a wellness directorate at the National level to advocate for wellness programs for healthcare professionals, staffing and staff development, adequate equipment, awareness creation and in-service training on wellness as well as team work among health professionals.

### **Sub-theme 3.1.1 Policy development to institute a wellness program**

Participants indicated that the findings of this study should influence policy makers to strengthen the development of a wellness policy in order to enable the establishment of a wellness program in the health facilities. They further mentioned that health professionals are suffering because there is no specific unit that addresses the issues faced by employees, especially health professionals.

*“... there is a need for a policy [wellness policy] (Participant 1, NM).”*

*“...when it comes to the Ministry [of Health and Social Services] there should be [a] policy at work, it is part of wellness...so if they can introduce a clear policy from up... (Participant 6, SMO).”*

*“I can tell you our colleagues/employees are suffering in the absence of that [wellness program] (Participant 1, NM).”*

### **Sub-theme 3.1.2 Establish a wellness directorate at the National level**

Participants indicated that there is a need to establish a wellness directorate at the national level to advocate for health professionals' needs.

*“And if at the National level we could have such program with a specifically directorate running, then the voices could be easily heard (Participant 2, PMO).”*

### **Sub-theme 3.1.3 Staffing and staff development**

Health professionals mentioned that if there was a revision on the staff establishment, it would bring benefits for the wellness of the staff in the state health facilities.

*“Despite the challenges that are there, we should see some efforts to put enough number of staffs ... this has been an outcry for sometimes (Participant 2, PMO).”*

#### **Sub-theme 3.1.4 Adequate equipment to deliver services**

Participants mentioned that for the health professionals to deliver quality service, they need enough and correct equipment at the health facilities where they work.

*“You need to have the right equipment to deliver a certain type of job ... (Participant 2, PMO).”*

#### **Sub-theme 3.1.5 Awareness creation and in-service training on wellness**

One participant suggested that there is a need to create awareness among health professionals on wellness and wellness programs through training by experts, and also to influence policy makers to develop a policy.

*“I think we need in-service training, just from someone with experience about the wellness. And from there we need also people like you, who is doing such a study for [at the] end of the study you come up with something even a pamphlet...to influence policy makers so that they can come up with a document (Participant 5, NM).”*

#### **Sub-theme 3.1.6 Strengthening support and team work among health professionals**

Participants indicated that there is a need for the health professionals’ council to revisit the scope of practice for nurses, because nurses tend to refuse to carry out certain activities if requested to do so by the doctors. They further mentioned that despite the fact that skills were transferred and there is shortage of staff, nurses refuse to assist the doctors.

*“...I am not the lawmaker of this country, but I think there is something that supposed to be done at the health professional council. We need to put our efforts together to see what exactly we can do... so that we can reduce the time of patients staying in the hospital (Participant 4, SMO).”*

This is consistent with the literature, which indicates that implementing a team-based care approach may require a review of state or organizational policies on scope of practice for each member (135).

### 5.3 MERGING SUB - OBJECTIVES 1, 2 & 3 AND IDENTIFICATION OF THE CONCEPTS

The quantitative and qualitative data sets were analysed separately, and findings were merged by comparing the two data sets to determine in what ways they confirm, refute or expand each other (30). Conclusions were drawn from the findings of the study objectives 1, 2 & 3. The central concepts, such as psychosocial environment, physical environment and personal environment, were identified from both quantitative and qualitative findings and they formed the basis for the development of a model. Convergent data analysis reveals similar challenges that affect the facilitation of a wellness program for health professionals in the state health facilities of Oshikoto region, including unavailability of a wellness policy and program, lack of management support, poor communication and lack of knowledge on wellness programs. Merged findings from sub-objectives 1, 2 & 3, conclusions, central concepts and main central concepts are presented in Table 5.2 below.

Table 5. 2: Merged quantitative and qualitative findings, concluded statements, identified concepts and main central concepts (Phase 1)

Objectives	Findings	Concluded statements	Identified concepts #WHO Framework and Model	Main central concepts
Sub-objective 1 Assess the state health facilities in Oshikoto region concerning the facilitation of wellness program.	<p><b>Quantitative</b></p> <p>✚ <b>Health facilities demographic data</b></p> <ul style="list-style-type: none"> <li>Number of MD: (n= 36), Onandjokwe 67%, Omuthiya 17%, Tsumeb 17%</li> <li>Number of nurses: Onandjokwe 71%, Omuthiya 18%, Tsumeb 12%.</li> <li>Number of Social workers: Onandjokwe 29%, Omuthiya 29%, Tsumeb 43%.</li> </ul> <p>✚ <b>Provision of wellness interventions</b></p> <ul style="list-style-type: none"> <li>Unavailability of wellness programs (100%)</li> <li>No focal person for wellness activities (100%)</li> <li>Inadequate health screening and education to promote well-being (66.7%)</li> </ul> <p>✚ <b>Policies and environmental support</b></p> <ul style="list-style-type: none"> <li>Unavailability of wellness policies 100%</li> <li>Inadequate wellness interventions (health promotion programs) (66.7%)</li> <li>Insufficient support</li> </ul> <p>✚ <b>Communication</b></p> <ul style="list-style-type: none"> <li>Irregular dissemination of wellness information/ poor communication 66.7%</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Resources challenges</b> (Objective 1, 3) <ul style="list-style-type: none"> <li>○ Staff shortage</li> <li>○ Inadequate facilities, equipment and materials</li> </ul> </li> <li>▪ <b>Organizational challenges:</b> (Objective 1, 2, 3) <ul style="list-style-type: none"> <li>○ Unavailability of wellness policies,</li> <li>○ Inadequate health promotion programs</li> <li>○ Inadequate health screening and education</li> <li>○ Unavailability of wellness program /focal person</li> <li>○ Insufficient support</li> <li>○ Pressure from public demanding for service delivery</li> <li>○ Lack of consultation for staff recruitment</li> </ul> </li> </ul> <p>(Objective 1, 2, 3)</p> <ul style="list-style-type: none"> <li>▪ <b>Psychosocial challenges:</b> <ul style="list-style-type: none"> <li>○ Poor communication</li> <li>○ Stress and burnout</li> <li>○ Insufficient support from management</li> <li>○ Workload</li> <li>○ Lack of advocacy</li> <li>○ Lack of co-worker support</li> <li>○ Excessive night shift for extra earning</li> <li>○ Time pressure</li> <li>○ Long hours and turn over</li> <li>○ Scope of practice issues</li> </ul> </li> <li>▪ <b>Personal challenges:</b> (Objective 2, 3) <ul style="list-style-type: none"> <li>○ Inadequate knowledge on wellness program</li> <li>○ Poor practices</li> </ul> </li> </ul>	<p><b>Physical work Environment</b></p> <ul style="list-style-type: none"> <li>• Staff</li> <li>• Facilities</li> <li>• Equipment</li> <li>• Materials</li> </ul> <p><b>Psychosocial work environment</b></p> <ul style="list-style-type: none"> <li>• Policies</li> <li>• Wellness programs/ wellness interventions</li> <li>• Management support</li> <li>• Lessening pressure from public</li> <li>• Staff recruitment</li> </ul> <p><b>Psychosocial work environment</b></p> <ul style="list-style-type: none"> <li>• Communication</li> <li>• Emotional and social support</li> <li>• Management support</li> <li>• Reduced workload</li> <li>• Advocacy</li> <li>• Co-worker support</li> <li>• Financial support</li> <li>• Relief/support</li> <li>• Working hours vs turnover</li> <li>• Scope of practice revision</li> </ul> <p><b>Personal Health practices/ Personal work environment</b></p> <ul style="list-style-type: none"> <li>• Knowledge</li> <li>• Practices</li> <li>• Health</li> <li>• Self-care</li> </ul>	<ul style="list-style-type: none"> <li>❖ Physical environment</li> <li>❖ Psychosocial environment</li> <li>❖ Personal environment</li> </ul>
Sub-objective 2 Describe the knowledge, practices and experiences of health professionals concerning facilitation of wellness program in the health facilities,	<p><b>Quantitative</b></p> <p>✚ <b>Knowledge on wellness program</b></p> <p>✚ Knowledge concerning facilitation of wellness program, score: Overall, self-rating score: Adequate knowledge 95.12%, Inadequate knowledge 4.88%.</p> <p>✚ <b>Health professionals' practices regarding facilitation of wellness program.</b></p> <p>✚ Lifestyle practices, and habits concerning nutrition, physical and emotional habits and health screening overall self -rating score: poor practices 62.2%, good practices 37.8%.</p> <p>✚ Working department and rank were found to have a significant effect on the level of agreement on the relationship between high</p>	<ul style="list-style-type: none"> <li>▪ <b>Psychosocial challenges:</b> <ul style="list-style-type: none"> <li>○ Poor communication</li> <li>○ Stress and burnout</li> <li>○ Insufficient support from management</li> <li>○ Workload</li> <li>○ Lack of advocacy</li> <li>○ Lack of co-worker support</li> <li>○ Excessive night shift for extra earning</li> <li>○ Time pressure</li> <li>○ Long hours and turn over</li> <li>○ Scope of practice issues</li> </ul> </li> <li>▪ <b>Personal challenges:</b> (Objective 2, 3) <ul style="list-style-type: none"> <li>○ Inadequate knowledge on wellness program</li> <li>○ Poor practices</li> </ul> </li> </ul>	<p><b>Personal Health practices/ Personal work environment</b></p> <ul style="list-style-type: none"> <li>• Knowledge</li> <li>• Practices</li> <li>• Health</li> <li>• Self-care</li> </ul>	

<p>Sub-objective 3 Explore and describe the perceptions of health professional managers concerning facilitation of wellness program in the health facilities</p>	<p>workload, staff shortage and job satisfaction (<math>p &lt; 0.05</math>).</p> <p>There is a statistically significant (<math>P &lt; .05</math>) between practices and years of working experience, age, position and department.</p> <p><b>Health professionals' experiences regarding management support and interests in wellness programs</b></p> <p>Experience regarding management support, overall, self-rating score:      Insufficient support 76.2%,      Sufficient support 23.8%</p> <p>Statistically significant (<math>P &lt; .05</math>) of the experiences on the provision of support from the employer / management and the department, gender and years of working experience.</p> <p><b>Qualitative</b></p> <p>Participants perceived challenges that affect wellness among health professionals in the health facilities:</p> <p><b>Psychosocial challenges</b></p> <ul style="list-style-type: none"> <li>Stress and burnout</li> <li>Workload</li> <li>Lack of advocacy and leadership support</li> <li>Lack of co-worker support</li> <li>Scope of practice issues</li> <li>Time pressure</li> <li>Long hours and turn over</li> <li>Excessive night shift for extra earning</li> </ul> <p><b>Organizational challenges</b></p> <ul style="list-style-type: none"> <li>Unavailability of wellness policy and program</li> <li>Pressure from public demanding for service delivery</li> <li>Lack of consultation/decision latitude for staff recruitment</li> </ul> <p><b>Resources challenges</b></p> <ul style="list-style-type: none"> <li>Staff shortage</li> <li>Inadequate facilities and equipment</li> </ul> <p><b>Personal challenges</b></p> <ul style="list-style-type: none"> <li>Lack of knowledge</li> <li>Illnesses and lack of self-care</li> </ul>	<ul style="list-style-type: none"> <li>○ Illnesses and lack of self-care</li> </ul>		
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## 5.4 SUMMARY OF THE CHAPTER

This chapter presented the qualitative findings as well as merging of the quantitative and qualitative results of the study. The findings from the study revealed that psychosocial, physical and personal environmental challenges affect the facilitation of wellness

programs and thus affect the well-being of health professionals in the state health facilities of the Oshikoto region. The findings indicated that there is neither a wellness policy nor a wellness program in any of these state health facilities. Health professionals are exposed to a non-conducive working environment due to workload, time pressure, insufficient resources, lack of interpersonal and management support and poor communication. The study findings also showed that some health professionals lack knowledge on wellness programs. These challenges negatively impact the effective facilitation of wellness programs for health professionals in the health facilities, and this in turn adversely affects the delivery of quality services to the public. The next chapter covers definition, classification and construction of the relationship between concepts and statement.

## CHAPTER 6

### DEFINITIONS, CLASSIFICATION AND CONSTRUCTION OF THE RELATIONSHIP BETWEEN CONCEPTS

#### 6.1 INTRODUCTION

In the previous chapter, the researcher presented and discussed qualitative findings. Findings from both quantitative and qualitative analysis were also merged and central concepts were identified. In this chapter, the researcher will present an analysis of concepts and construction of the central statement that accurately reflect the relationships between the concepts. Concepts are the basic building blocks in the development of a model. Walker and Avant (56) defined concept analysis as a process of examining the basic elements of a concept, in order to refine ambiguous and clarify frequently used concepts. Moreover, concepts analysis is done to clearly define the structure and uses of concepts in the process of model development. The Practice Oriented theory (49), WHO framework and model (14) and Management theory (51) were adopted to guide the development of this model. Concept analysis and conceptualization guided the development of a model for health professionals that facilitates a wellness program in the health facilities of Oshikoto region, Namibia.

#### 6.2 BACKGROUND OF CONCEPTS IDENTIFIED

The findings of the study formed the basis of the identification of the main concepts and central statement. The concept analysis process is crucial in the development of a model. In this study the central concepts were identified from the findings after convergent data analysis and merging of findings as presented in Chapter 5. The findings of this study revealed that health professionals are exposed to a non-conducive work environment, as

a result of **psychosocial, physical** and **personal** challenges that hamper the facilitation of a wellness program in the state health facilities of Oshikoto region.

#### 6.2.1. Identification of central concepts and statements

In the process of theory development, it is essential to identify the central concepts because they are key components that will carry the focus and meaning of that theory. The central concepts deduced from this study using WHO framework and model (14) were **psychosocial environment, physical environment** and **personal environment** as indicated in Table 5.2. For the purpose of this study, the concept **environment** will be described separately for clarity and to give more meaning to the health facility environment. The central concepts identified are described below.

##### *6.2.1.1 Psychosocial*

It was concluded from the results as illustrated in Table 5.2 that there are psychosocial challenges in the work environment that adversely affect the facilitation of wellness programs for health professionals in the state health facilities, such as unavailability of a wellness policy, which in turn led to unavailability of a wellness program. Additionally, the results of experiences, as shown in table 5.2, specified that there is insufficient support from management and this hinders the facilitation of wellness programs for health professionals. Poor communication was also mentioned as a challenge in respect of facilitation. Furthermore, **psychosocial** challenges perceived by health professional managers in the state health facilities include stress and burnout due to workload, time pressure, lack of advocacy, scope of practice issues, lengthy night shifts for extra earnings, lack of co-worker support as well as pressure from the public, demanding service delivery. These were found to have an influence on the facilitation of wellness programs. Therefore,

creating a conducive work environment through policy development, establishment of a wellness directorate, strengthening of management and co-worker support, teamwork as well as awareness creation are necessary to enable the facilitation of a wellness program for health professionals in the state health facilities.

The findings on the level of interest as indicated in table 4.26.1 indicated that health professionals have a high level of interest in wellness interventions such as heart disease prevention, work stress management, healthy eating and regular presentations on nutrition-related topics.

#### *6.2.1.2 Physical*

Secondly, as per table 5.2 it emerged that there are **physical** (resources) challenges cited in the work **environment** such as human resources, facilities, materials and equipment that are inadequate to enable the facilitation of a wellness program in the state health facilities. This was viewed as being the result of high numbers of patients compared to the available number of health professionals, facilities and equipment in the health facilities. Hence, it is crucial to ensure that there are adequate resources through staffing, improving facilities and provision of adequate equipment and materials to deliver proper service in the state health facilities.

#### *6.2.1.3 Personal*

Thirdly, as indicated in table 5.2, health professionals have inadequate or nonexistent knowledge concerning the facilitation of a wellness program. The results further showed poor practices in terms of nutrition, physical and emotional habits, and health screening among health professionals; whereas illnesses and lack of self-care, were mentioned as **personal** challenges in the facilitation of a wellness program. These challenges were

viewed as being the result of irregular dissemination of wellness information to health professionals, inadequate health education and screening on wellness interventions as well as insufficient support from management concerning facilitation of wellness programs. The latter (illnesses and lack of self-care) are regarded as a result of stress and burnout, workload and time pressure. In view of this, the facilitation of a wellness program in the health facilities requires the active engagement and involvement of both the health professional managers (management) and health professionals.

#### *6.2.1.4 Environment*

Fourthly, as per table 5.2, health facilities do not operate in isolation; they are interconnected to and exist within a specific environment. The health facility context is divided into external (community, policymakers, regulatory body, NGOs and family members) and internal (health professionals) environments comprised of psychosocial, physical and personal components. There are dynamics in these components that hinder the facilitation of a wellness program in the health facilities. Based on the findings of this study, it is evident that health professionals are exposed to a non-conducive work environment in terms of health facilities in Oshikoto region and this hampers the facilitation of a wellness program. Therefore, the facilitation of a wellness program needs management and maintenance of a conducive work environment through assessment, planning, organizing, leading, and controlling processes. Also, ensuring a conducive environment requires management support, involvement of all parties and effective communication.

Based on the study findings, the researcher concluded that to ensure the facilitation of a wellness program for health professionals in the state health facilities, it is essential to

create a conducive **psychosocial, physical and personal environment**. Consequently, the central statement of this study of the “**facilitation of psychosocial, physical and personal environment,**” to facilitate a wellness program for health professionals in the health facilities is tremendously pertinent.

Concept analysis is essential because it helps the researcher focus on the intended use of the concepts (56). The purpose of concept analysis in this study was to determine the defining attributes, to clarify the meaning of existing concepts, to identify different usages of similar concepts, as well as to develop operational definitions of the concepts. The researcher used dictionaries, thesaurus, internet searches, available literature and existing theories to identify as many uses of the concepts as possible. This helped the researcher to expand the use of both ordinary and scientific concepts without limiting the usefulness of the outcome. In addition, identifying many uses of the concepts assisted the researcher to support the ultimate choices of the defining attributes and to provide the evidence base for concept analysis (56).

### 6.3 DEFINITION AND CLASSIFICATION OF CONCEPTS

After identification of the concepts and central statements of “facilitating psychosocial, physical and personal environment”, a detailed conceptualization was carried out. In the process of defining central concepts, different sources such as dictionaries, literature, models and theories were used to define and identify common uses of central concepts (64). For clarity purposes each concept was defined separately as psychosocial, physical, personal and environment. The researcher first examined in detail the definitions from dictionaries, followed by subject definitions and then context definitions of these concepts. The detailed definitions of central concepts are presented below.

### 6.3.1 Examination of the concept “psychosocial”

The examination of the concept “psychosocial” was done as follows: definitions from the dictionary, subject and context; reduction of the identified criteria of the concept, reduction process of the identified criteria; and subsequently the definition of the concept “psychosocial”.

#### 6.3.1.1 Dictionary definition of the concept “psychosocial”

Psychosocial is defined as

- Involving aspects of **social** and **psychological** behavior (141).
- Involving both **psychological** and **social aspects**; for example, age, education, marital and related aspects of a person's history (142,143).
- of or pertaining to the interaction between social and psychological factors (144)

According to the Collins English Dictionary (59), psychosocial is

- (Psychology) of or relating to **processes** or **factors** that are both social and psychological in origin
- (Sociology) of or relating to processes or factors that are both **social** and **psychological** in origin
- Examples of psychosocial factors include **social support, loneliness, marriage status, social disruption, bereavement, work environment, social status, and social integration.**

The Oxford English Dictionary (145) defined psychosocial as

- Pertaining to the influence of **social factors** on an individual's mind or behaviour and to the **interrelation** of behavioural and **social factors**
- Individual **psychological** and **social aspects** related to individual's social conditions, **mental** and **emotional health**

According to Segen's Medical Dictionary, 'psychosocial' refers to a **person's psychological** development in, and **interaction** with, a **social environment** (146,147).

It is a term referring to the **minds'** ability to consciously adjust and relate the body to its **social environment** (148).

Random House Kernerman Webster's College Dictionary (144) defined psychosocial as 'of or pertaining to the **interaction** between **social** and **psychological** factors.

According to Oxford Lexico, psychosocial relates to the **interrelation** of **social factors** and individual thought and behavior (149).

Psychosocial pertains to or involves both **psychic** and **social aspects**(150).

#### *6.3.1.2 Subject definition of the concept "Psychosocial"*

Psychosocial (14) refers to

- the **work environment**, which includes the **organization of work**
- **organizational culture** such as **policies, attitudes, values, beliefs** and **practices** that are demonstrated on a daily basis in the organization; and
- which affect the **mental** and **physical** well-being of employees.

These are also referred to as

**workplace stressors** that may cause **emotional** and **mental stress** to workers (54).

Tu vesson and Eklund (140) defined the psychosocial work environment as

- a phenomenon that often includes a multitude of aspects such as
- **organizational climate, culture, work demands, work control, leadership empowerment and support; co-worker support and collaboration.**
- a compound system that includes the **work, the workers and the environment.**

While some authors (151) describe it in the context of

- human to human **relationships** and
- **interaction** in work situations.

This is a broad concept that basically refers to how the individual **experiences** and **responds** to his or her surroundings; and thus, the focus is on the individual.

According to Foldspang et al. (152) the psychosocial working environment of the employee includes, among other things,

- a set of job factors related to the **interaction** between people, their **work** and the **organisation.**

Burton (14) highlighted interventions that address psychosocial challenges such as

- **reallocating work** to reduce workload
- allowing **flexibility** in how and when work is carried out
- respecting work-family balance
- recognizing and rewarding good performance

- allowing participation in **decision making** and **providing support**.

### 6.3.1.3 Context definition of the concept “Psychosocial”

In this study, psychosocial is an

- **interactive process** between the **health professionals** and **management** in the health facilities (**work environment**)
- to **promote health**,
- focusing on **social** and **psychological** aspects
- that influence **social behavior, attitudes, beliefs, practices, emotional** and **physical health** of workers.

The **psychosocial challenges** that could adversely influence the facilitation of wellness programs for health professionals in this study include:

**unavailability of policies, pressure from public/community demanding service delivery, lack of consultation, lack of involvement in decision making, poor management / leadership support, poor communication, stress and burnout, workload, lack of co-worker support, scope of practice issues, time pressure, long working hours and turnover, excessive night shift for extra earning and lack of advocacy.**

These could be facilitated by **support from management** that would maintain a conducive environment through

- **planning** (needs assessment, priority setting, manipulate policymakers and regulatory body, reallocating work, reduce workload, allowing flexibility, training on stress management);

- **organizing** (consultation, interaction, advocacy, collaboration, motivation, co-worker support, communication);
- **directing** (leadership empowerment, involvement in decision making); and
- **controlling** (assessment, evaluation, coordination).

#### *6.3.1.4 Reduction of the identified criteria of the concept “Psychosocial”*

The following criteria and defining attributes were deduced from the dictionary, subject and contextual definitions of the concept “psychosocial”. The criteria were refined in order to reflect the intended meaning of the concept. Table 6.1 below illustrates the identified criteria and defining attributes of the concept “psychosocial”

Table 6. 1: Criteria / defining attributes of “psychosocial

Psychosocial	
<b>Criteria / defining attributes</b>	<ul style="list-style-type: none"> <li>• psychological (aspects, factors, processes)</li> <li>• social (aspect, factors, processes)</li> <li>• work, workers and environment / people, work and organisation</li> <li>• relationship</li> <li>• behavioral factors</li> <li>• influence</li> <li>• psychic</li> <li>• social integration</li> <li>• social disruption</li> <li>• social status</li> <li>• bereavement</li> <li>• organizing (consultation, interaction, advocating, collaboration, motivation, communication)</li> <li>• organizational culture</li> <li>• organizational climate</li> <li>• communication</li> <li>• planning (needs assessment, manipulate policymakers and regulatory body, priority setting, reallocating work, reduce workload, allowing flexibility)</li> <li>• organization of work</li> <li>• controlling</li> <li>• directing</li> <li>• coordination</li> <li>• participation, involvement in decision making, engagement</li> <li>• work demands</li> <li>• involvement</li> <li>• work control</li> <li>• policies</li> <li>• attitudes, behavior, values, beliefs, practices</li> <li>• reallocating work</li> <li>• reduce workload</li> <li>• allowing flexibility</li> <li>• phenomenon</li> <li>• thought / mind</li> <li>• mental /mental well-being</li> <li>• physical well-being</li> <li>• collaboration</li> <li>• relationships</li> <li>• leadership empowerment</li> <li>• job factors</li> <li>• social support (co-worker support, management / leadership support)</li> <li>• interrelation, interaction,</li> <li>• social conditions/environment</li> <li>• emotional health</li> <li>• conducive environment</li> </ul>

6.3.1.5 Reduction process of the identified criteria of the concept “Psychosocial”

Table 6. 2: Characteristics of essential and related criteria in respect of the concept “psychosocial”

Essential criteria	Other related criteria
<p><b>Psychosocial</b> is an <b>interactive</b> process between the <b>workers</b> (health professionals) and management in the <b>work environment</b> that influences <b>social behavior, attitudes, beliefs, values, practices</b> as well as <b>physical and emotional health</b>; and facilitates wellness programs.</p>	<p>Management <b>creates</b> and <b>maintains conducive environment</b> through:</p> <ul style="list-style-type: none"> <li>• <b>Planning</b> (needs assessment, priority setting, strategizing, flexibility, manipulating policymakers and regulatory body, reallocating work, reduce workload, training on stress management)</li> <li>• <b>Organizing</b> (all required resources such as human, equipment, facilities and materials, coordinating activities)</li> <li>• <b>Directing</b> (leadership empowerment, motivation (recognition/rewarding), Teamwork, communication / interaction, involvement and engagement in decision making, collaboration, advocacy, co-worker support)</li> <li>• <b>Controlling</b> (evaluation)</li> </ul>

6.3.1. 6 Definition of the concept of “psychosocial”

Psychosocial is an interactive process between the workers (health professionals) and management in the work environment, that influences social behaviour, attitudes, beliefs, values, practices as well as physical and emotional health; and facilitates wellness programs; facilitated by support from management through planning (needs assessment, priority setting, reallocating work, reduce workload, allowing flexibility) organizing (involvement and engagement in decision making, consultation, interaction, advocacy, collaboration, motivation, recognition/rewarding, communication), controlling and directing (leadership empowerment, policy development and implementation).

### 6.3.2 Examination of the concept “physical”

The concept “physical” is examined as follows: dictionary definition, subject definition, context definition, reduction of the identified criteria of the concept, reduction process of the criteria identified and lastly, a definition of the term “physical” within the context of this study.

#### 6.3.2.1 Dictionary definition of the concept “physical”

According to Oxford Advanced Learners’ Dictionary (107) “physical” means

- connected with a **person’s body** rather than their mind
- connected with **things that actually exist** or are **present** and **can be seen, felt, touched** etc. rather than only exist in a person’s mind (145)

The Oxford English Dictionary defines “physical” as relating to **things** perceived through the **senses** as opposed to the mind; **tangible** or **concrete**.

The Macmillan Dictionary (153) defines “physical” as

- **relating to body** (144)
- able to **be seen / touched**
- relating to **appearance**
- when people **touch** a lot in real world
- relating to your **body** rather than mind / as distinguished from the mind (59,145,154)

“Physical” relates to, or resembles **material things** or **nature** (59,155).

According to the Collins English Dictionary (59) physical is defined as

- of or relating to the **body**, as distinguished from the mind or spirit

- of, relating to, or resembling **material things** or **nature**: *the physical universe*.
- involving or requiring **bodily contact**: *rugby is a physical sport*.
- (General Physics) of or concerned with **matter** and **energy**
- (General Physics) of or relating to **physics**
- **perceptible** to the **senses**; **apparent**: *a physical manifestation*
- involving **sexual interest** or **activity**

Synonyms for “physical” are (156)

- somatic, fleshly, tangible, real, palpable, environmental, natural, substantial, concrete, corporeal, gross, materialistic, objective, phenomenal, ponderable, sensible, solid, somatic, visible

#### 6.3.2.2 Subject definition of the concept “physical”

According to Burton (14) “**physical**” is

- an **aspect** of **the** work environment which is part of the **workplace** or **facility** that can be detected by human or electronic senses;
- that includes the **structure, air, machines, furniture, products, materials, chemicals** and **processes**;
- that occur and can affect the worker’s **physical** and **mental, safety, health** and **well-being** in the **workplace**.

Furthermore, Burton (14). emphasizes that when **setting priorities** to address physical challenges, it is sensible to consider the **safety** and **security needs** of workers.

The Merriam-Webster dictionary defines physical environment as

- the part of the **human** environment that includes purely **physical factors** such as **soil, climate** and **water supply** (157).

In a peer-reviewed published article on **workplace physical environment** and **wellbeing**, it was recommended that work environments should be **planned** in such a way that they go beyond the basic **materials** needed to do a job; and **promote employee wellbeing** and **productivity** (158).

Similarly, Sarode and Shirsath (159) stated that managers should apply

- **ergonomic** principles to the work environment design in order to **improve work performance, health** and **safety** of workers.
- Ergonomics refers to the study of the **relationship between people**, the **equipment** that they use and their **physical** environment (159).

Foldspang et al. (152) emphasize that the **physical** working environment of employee includes

- the **overall health** and **safety** of the employee, including the **identifiable** workplace causes of **accidents** and **illness**.

Bhaga (160) contends that the physical work environment is

- a **condition** or **state** of the workplace environment in terms of the **materials** it contains and their **effects** on workers,
- including the shape or the intensity and duration of the effect on workers, which may cause hazards or risks such as the presence of toxic substances, radiation, noise, and the atmosphere workplace.

### *6.3.2.3 Context definition of the concept “Physical”*

For the purpose of this study, “physical” should be seen in terms of

- **resources** including **human, facilities, equipment** and **materials**
- that are required in the **work environment (health facility),**
- to improve **work performance, health, safety** and **well-being** for health professionals
- and influence the **facilitation of wellness program** in the health facilities.

In this study, the physical challenges identified that would affect the facilitation of wellness programs for health professionals include:

- **staff shortage** as well as
- **inadequate facilities** and **equipment**

These should be addressed by ensuring that the work environment has **adequate staff, adequate and appropriate equipment and materials** as well as **adequate and improved facilities**, through:

- management **support** through
  - proper **planning** (priority setting, manipulate policymakers, adequate and appropriate staffing, equipment and facilities);
  - **organizing** (good relationship/ interaction/ communication/ collaboration, strategizing, advocacy);
  - **directing** (involvement in decision making); and
  - **controlling** (ordering, auditing, maintenance, assessment).

#### 6.3.2.4 Reduction of the identified criteria of the concept “Physical”

The following criteria and defining attributes were deduced from the dictionary, subject and contextual definition of the concept “physical”. Table 6.3 below shows the identified criteria and defining attributes of the concept “physical”

Table 6. 3: Criteria / defining attributes of “physical”

<b>Physical</b>	
<b>Criteria / defining attributes</b>	<ul style="list-style-type: none"> <li>• things that actually exist / present</li> <li>• overall health and safety</li> <li>• person’s body</li> <li>• able to be seen / visible</li> <li>• able to be felt</li> <li>• able to be touched / ponderable / palpable</li> <li>• appearance</li> <li>• resources (human, facilities, equipment and materials)</li> <li>• people, adequate staffing</li> <li>• priority setting</li> <li>• proper planning</li> <li>• controlling</li> <li>• regular auditing, ordering, maintenance</li> <li>• promote employee wellbeing</li> <li>• productivity</li> <li>• appropriate and adequate equipment / materials</li> <li>• improved facilities</li> <li>• corporeal</li> <li>• facilitation of wellness program</li> <li>• management support</li> <li>• human environment (physical factors: soil, climate and water supply)</li> <li>• material things or nature</li> <li>• equipment, facilities</li> <li>• body fitness</li> <li>• improve work performance, health and safety</li> <li>• structure</li> <li>• ergonomic</li> <li>• tangible, concrete, material,</li> <li>• relating to physics</li> <li>• perceptible / identifiable / senses</li> <li>• apparent</li> <li>• organizing (good relationship/ interaction/ communication/ collaboration, advocacy)</li> <li>• matter and energy</li> <li>• involving sexual activity / interest</li> <li>• machine, furniture, products</li> <li>• noise, radiation, chemicals</li> <li>• well-being</li> </ul>

- 
- processes
  - workplace facility, work environment
  - product
- 

### 6.3.2.5 Reduction process of the identified criteria of the concept ‘physical’

Table 6. 4: Characteristics of essential and related criteria in respect of “physical”

Essential criteria	Other related criteria
<p><b>Physical</b> denotes <b>identifiable nature</b> and <b>material things</b> that represent <b>human resources, facilities, equipment</b> and <b>materials</b>, required in the <b>work environment (health facility)</b> to <b>improve work performance, health, safety</b> and <b>wellbeing of workers (health professionals)</b>; and influence the facilitation of wellness program.</p>	<p>Management <b>support</b> and <b>maintenance</b> of a conducive physical environment through:</p> <ul style="list-style-type: none"> <li>• Proper <b>planning</b> (priority setting, strategizing, lobby policymakers)</li> <li>• <b>Organizing</b> (good relationship/ interaction/ <b>communication</b>/ collaboration, <b>mobilize resources</b> [adequate and appropriate <b>staffing</b>, equipment and facilities] involvement in <b>decision making</b>, advocacy)</li> <li>• <b>Directing</b> (guiding,)</li> <li>• <b>Controlling</b> (ordering, auditing, maintenance, assessment)</li> </ul>

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### 6.3.2.6 Definition of the concept physical

“Physical” denotes identifiable nature and material things that represent human resources, facilities, equipment and materials, required in the work environment (health facility) to improve work performance, health, safety and wellbeing; and to facilitate wellness programs for health professionals. A conducive physical environment is facilitated by proper resource planning (prioritizing, manipulate policymakers, staffing, adequate equipment and facilities), organizing (strategizing, advocacy, collaboration, good relationship), directing (involvement in decision making) and controlling (ordering, auditing, maintenance, assessment).

### 6.3.3 Examination of the concept “personal”

Like other concepts, the concept “personal” was examined through dictionary definition, subject definition and context definition. Thereafter, the reduction of the identified criteria of the concept, reduction process of the criteria identified and lastly, a definition of the term “personal” were explored.

#### *6.3.3.1 Dictionary definition of the concept “personal”*

Pocket Oxford English Dictionary (145) defined “personal” as

- relating or belonging to a **particular person**
- done by a **particular person** rather than someone else
- concerning / related to a **person’s private life** (59)
- referring to a **person’s character** or **appearance** in an offensive way
- relating to a **person’s body**, its **care**, or its **appearance**
- belonging to or intended for a **particular** person
- undertaken by an **individual** himself
- referring to, concerning, or involving a person's **individual personality, intimate affairs,**
- having the **attributes** of an **individual** conscious being
- of or arising from the **personality**

According to the Oxford Advanced Learner’s Dictionary (107) “personal” is connected with **individual people**, especially **their feelings, characters** and **relationships**.

The Random House Kernerman Webster's College Dictionary (144) defined personal as

- of, pertaining to, or concerning a **particular** person; **individual**; **private**: a **personal** opinion (59);
- directed to or intended for a **particular** person: a **personal** favor;
- referring or directed to a **particular** person in an offensive sense or manner
- done, carried out, held, etc., **in person**;
- pertaining to the **body** (107), **clothing**, or **appearance**: **personal** cleanliness;
- of, pertaining to, or indicating **grammatical** person: the personal ending;
- pertaining to or **characteristic** of a person or **self-conscious** being;
- of the nature of an **individual** rational being;
- Law of or pertaining to **personal property**: personal interests.

#### 6.3.3.2 Subject definition of the concept “personal”

Burton (14) defines “**personal**” in terms of **personal health resources**, which refers to

- the **supportive environment, health services, information, resources, opportunities and flexibility** an organization provides to **workers**;
- to **support and motivate** their efforts to **improve and maintain healthy personal lifestyle practices**;
- as well as to monitor and support their ongoing **physical and mental health**.

**Personal** health resource issues in the work environment are workplace conditions such as

- **lack of information and knowledge**
- that may cause workers not able to adopt **healthy lifestyles** (e.g. **physical activity and diet**)

Burton (14). further recommended that organisations may provide interventions that address **personal health resource** challenges in the workplace which include

- **supportive environment** and
- **resources** (e.g. **training, medical services, information, support, facilities, flexibility**) to encourage workers to develop healthy lifestyle practices.

#### *6.3.3.3 Context definition of the concept “personal”*

For the purpose of this study **personal** should be looked at in terms of

- a particular **person’s character, feelings, body, self-care, interests, experience, health habits, behaviour, knowledge, practices and relationships**
- that influence the **individual health professional’s health and well-being** in the **work environment (health facility)**;

In this study, the **personal challenges** that would hamper the facilitation of wellness programs in the state health facilities include:

- lack of or inadequate knowledge, illnesses, lack of self-care and poor healthy lifestyle practices

These challenges should be addressed to ensure **adequate knowledge and information, proper self-care, good practices** regarding nutrition, physical and emotional health habits; and health screenings, **positive attitudes** towards wellness interventions as well as **good intra-personal health**. This is facilitated by interventions such as

- **supportive environment** in the form of

- regular **health screening, dissemination of information and training, policies, fitness facilities, flexibility, employee assistance program** and other programs that promote health and wellbeing among health professionals.

*6.3.3.4 Reduction of the identified criteria of the concept of “personal”*

The following criteria and defining attributes were deduced from the dictionary, subject and context definitions of the concept “personal”. Table 6.5 below displays the identified criteria and defining attributes of the concept “personal”

Table 6. 5: Criteria / defining attributes of “personal”

<b>Personal</b>	
<b>Criteria / defining attributes</b>	<ul style="list-style-type: none"> <li>• belonging to a particular person</li> <li>• private life</li> <li>• person’s character/ characteristics</li> <li>• person’s body/appearance</li> <li>• individual personality</li> <li>• body, care</li> <li>• personal health resource</li> <li>• person’s feelings</li> <li>• physical and mental health</li> <li>• physical activity and diet</li> <li>• intra-personal health</li> <li>• person’s relationship</li> <li>• supportive environment</li> <li>• work environment / health facility</li> <li>• health services</li> <li>• information</li> <li>• interests, experience</li> <li>• health habit, behaviour</li> <li>• opportunities</li> <li>• resources (training, medical services, information, support, facilities, flexibility)</li> <li>• adequate knowledge</li> <li>• good practices</li> <li>• personal lifestyle practices</li> <li>• positive attitudes</li> <li>• health and wellbeing</li> <li>• pertaining to the body</li> <li>• self-conscious</li> <li>• pertaining to personal property</li> <li>• health screening,</li> <li>• dissemination of information</li> </ul>

- 
- trainings, fitness facilities
  - policies
  - employee assistance program
- 

### 6.3.3.5 Reduction process of the identified criteria of the concept ‘personal’

Table 6. 6: Characteristics of essential and related criteria in respect of “personal”

Essential criteria	Other related criteria
<p><b>Personal</b> refers to a <b>particular or individual person’s character, feelings, body/self-care, interests, experience, health habit, behaviour, knowledge, lifestyle practices and relationship</b>; that may influence the <b>individual health professional’s health and well-being in the work environment (health facility)</b>.</p>	<ul style="list-style-type: none"> <li>• Supportive environment (regular health screening, motivation, dissemination of health information)</li> <li>• Active participation, involvement</li> <li>• Development and implementation of wellness policies</li> <li>• Monitoring (physical and mental health)</li> <li>• Employee assistance program (EAP)</li> <li>• Trainings, fitness facilities</li> <li>• Flexibility to allow for exercises</li> </ul>

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### 6.3.3.6 Definition of the concept “personal”

Personal refers to a particular or individual person’s character, feelings, body/self-care, interests, experience, health habit, behaviour, knowledge, practices and relationship; that may influence the individual health professional’s health and well-being in the work environment (health facility); and facilitate wellness programs; through a supportive environment in the form of regular health screening, motivation, dissemination of health information, active participation, involvement, policies, monitoring, trainings, flexibility, EAP and fitness facilities.

#### 6.3.4 Examination of the concept “environment”

The last central concept in this study is environment. The dictionary, subject and context definitions as indicated below enabled the researcher to clarify the criteria and use of the concept in this study.

##### *6.3.4.1 Dictionary definition of the concept “environment”*

Environment refers to the **place in which people live and work**, including all the **physical conditions** that affect them (145,153).

The Cambridge Academic Content Dictionary (161) defines “environment” as the **conditions that you live or work in** and the way that they **influence** how you feel or how effectively you can work.

The Collins English Dictionary (59) defines “environment” as

- the aggregate of **surrounding things, conditions, or influences; surroundings; milieu;**
- the **social** and **cultural forces** that shape the life of a person or a population;
- **external conditions** or **surroundings**, especially those in which people live or work.

According to the Oxford Advanced Learner’s Dictionary (107) “environment” refers to

- the **conditions that affect the behaviour** and development of somebody or something;
- the **physical conditions** that somebody or something exists in / in which a person, animal, plant lives or operates or in which an activity takes place;
- a **natural world** in which people, animals and plants live

The Merriam-Webster Dictionary (157) defines “environment” as

- the **circumstances, objects, or conditions** by which one is surrounded;
- the aggregate of **social and cultural conditions** that **influence the life** of an individual or community.

“Environment” is also defined as

- the **existing surroundings** that affect an activity or
- the totality of **surrounding conditions** and **circumstances** affecting growth or development (156).

According to the American Heritage Dictionary of the English Language (155), “environment” is the **complex of social and cultural conditions** affecting the nature of an individual person or community.

The Random House Kernerman Webster's College Dictionary (144) defines “environment” as

- the aggregate of **surrounding things, conditions, or influences; surroundings; milieu;**
- the **air, water, minerals, organisms,** and all other **external** factors surrounding and affecting a given organism at any time;
- the **social and cultural forces** that shape the life of a person or a population;
- the synonyms are: **ambiance, vicinity, atmosphere, climate, medium, milieu, surroundings, world** (156).

Environment is the **milieu**; the aggregate of all of the **external conditions and influences affecting the life and development** of an organism. It can be divided into **physical,**

**biological, social, cultural**; any or all of which can influence the health status of the population (142)

The Collins Thesaurus of the English Language (162) lists the synonyms of “environment” as **surroundings, setting, conditions, situation**, medium, scene, **circumstances**, territory, background, atmosphere, **context, habitat**, domain, **milieu**, and locale.

#### *6.3.4.2 Subject definition of the concept “environment”*

Burton (14) emphasizes that a work environment is a **fundamental human right for workers** and employers should provide a **healthy work environment**. Furthermore, a **healthy workplace** is one in which

- **workers and managers collaborate** to use a continual improvement process;
- to **protect and promote the health, safety and well-being** of all workers and
- the **sustainability of the workplace** by considering **health and safety** concerns, based on identified needs with regard to:
  - **physical work environment**
  - **psychosocial work environment (organization of work, workplace culture)**
  - **personal health resources** in the workplace
  - ways of **participating in the community** to improve the **health of workers**, their **families** and other **members of the community**.

Working **environment** is a set of

- **physical, chemical, biological, socio-psychological** and other **factors, that affect employees** (163).

Environmental factors include not only the

- **physical environment** but
- also, **psycho-social aspects** and
- the **socio-economic** environment.

Green and Tones (164) emphasize the impact of environment on **physical aspects**, particularly its **influence** on health.

Foldspang et al. (152) define working environment as

- the **conditions** in the company in which the employee works,
- which must be prepared by the management concerned,
- that ensure **good protection** and **safe space** for employees to do the job.

Workplace **environment** is

- the sum of the **interrelationships** that exist between **employees** and the **environment** in which they work (165).

Whereas Oludeyi (166) defines work environment as

- the **settings, situations, conditions** and **circumstances** under which people work.

According to Tripathi (167), work environment is

- the environment in which people work
- including **physical setting, job profile, work load, leadership style, and culture** and **market condition**.

Chandrasekar (168) identifies the factors in the workplace environment which either lead to engagement or disengagement of workers. These factors include:

- **goal-setting, performance feedback, role congruity, defined processes, workplace incentives, open communication, adequate space and facilities,**

**supervisor support, good relationship with supervisors, mentoring/coaching, opportunity to apply new skills, job aids, environmental factors, and physical factors.**

Arsalan et al. (169) also pointed out that factors of working environments are divided into two parts including

- **physical** (e.g. lighting, noise and ergonomics) and
- **psychosocial** (e.g. influence at work, meaning of work, quality leadership and security at work).

Amukugo, Jooste and van Dyk (170) highlight that a conducive environment is characterized by:

- **provision of support, commitment, two-way communication, involvement in decision making, clear policies and guidelines, recognition, mutual respect, trust, teamwork and encouragement.**

#### *6.3.4.3 Context definition of the concept “environment”*

In this study environment refers to

- **psychosocial, physical and personal conditions**
- that **influence the behavior and health** of an individual
- in the **health facility (work environment).**

This involves the **external** and **internal** environment of the health facilities under which health professionals work that affect the facilitation of wellness programs.

- **external environment** includes stakeholders (policymakers, regulatory body, Non-governmental Organizations (NGO’s) and community), while

- **internal environment** comprises (health professional managers (SMO, CMO, NM) and health professionals (doctors and nurses).

The environmental challenges that would influence the facilitation of wellness programs in this study include:

- **psychosocial** challenges (unavailability of policy, lack of involvement in decision making, pressure from the community/public, stress and burnout, workload, lack of advocacy, lack of support, scope of practice issues, time pressure, long hours and turnover, excessive night shifts for extra earnings)
- **physical** challenges (staff shortage, inadequate equipment and facilities)
- **personal** challenges (lack of knowledge, poor lifestyle practices, illnesses and lack of self-care)

The interventions would include a **supportive and accommodating environment** through engagement of policymakers, involvement in decision making, collaboration, reallocation of work, staffing, collaboration, communication, advocacy, flexibility, adequate resources, dissemination of health information, regular screening, training, motivation, recognition and encouragement).

#### *6.3.4.4 Reduction of the identified criteria of the concept “environment”*

The following criteria and defining attributes were deduced from the dictionary, subject and context definitions of the concept “environment”. Table 6.7 below presents the identified criteria and defining attributes of the concept “environment”

Table 6. 7: Criteria / defining attributes of “environment”

<b>Environment</b>	
<b>Criteria / defining attributes</b>	<p>place in which people live and work            setting, surrounding, situation, circumstances,            conditions, habitat, context, objects, milieu            personal traits (lifestyle practices, habits/behaviors)            psychosocial aspects (organizational culture, workload,            healthy workplace            fundamental human right to workers            interrelationships, leadership, influence at work)            physical setting            psychosocial, physical and personal conditions            quality leadership            conducive work environment (provision of support, commitment, two-            way communication, involvement in decision making, clear policies            and guidelines, recognition, mutual respect, trust, teamwork and            encouragement)            physical aspects (resources)            influence on health (individual, family and community)            external and internal environment /conditions / surroundings            social and cultural forces            natural world            resources            air, water, minerals, organisms, biologic            safe space            good protection            open communication            adequate space and facilities            leadership style            socio-psychological, socio-economic            interrelationship (employees and environment)            aggregate surrounding things            goal-setting, performance feedback, role congruity,            defined processes, workplace incentives, supervisor            support, mentoring/coaching            physical work environment            psychosocial work environment            personal health resources            health facility/ work environment            job profile            work load            market condition            culture            ways of participating in the community            workers and managers collaborate</p>

6.3.4.5 Reduction process of the identified criteria of the concept ‘environment’

Table 6. 8: Characteristics of essential and related criteria in respect of “environment”

Essential criteria	Other related criteria
<p><b>Environment</b> signifies <b>psychosocial, physical</b> and <b>personal</b> conditions which comprises <b>external</b> and <b>internal settings</b>; that influence the <b>behaviour, health</b> and <b>facilitation of wellness program for health professionals in the work environment (health facility).</b></p>	<p><b>Conducive environment:</b></p> <ul style="list-style-type: none"> <li>• Support</li> <li>• Motivation (recognition / reward, mutual respect, encouragement)</li> <li>• Active participation (Involvement and engagement in decision making)</li> <li>• Effective communication / interaction</li> <li>• Commitment</li> <li>• Collaboration, interrelationship</li> <li>• Safe, good protection</li> <li>• Clear policies and guidelines in place</li> <li>• Quality leadership</li> <li>• Recognition, mutual respect, trust, team work</li> <li>• Workplace incentives</li> <li>• Adequate resources (human, equipment and materials)</li> </ul>

6.3.4.6 Definition of the concept “environment”

The definition of the concept of “environment” was formulated based on the criteria identified in table 6.7.

Environment signifies psychosocial, physical and personal conditions, comprising external (stakeholders such as policymakers, NGO’s, regulatory body and community) and internal (management, doctors and nurses) settings that influence the behaviour, health and facilitation of wellness program for health professionals in the work environment (health facility) through a supportive and accommodating environment that creates a conducive work environment.

6.3.5 Final reduction process of identified criteria of the main statement “facilitation of psychosocial, physical and personal environment” to facilitate wellness programs for health professionals in the health facilities.

Chinn and Kramer (53) suggest that it is important to refine the criteria so that they reflect the intended meaning of the concept. Table 6.9 shows the final reduced essential and related criteria for the statement “facilitation of psychosocial, physical and personal environment” from the definitions.

Table 6. 9: Characteristics of essential and related criteria

ESSENTIAL CRITERIA	OTHER RELATED CRITERIA
<p><b>Psychosocial</b> describes an <b>interactive</b> process between the <b>workers</b> (health professionals) and <b>management</b> in the <b>work environment</b> that influences <b>social behaviour, attitudes, beliefs, values, and practices</b> as well as <b>physical and emotional health</b>; and facilitate wellness program.</p>	<p>Management <b>creates, supports and maintains</b> conducive psychosocial work environment through:</p> <ul style="list-style-type: none"> <li>• <b>Planning (priority setting,</b> reallocating work, reduce workload, allowing <b>flexibility,</b> training on stress management)</li> <li>• <b>Organizing (policy development and implementation, manipulating policymakers and regulatory body, resources, communication, teamwork/co-worker support, collaboration, interaction)</b></li> <li>• <b>Directing</b> (leadership empowerment, guiding, involvement, coordinating, motivation and engagement in decision making)</li> <li>• <b>Controlling</b> (evaluation)</li> </ul>
<p><b>Physical</b> denotes <b>identifiable nature and material</b> things that represent <b>human resources, facilities, equipment and materials,</b> required in the <b>work environment</b> (health facility) to improve <b>work performance, health, safety and wellbeing</b> of workers (health professionals); and influence the facilitation of wellness program.</p>	<p>Management creates, <b>supports and maintains</b> conducive <b>physical work environment</b> through:</p> <ul style="list-style-type: none"> <li>• <b>Planning</b> (priority setting)</li> <li>• <b>Organizing</b> (resources {staffing, equipment, facilities and materials} <b>allocating adequate resources,</b> policies, manipulating policymakers, <b>communicating, collaborating, advocating, interacting</b>)</li> <li>• <b>Directing</b> (leadership, guiding, involvement in decision making)</li> <li>• <b>Controlling</b> (evaluation, auditing, maintenance)</li> <li>• <b>Coordinating (working together, cooperation)</b></li> </ul>
<p><b>Personal</b> refers to a <b>particular or individual</b> person’s <b>character, feelings, body/self-care, interests, experience, health habit, behaviour, knowledge, lifestyle practices and relationship;</b> that may influence the individual health professional’s health and well-being in the <b>work environment</b> (health facility).</p>	<p>A <b>supportive</b> environment addresses personal challenges through:</p> <ul style="list-style-type: none"> <li>• Regular health screening (monitoring physical and mental health)</li> <li>• Motivating employees</li> <li>• Dissemination of health information/trainings</li> <li>• Encourage active participation and involvement in wellness program</li> <li>• Establishing employee assistance program (EAP)</li> <li>• Provide fitness facilities</li> <li>• Flexibility to allow for exercises</li> </ul>
<p><b>Environment</b> signifies <b>psychosocial, physical and personal conditions</b> which comprises <b>external and internal settings;</b> that influence the <b>behaviour, health and facilitation of wellness program</b> for health professionals in the <b>work environment</b> (health facility).</p>	<p>Conducive work environment:</p> <ul style="list-style-type: none"> <li>• <b>Supportive</b></li> <li>• <b>Motivating</b> (recognition / reward, mutual respect, encouragement)</li> <li>• <b>Active participation</b> (involvement and engagement in decision making)</li> <li>• <b>Effective communication</b> / interactive</li> <li>• <b>Commitment</b></li> <li>• <b>Collaborative</b></li> <li>• <b>Safe</b></li> <li>• <b>Policies in place</b></li> <li>• Adequate resources (human, equipment and materials)</li> </ul>

### 6.3.6 Definition of related concepts

Definitions of related concepts “facilitation of psychosocial, physical and personal environment” are presented in terms of their application in this study.

- **Psychosocial**

Psychosocial describes an interactive process between the workers (health professionals), management and stakeholders in the work environment, that influence social behavior, attitudes, beliefs, values, practices as well as physical and emotional health; and facilitate wellness programs; aided by support from management through planning (priority setting, reallocating work, reduce workload, allowing flexibility) organizing (policy development and implementation involvement and engagement in decision making, consultation, interaction, advocacy, collaboration, motivation, recognition/rewarding, communication), directing (leadership empowerment) and controlling (evaluating).

- **Physical**

Physical denotes identifiable natural and material things that represent human resources, infrastructure, equipment and materials, required in the work environment (health facility) to improve work performance, health, safety and wellbeing; and to facilitate wellness program for health professionals. A conducive physical environment is facilitated by proper resource planning (prioritizing, manipulate policymakers), organizing (adequate resources {such as staff, equipment, infrastructure, facilities and materials}, strategizing, advocacy, collaboration, good relationship), directing (leadership, involvement in decision making) and controlling the use of resources (evaluating, auditing, maintenance).

- **Personal**

“Personal” refers to a particular individual or person’s character, feelings, body/self-care, interests, experience, health habits, behaviour, knowledge, practices and relationship; that may influence the individual health professional’s health and well-being in the work environment (health facility); and facilitate wellness programs; through a supportive environment in the form of regular health screening, motivation, dissemination of health information, active participation, involvement, policies, monitoring, trainings, flexibility, EAP and fitness facilities.

- **Environment**

Environment signifies psychosocial, physical and personal conditions, comprising external (stakeholders such as policymakers, NGO’s, regulatory body and community) and internal (management, doctors and nurses) settings that influence the behaviour, health and facilitation of wellness programs for health professionals in the work environment (health facility). A conducive work environment is facilitated through support and collaboration.

### 6.3.7 Definition of the statement “facilitation of psychosocial, physical and personal environment”

The definition of the statement of “**facilitation of psychosocial, physical and personal environment**” was formulated based on the criteria identified in Table 6.9. In this study, facilitation of psychosocial, physical and personal environment is a comprehensive process that involves:

- facilitating interaction between management, stakeholders and health professionals in the external and internal environment of the health facility, to identify needs, manage and maintain a work environment that is conducive for the facilitation of wellness programs for health professionals,
- improving resources required in the work environment that improve work performance and influence the facilitation of wellness programs, and
- addressing individual feelings, habits, knowledge, lifestyle practices on wellness interventions that may influence the facilitation of wellness programs for health professionals.

#### 6.4 CONSTRUCTION OF RELATIONSHIPS

The linkages and nature of interactions among the concepts contained in “psychosocial environment, physical environment and personal environment” provide some indications concerning the purposes and assumptions on which the model is based. The relationships began to unfold as the concepts were identified and analysed. Relationships were made among concepts identified from phase 1 of the study, Practice-Oriented theory, WHO framework and model and Fayol’s Management theory.

##### 6.4.1 Identified statements of concepts

The construction of relationship statements of the central concepts formed the basis of the model assumptions, and they are presented below.

##### **Environment**

- The health facility (context) consists of external and internal environmental factors that influence the facilitation of wellness programs. In the external environment, there are psychosocial challenges (dynamics) such as unavailability of wellness

policy and scope of practice issues that affect the health professionals (recipients), while in the internal environment there are psychosocial, physical and personal challenges (dynamics) that affect health professionals' health, safety and well-being, and subsequently hamper facilitation of wellness program.

- The health professional managers, referred to in this study as management (key agents), co-ordinate all activities necessary, using management processes such as planning, organizing, directing and controlling to ensure an environment that is conducive for the facilitation of wellness programs for health professionals in the state health facilities (procedure). The management (key agents), stakeholders (agents), health professionals (recipients) interact to address psychosocial, physical and personal challenges in the work environment.
- An environment conducive for the facilitation of wellness programs in the health facility context should be supportive, motivating, interactive, having clear policies and adequate resources and guaranteed safety and flexibility to facilitate wellness programs.
- The achievement of the outcome (terminus) of the facilitation of wellness programs depends on the extent of facilitation, commitment and shared effort of all in addressing the dynamics.

#### **Psychosocial**

- This describes the interaction between the management, stakeholders and health professionals in the work environment, which is facilitated by management processes such as planning, organizing, directing and controlling.

- The management (key agent) facilitates interaction with the stakeholders (secondary agent) in the external environment and health professionals (primary recipients) in the internal environment to identify psychosocial needs and provide psychosocial support; to ensure a psychosocial environment that is conducive for the facilitation of wellness programs in the state health facilities.

### **Physical**

- Management facilitates physical needs assessment and physical support to ensure a conducive physical environment for health professionals (recipients) through proper resource planning, organizing adequate resources as well as directing and controlling resources. Management (key agent) collaborates with stakeholders to address the physical needs of health professionals.
- Adequate resources are required in the work environment (health facility) to improve work performance and to facilitate wellness programs for health professionals.

### **Personal**

- The individual person's character, health habit, knowledge, practices and interests may influence the facilitation of wellness programs in the work environment.
- The management (key agent) is expected to conduct personal needs assessment, facilitate personal support for health professionals (recipients) and collaborate with stakeholders in order to create a supportive environment through regular screening and medical services, motivation, dissemination of health information, trainings, safety and other wellness interventions that facilitate wellness programs.

- The health professionals (recipients) are required to show commitment and actively participate in the facilitation of wellness programs.

#### 6.4.2 Adopting theories to guide the development of a model

The researcher adopted Practice Oriented theory by Dickoff et al. (49), WHO healthy workplace model(14), Management theory of Fayol (51,52), as well as Evaluation theory by Fawcett (55) (refer to Chapter 7) to guide the development of a model.

##### *6.4.2.1 Dickoff et al.'s Practice-Oriented theory (1968)*

The Practice Oriented theory by Dickoff et al. (49) was adopted to guide the development of the conceptual framework for this study. The development of the conceptual framework used the six elements of Practice-Oriented theory, namely *agent, recipient, context, dynamics, procedure* and *terminus*. These are based on the six aspects of activity from a six-question survey list. The researcher's logical reasoning map, guided by Practice-Oriented theory, is presented in Fig 6.1 below, whereas Table 6.10 illustrates the application of Practice-Oriented theory to this study.

Context: Health facility

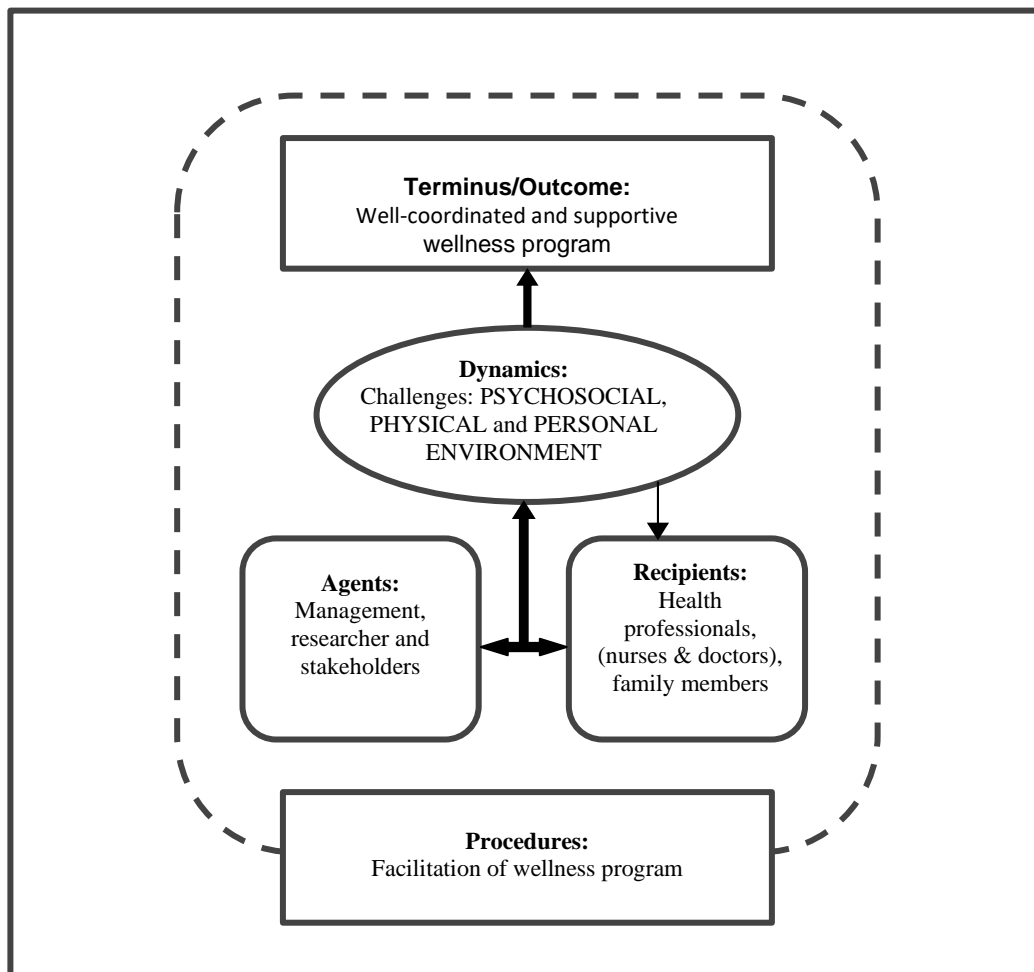



Figure 6. 1 Researcher's Mental Map

Table 6. 10: Application of Practice-Oriented theory

Element	Application to the study
Agent	Researcher, health professional managers (Senior Medical officers, Chief medical Officers, Nurse Managers) and stakeholders (Policymakers, Regulatory body (Health Professionals Council of Namibia) and Non-governmental Organizations (NGOs))
Recipient	Health professionals (Doctors and nurses) and family members
Context	Health facilities
Dynamics	<p>Findings of this study regarding challenges that the health professionals (doctors and nurses) were experiencing relating to psychosocial, physical and personal environment, that hinder facilitation of wellness programs.</p> <p><b>Psychosocial environment challenges</b></p> <ul style="list-style-type: none"> <li>▪ Unavailability of wellness policy and program</li> <li>▪ Pressure from public demanding service delivery</li> <li>▪ Lack of consultation regarding staff recruitment</li> <li>▪ Stress and burnout</li> <li>▪ Workload</li> <li>▪ Lack of advocacy and leadership support</li> <li>▪ Insufficient support from management</li> <li>▪ Poor communication</li> <li>▪ Inadequate health screening and education</li> <li>▪ Lack of co-worker support</li> <li>▪ Scope of practice issues</li> <li>▪ Time pressure</li> <li>▪ Long hours and turn over</li> <li>▪ Excessive night shift for extra earning</li> </ul> <p><b>Physical environment (resources) challenges</b></p> <ul style="list-style-type: none"> <li>▪ Staff shortage</li> <li>▪ Inadequate facilities, equipment and materials</li> </ul> <p><b>Personal environment challenges</b></p> <ul style="list-style-type: none"> <li>▪ Inadequate knowledge</li> <li>▪ Poor practices concerning facilitation of wellness programs</li> <li>▪ Illnesses and lack of self-care</li> </ul>
Procedure	Facilitation of wellness programs that include development of a model and guidelines
Terminus	Outcome, which would be a well-coordinated and supportive wellness program for health professionals in the state health facilities.

 *Agent*

The agent is the person who performs the activity that will lead to the realization of the goal (49). In this study, the agents include:

- The **researcher** who facilitated the development, implementation and evaluation of the model for health facilities to facilitate wellness programs for health professionals.

- The **health professional managers** (also referred to management) are the facilitators and focal persons in charge for planning, organizing, directing and controlling activities that will lead to the realization of the goal of the study.
- The **stakeholders (policymakers, regulatory body and Non-governmental organizations)** are those with political, professional and financial responsibilities that contribute to the realization of the goal of the study.

Dickoff et al. (49) emphasized that an agent should possess internal and external resources that are vital for the realization of the goal. Internal resources refer to the skills, values, education, knowledge, techniques, routines or policies available to the agent, while external resources of an agent might include resources available for maintaining, supporting, developing, protecting, extending the agent's capacity, power or flexibility (49). Furthermore, the agents should have specific characteristics and skills to facilitate the psychosocial, physical and personal environment for the facilitation of wellness programs in the health facilities.

The health professional managers (management) should be able to plan, organize, direct, control and coordinate all the activities necessary to ensure a work environment that is conducive for the facilitation of wellness programs in the health facilities. A clear vision statement should be communicated to everyone involved. They should be good facilitators and collaborators in order to build goal-focused interactions between recipients and stakeholders. To facilitate effectively, managers need to have good communication skills, understanding of the goals and the ability to share knowledge and skills necessary for the implementation of the model. Additional important values and skills that the agent should

possess include competency, patience, empathy, motivation, commitment, confidence and leadership.

The achievement of the outcome of facilitation of wellness programs depends on the extent of facilitation, commitment and shared effort of everyone involved.

#### *Recipient*

The recipients are people who would benefit from the activity (49). The two recipients identified in this study were:

- **Primary recipients:** Health professionals (nurses and doctors) who would benefit and be involved in the implementation process of the model.
- **Secondary recipients:** Immediate family members who live and interact with health professionals. They would also benefit from the support, services and resources provided to the health professionals.

In order to realize the purpose of the study, health professionals should be actively involved and show willingness to participate in the facilitation of wellness programs. They should take responsibility for their acquisition of knowledge and skills regarding the facilitation of wellness programs in the health facilities. Knowledge regarding facilitation of wellness programs is crucial to the health professionals and their families, especially the effects of a work environment that is detrimental to their health and is characterized by heavy workload, time pressure, stress and burnout. Health professionals and their families should be empowered with knowledge and skills. They should also be supported, motivated and encouraged to participate in the implementation process for the realization of the purpose of the study. By acquiring adequate knowledge, getting sufficient support

and good practices, some challenges experienced by health professionals would thus be addressed, and this, in turn, would ensure a work environment that is conducive to their well-being and productivity.

#### *Context*

The context is a setting or location or physical structure in which the activity is performed (49). Dickoff et al. (49) suggested that both physical and non-physical factors demand recognition as part of the framework. In this study the context refers to state health facilities that provide healthcare services to the clients and patients in the MoHSS. These facilities include one intermediate and two district state health facilities. The context is the work environment that should be conducive to the promotion of health, safety and well-being of health professionals. The health facility environment is divided into external and internal environment. The findings of the study revealed that health professionals work in an environment that compromises their health and well-being. To ensure facilitation of wellness programs in the health facilities, the psychosocial environment, physical environment and personal environment need to be conducive for health professionals to feel safe, supported, motivated and encouraged. Also, a conducive work environment should be collaborative, interactive and with adequate resources as well as effective interpersonal relationship to facilitate wellness programs for health professionals. Therefore, a model, including guidelines, was developed for the realization of the purpose of the study.

#### *Dynamics*

According to Dickoff et al. (49), dynamics refer to the energy source for the activity. In this study, the dynamics were the challenges that the health professionals were

experiencing in their work environment, including psychosocial, physical and personal challenges (refer to table 6.10). These challenges adversely affect the health professionals' health, safety and well-being and hinder the facilitation of wellness programs in the health facilities. The non-conducive psychosocial, physical and personal environment hampers the well-being of health professionals and the provision of quality care to patients and clients. Therefore, these challenges should be addressed in order to create and maintain a work environment that conducive to health professionals' health, safety and well-being. A collective effort from everyone involved is necessary to strengthen the facilitation process of wellness programs in the state health facilities.

#### *Procedure*

The procedure is the protocol or technique that guides the activity (49). The procedure in this study is the facilitation of wellness programs, including the development of a model which comprises of three phases namely: needs assessment, managing and maintaining a conducive environment and outcome (well-coordinated and supportive wellness program). It also includes the procedure of developing guidelines for operationalizing the model. Management needs to facilitate an interactive process with the stakeholders and the health professionals to work as a team and address the challenges identified. Management should plan, organize, direct and control the activities necessary to facilitate the implementation of the model as a way of addressing the dynamics in the health facility context.

#### *Terminus*

Terminus refers to the end point or desired outcome of the activity (49). The desired outcome after the implementation of the model is well-coordinated and supportive

wellness programs for health professionals in the state health facilities. Management will facilitate the needs assessment as well as manage and maintain a conducive environment through planning, organizing, directing and controlling the activities that will lead to the achievement of the intended goal. They guide the stakeholders and support health professionals to actively participate in the implementation process. The outcomes expected after the implementation of the model include having a wellness policy in place, adequate resources, sufficient support, adequate knowledge, good practices and active participation, which would lead to the facilitation of wellness programs in the health facilities. It is expected that the interaction between the policymakers, regulatory body (Health Professions Council) and NGOs will continue in order to ensure improved outcomes. The overall outcome will be adequate psychosocial, physical and personal support to ensure promotion of health and well-being among health professionals in the state health facilities.

#### *6.4.2.2 WHO Framework and model (2010)*

The WHO framework and model was developed to promote health and safety for employees at work and to create workplace wellness programs that can be used by any country, based on their culture (14,54). In addition, this model was developed by specifically considering the avenues of influence for a healthy workplace, namely: psychosocial and physical work environment, personal health resources in the workplace and ways of participating in the community to improve the health of workers, their families and community. In his report, Burton (14) emphasized that in order to create a workplace that protects, promotes and supports the health of the workers, one must

consider addressing content in four avenues of influence, based on the identified needs and preferences of each organization.

In this study, the WHO framework and model was adopted based on the identified needs. The health professionals' needs were identified and classified according to the main concepts of psychosocial environment, physical environment and personal environment as adapted from the WHO framework and model. Consequently, the WHO framework and model provided insight on health professionals' needs that, if addressed, will lead to successful facilitation of wellness programs in the health facilities. These are the ways that the management, working in collaboration with stakeholders and health professionals, can influence the health status of health professionals as well as the efficiency, productivity and competitiveness of the health facility.

The central concepts of the study are presented in Figure 6.2; while Table 6.11 illustrates the application of the WHO framework and model to the study.

Context: Health facility environment

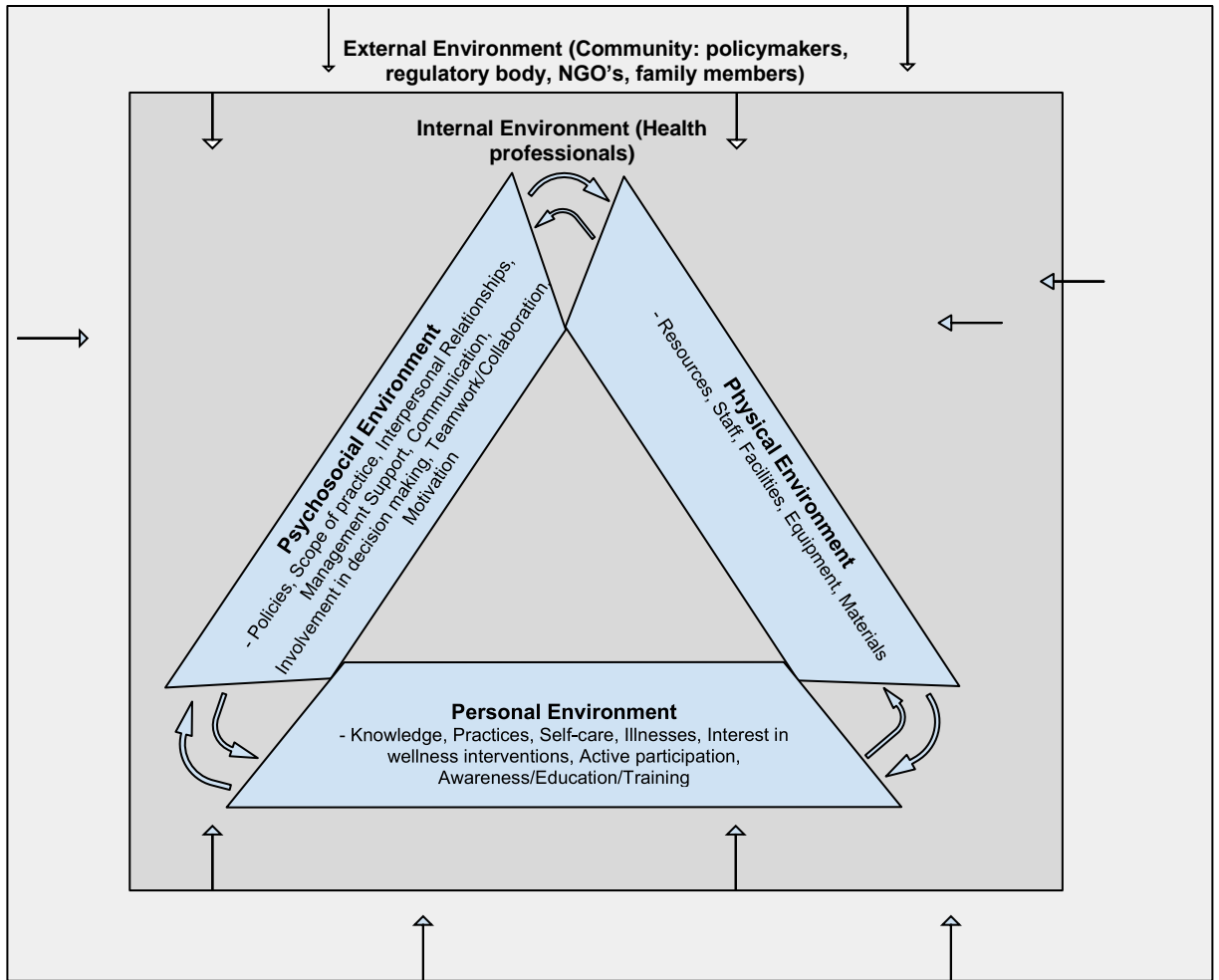



Figure 6. 2 Central concepts of the study

Table 6. 11: Application of WHO framework and model

Element	Application to the study
Psychosocial environment	<ul style="list-style-type: none"> <li>▪ Policies</li> <li>▪ Scope of practice</li> <li>▪ Interpersonal relationships</li> <li>▪ Management support</li> <li>▪ Effective communication</li> <li>▪ Teamwork /collaboration/ cooperation</li> <li>▪ Involvement in decision making</li> <li>▪ Motivation</li> </ul>
Physical environment	<ul style="list-style-type: none"> <li>▪ Resources (staff, facilities, equipment and materials)</li> </ul>
Personal environment	<ul style="list-style-type: none"> <li>▪ Knowledge</li> <li>▪ Practices</li> <li>▪ Self-care</li> <li>▪ Illnesses</li> <li>▪ Interest in wellness interventions</li> <li>▪ Active participation</li> <li>▪ Awareness / education / training</li> </ul>

The health facility environment consists of external (community such as policymakers, regulatory body and NGO's) and internal (health professionals) environments, comprised of the components of psychosocial, physical and personal environment as described below.

 *Psychosocial environment*

The psychosocial element of the work environment involves the organization of work and organizational culture, including policies, attitudes, believes and practices (14). The findings of this study revealed that health professionals experience challenges relating to

psychosocial issues from the external and internal environments that hamper the facilitation of wellness programs in the health facilities as indicated in Table 6.10. These are workplace stressors that may affect the health professionals' emotional, physical and mental well-being.

The psychosocial environment needs to be conducive to promote health, safety and well-being of health professionals. The psychosocial environment should be conducive to the creation of a safe, supportive, collaborative workplace, characterized by policies that enable active participation and effective communication.

Management should facilitate and collaborate with health professionals and stakeholders to create a conducive psychosocial environment. To facilitate effectively, they should employ management functions such as planning, organizing, directing and controlling all the activities that will allow them to manage and maintain a healthy psychosocial environment. In this study, the following issues should be addressed in order to ensure a psychosocial environment that is conducive to the facilitation of wellness programs: wellness policy development and implementation, lobbying the regulatory body to revisit the scope of practice, provision of sufficient support from management and co-workers, reallocating work and reducing workload to reduce stress, good interpersonal relationships, effective communication and collaboration, teamwork, involvement in decision making as well as motivation through rewards and recognition.

#### *Physical environment*

In this study “physical work environment” denotes resources such as personnel (human resources), infrastructures, equipment and materials that are needed in the work environment to facilitate a wellness program. The findings of the study indicate that there

is a shortage of human resources, inadequate infrastructure, equipment and materials, which collectively affect the health professionals' health, safety and well-being. To ensure a physical environment that is conducive to health, safety and well-being, health professionals need to be provided with adequate resources that will improve service delivery. The management should facilitate a physical environment that is conducive to the facilitation of a wellness program through adequate human resources, adequate and improved infrastructure as well as adequate equipment and materials. To achieve these, management should plan, organize, direct, and control the resources in order to facilitate wellness programs in the health facilities.

#### *Personal environment*

“Personal work environment” entails the provision of a supportive environment, health services, information, resources, opportunities and flexibility by the organisation to motivate its workers to maintain healthy personal lifestyle practices (14). The findings of this study revealed that health professionals experienced personal challenges in the work environment such as illnesses, lack of self-care, and lack of knowledge regarding the facilitation of wellness programs and poor practices pertaining to nutrition, physical and emotional habits and health screening. To ensure an environment that is conducive to the facilitation of a wellness program, health professionals need support to cope with their illnesses; motivation to actively participate in the wellness program, encouragement to take care of their own health, to be provided with adequate knowledge regarding the facilitation of wellness programs; as well as regular health screening and medical services to detect and monitor illnesses. Management needs to facilitate a positive personal work environment through collaboration with stakeholders and health professionals. They need

to create awareness, health education and offer training to health professionals about the facilitation of wellness programs in the health facilities. However, health professionals have to demonstrate a sense of responsibility in addressing their personal needs that will lead to the facilitation of a wellness program.

#### *6.4.2.3 Fayol's Management theory (1920)*

Fayol's management theory covers, in broad terms, how management interacts with employees in such a way that any organization can apply it (52). Furthermore, Fayol introduced managerial levels, namely administrative, security, accounting, financial, commercial and technical. Fayol originally identified and focused on the five managerial functions of planning, organizing, directing, coordinating and controlling. However, currently these have been changed to four commonly accepted functions comprising of planning, organizing, directing and controlling that form the basis of management process. Based on Fayol's management theory (51), it was assumed that health professional managers in this study would employ the four managerial functions depicted in Figure 6.3. Table 6.12 represents the application of Fayol's management theory to facilitate a psychosocial, physical and personal environment that is conducive to the facilitation of a wellness program in the health facilities.

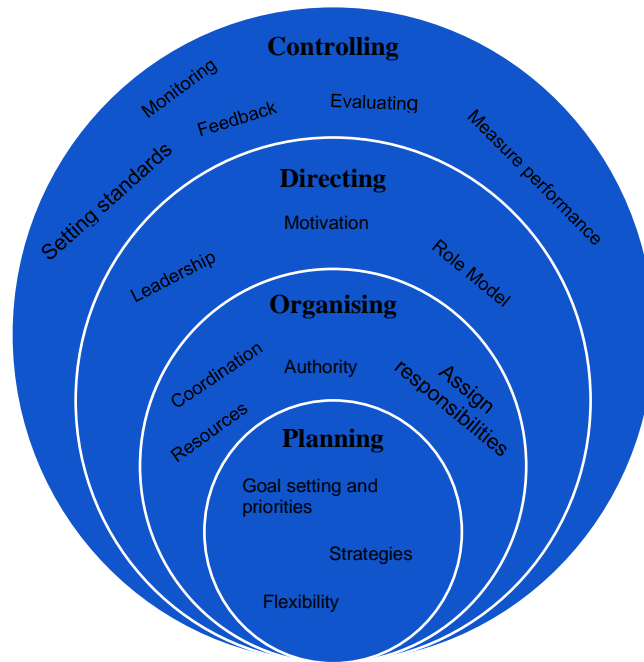


Figure 6. 3 Components of management process

Table 6. 12: Application of management theory

Element	Application to the study
Planning	<ul style="list-style-type: none"> <li>▪ Goal setting and priorities</li> <li>▪ Decision making</li> <li>▪ Implement and evaluate strategies</li> <li>▪ Flexibility</li> </ul>
Organizing	<ul style="list-style-type: none"> <li>▪ Assign responsibilities / delegate tasks to all</li> <li>▪ Assign authority to stakeholders in addressing the challenges.</li> <li>▪ Organize resources</li> <li>▪ Coordinate activities to ensure engagement for all involved.</li> </ul>
Directing	<ul style="list-style-type: none"> <li>▪ Lead and guide health professionals and stakeholders to achieve the goal</li> <li>▪ Motivation</li> <li>▪ Role model / lead by example</li> </ul>
Controlling	<ul style="list-style-type: none"> <li>▪ Set standards of evaluation</li> <li>▪ Evaluate/ measure performance &amp; monitor the activities</li> <li>▪ Provide feedback through positive remarks and suggestions for improvement.</li> </ul>

### *Planning*

Planning is a process of setting goals and priorities in order to achieve a particular purpose (107). Fayol described planning as a managerial function that anticipates action (51). Fayol argued that a good plan of action should be flexible, continuous, relevant and accurate by focusing on the nature, priorities and condition of the organisation (51). For effective planning, this study assumed that health professional managers should be competent to set relevant goals and priorities that will address the dynamics in the context of health facilities. The findings of the study revealed that health professionals are faced with numerous challenges that hamper the facilitation of wellness program, as indicated in Table 6.10.

In addition, health professional managers need to interact with health professionals and stakeholders in order to make informed decisions about the priority needs and alternatives to facilitate wellness programs, based on the available resources. The management should plan, implement and evaluate strategies such as lobbying policy makers to develop a wellness policy and promoting awareness that enables the facilitation of wellness programs for health professionals in the health facilities. The plan should be flexible and continuous so that the management is able to adjust it based on the outcomes.

### *Organising*

Organising involves the use of resources, lines of responsibility, authority and communication flow (45). The purpose of organising is to distribute the resources and delegate tasks to personnel in order to achieve goals set in the planning stage. In this study, health professional managers need to team up with policy makers and NGOs to organize the resources (human resources, structures, materials and equipment) required for the

realization of goals set during planning. The findings of the study highlighted that there is staff shortage and inadequate infrastructure and equipment in the state health facilities that collectively hinder the facilitation of wellness programs. Consequently, management should assign and clarify the responsibilities as well as authority to the stakeholders and ensure that they understand their duties in addressing these challenges. Management needs to make stakeholders and health professionals feel engaged and productive by assigning them appropriate amounts of work and time and ensuring proper coordination. Finally, management needs to ensure that there is team work.

#### *Directing*

According to Fayol, management must encourage and direct personnel activity (51). In this study, health professional managers (management) need to guide, lead, instruct and coach health professionals and stakeholders to achieve the objectives.

However, management should have knowledge of their personnel and lead by example by participating in the activities that facilitate a wellness program in the health facilities. Accordingly, management should motivate and influence health professionals' behaviour to actively participate and take initiative in the facilitation of wellness programs. To be successful leaders, health professional managers have to employ interpersonal skills to encourage, inspire, guide and motivate health professionals and stakeholders to perform to the best of their abilities. Also, management needs to create a conducive work environment through support and positive reinforcement by praising health professionals who actively participate in the facilitation of wellness program.

## *Controlling*

Controlling is the process of checking or evaluating that the plan was executed according to the set standards to ensure that the goals are achieved (51). This study recommends that management should monitor and evaluate the quality of activities carried out by both health professionals and stakeholders that facilitate wellness programs. Subsequently, performance appraisal may be given through positive feedback on what was done well and suggestions for improvement. Management may also adjust the plan based on the outcome.

### 6.5 PROPOSED STRUCTURE FOR THE MODEL DEVELOPMENT

The findings relating to the three objectives of the study (phase 1) that led to the central concepts, the six components of Practice-Oriented theory (49), the WHO Framework and model (14) as well as Fayol's Management theory (52) guided the proposed structure for the model. The development of a model followed the three phases outlined below:

- Phase 1: Needs assessment
- Phase 2: Managing and maintaining conducive environment
- Phase 3: Outcome

#### 6.5.1 Phase 1: Needs assessment

The researcher and health professional managers (management) are focal agents and entrusted to facilitate the process of needs assessment in the external and internal environment of the health facilities. To facilitate needs assessment, management utilizes communication skills. Management is assigned the role of leading the needs assessment process by involving health professionals and collaborating with stakeholders (policymakers, regulatory body and NGOs). The sub-components of needs assessment are

psychosocial, physical and personal and they are interrelated. Figure 6.4 depicts the external and internal environments as components of needs assessment.

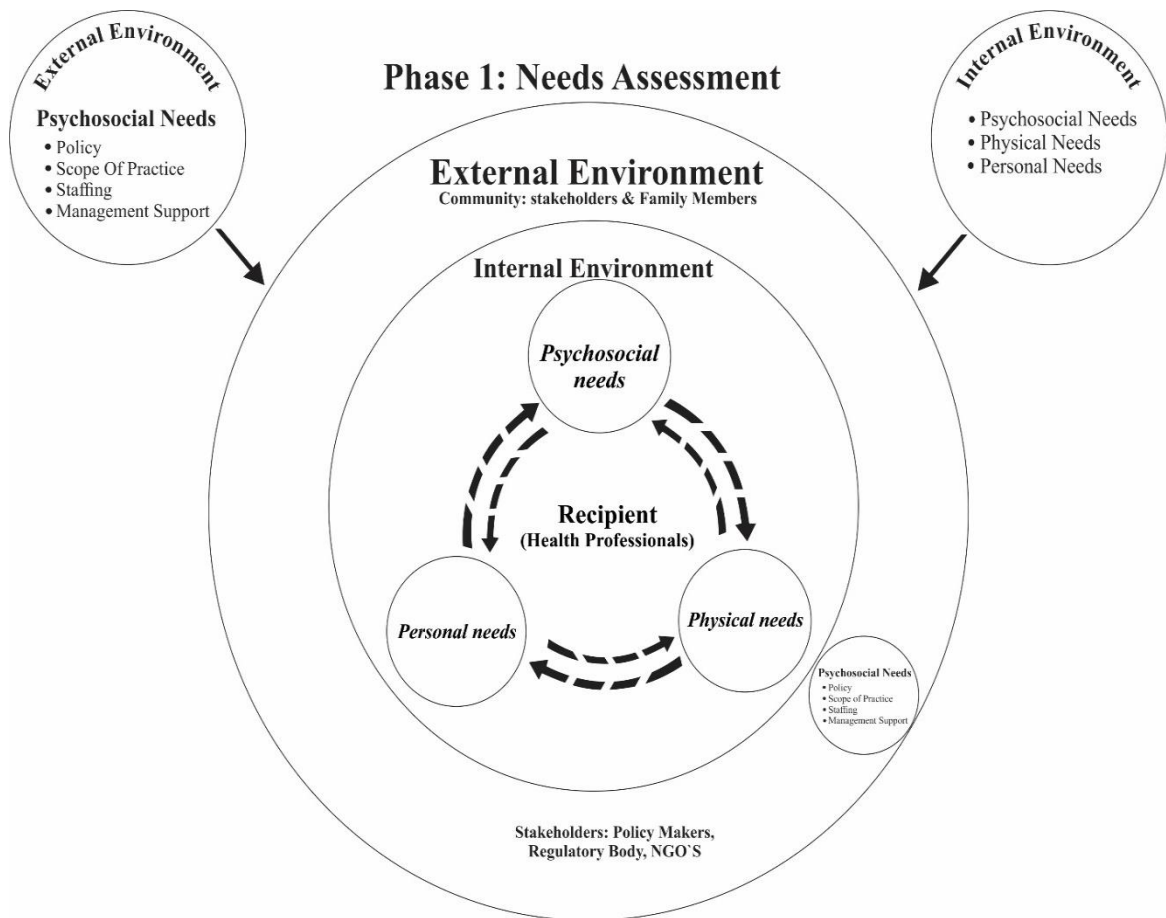


Figure 6. 4 The external and internal environments as components of needs assessment

#### 6.5.1.1 External environment

The external environment (community) is to be assessed during needs assessment. The needs in the component of external environment are:

**Psychosocial needs:** wellness policy, scope of practice, support from management at all levels, involvement in staffing i.e. decentralization of staff recruitment.

#### *6.5.1.2 Internal environment*

The needs identified within the internal environment (health professionals) include the following:

- **Psychosocial needs:** wellness program, advocacy, involvement in decision making, management support and co-worker support and communication.
- **Physical needs:** adequate resources (staff, facilities, equipment and materials).
- **Personal needs:** adequate knowledge, good practice, self-care, screening and medical services, motivation, awareness and education on wellness program.

#### 6.5.2 Phase 2: Managing and maintaining a conducive environment

Phase 2 comprises three components; namely, management process, dynamics and conducive environment. The process of managing and maintaining a conducive environment through the management process addresses the dynamics, and enhances active participation and understanding of the commitment of all parties involved towards the shared vision. Figure 6.5 illustrates the managing and maintaining a conducive environment phase.

## Phase 2: Managing and Maintaining Conducive Environment

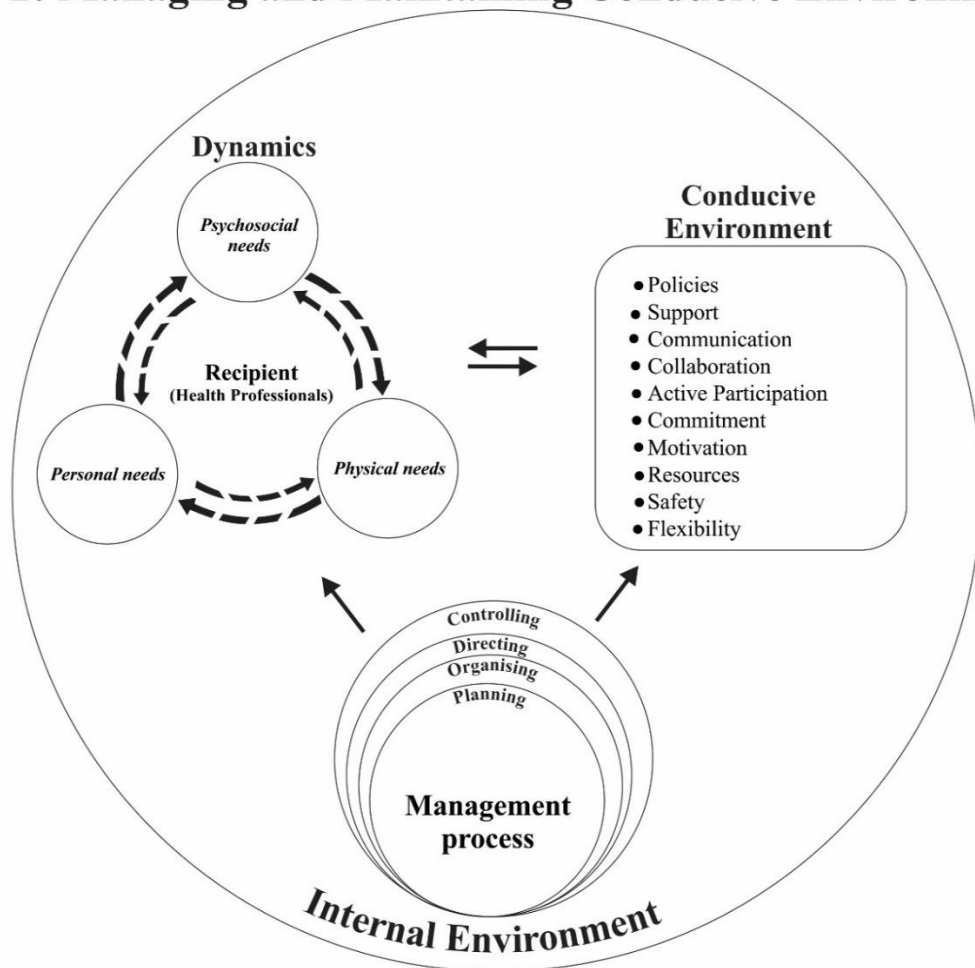


Figure 6. 5 Components of management process, dynamics and conducive environment

### 6.5.2.1 Management process

Management utilizes the skills (leadership, communication, interpersonal, decision making and problem solving) to manage and maintain a conducive environment through:

- Planning
- Directing,
- Organizing and
- Controlling

These activities ensure successful facilitation of wellness programs as indicated in Table 6.12. Management, in collaboration with stakeholders, sets goals and priorities that will address the dynamics and needs identified in phase 1. Management guides and directs the recipients and stakeholders to implement the activities that will address the challenges that hinder the facilitation of wellness programs.

#### *6.5.2.2 Dynamics*

To ensure an environment that is conducive to the facilitation of a wellness program for health professionals, the challenges in the external and internal environments need to be addressed. As agents of change, management is expected to guide health professionals and lobby stakeholders to implement the procedures to address the challenges that hinder the facilitation of wellness programs.

Management, in collaboration with stakeholders, should address the psychosocial, physical and personal dynamics as shown in Table 6.11, using different strategies such as lobbying policymakers to develop and implement a wellness policy and lobbying the regulatory body to revise the scope of practice for nurses.

#### *6.5.2.3 Conducive environment*

Management should facilitate the process of ensuring an environment that is conducive to the facilitation of wellness programs in the health facilities. The findings of the study revealed that health professionals work in an environment that hampers the facilitation of wellness programs, as evidenced by the dynamics indicated in Table 6.10. A conducive psychosocial, physical and personal environment should be safe, supportive, collaborative and motivational, and also have the relevant policies and adequate resources in place, while enabling active participation and effective communication.

### 6.5.3 Phase 3: Outcome

Phase 3 relates to the outcome of the model implementation, comprising three components; namely, psychosocial support, physical support and personal support. The outcome of model implementation would be a well-coordinated and supportive wellness program. The interactive process facilitated by management between the healthcare professionals and stakeholders should enhance understanding of the commitment towards a well-coordinated and supportive wellness program in the health facilities. Figure 6.6 shows the components of the outcome of the model.

### Phase 3: Outcome

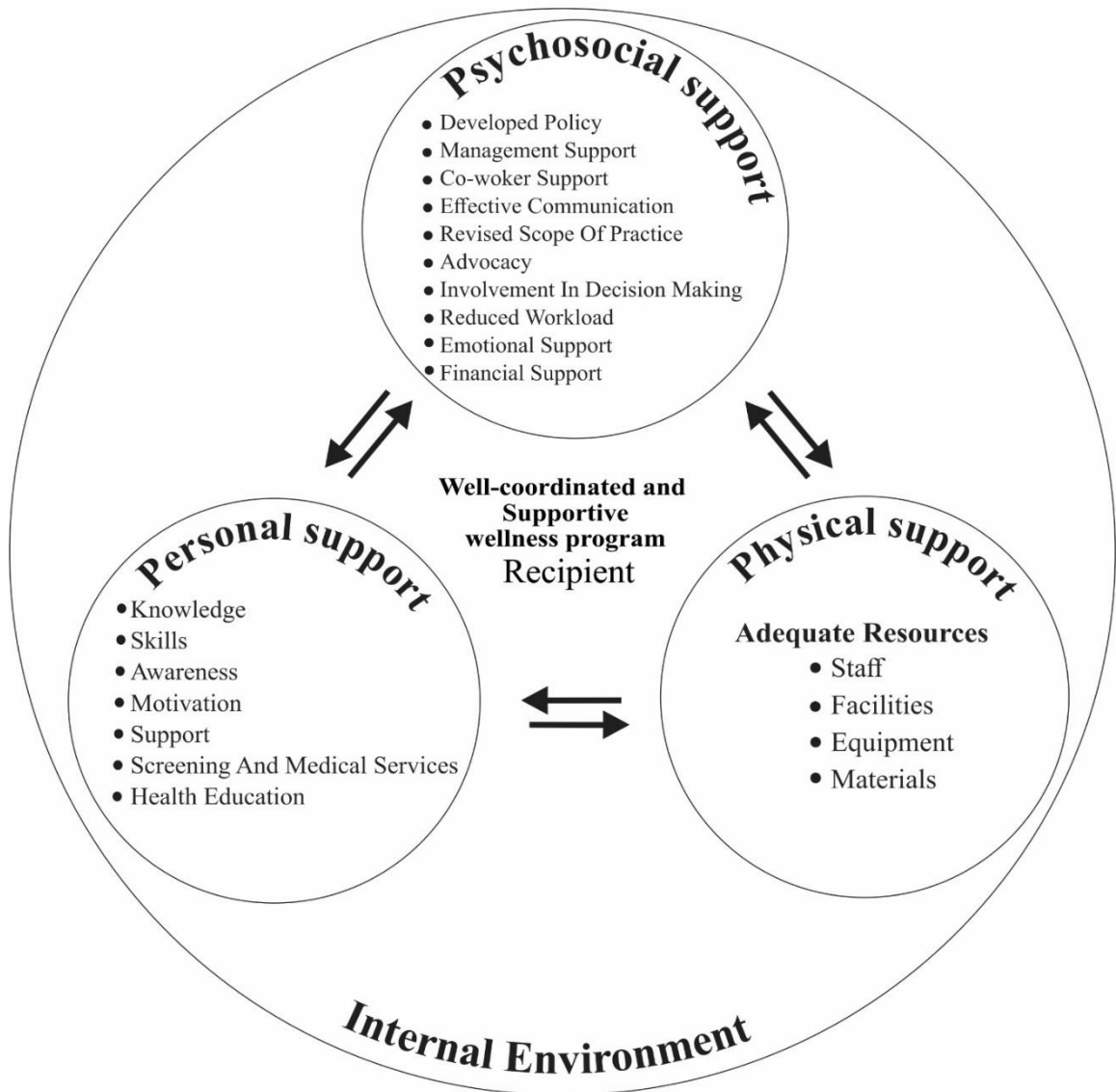


Figure 6. 6 Components of the outcome of the model

#### 6.5.3.1 Psychosocial support

The interactive process addresses the psychosocial dynamics in both external and internal environments. If this is successfully done, it may lead to an environment that is conducive to the development of a well-coordinated and supportive wellness program (outcome). A supportive psychosocial environment would include the development and implementation

of a wellness policy, development and implementation of a wellness program, sufficient support from all levels of management and co-workers, effective communication, revised nurses' scope of practice, consultation and involvement in decision making, advocacy, and reduced workload.

#### *6.5.3.2 Physical support*

The outcome of physical support includes provision of adequate resources such as staff, equipment, facilities and materials that ensure an environment that is conducive to the development of a well-coordinated and supportive wellness program in the health facilities.

#### *6.5.3.3 Personal support*

The outcome of facilitating a supportive personal environment is the creation of an environment that is conducive to the facilitation of a wellness program for health professionals in the health facilities. A supportive personal environment includes the creation of awareness regarding wellness programs, regular dissemination of information (health education) on wellness that leads to adequate knowledge by health professionals, provision of regular health screening and medical services, recognition of health professionals' efforts to maintain healthy personal practices, provision of opportunities and training to support health professionals' efforts to improve lifestyle practices, flexibility of breaks at work to allow for exercises, motivation, provision of support (such as Employee Assistance Programs).

## 6.6 SUMMARY OF THE CHAPTER

This chapter presented the identification and definition of the main concepts of psychosocial, physical and personal environment. Characteristics of essential and related criteria were identified and they guided the development of a model. The relationship statements were formulated. The researcher's mental map based on the six elements of the practice-oriented theory was presented. Theories adopted to guide the development of a model were applied. A proposed structure of a model is drawn and the model is presented in the following chapter.

## CHAPTER 7

### DESCRIPTION OF THE STRUCTURE AND PROCESS, EVALUATION OF THE MODEL AND GUIDELINES FOR OPERATIONALIZATION OF THE MODEL

#### 7.1 INTRODUCTION

In the previous chapter the proposed model for “facilitating psychosocial, physical and personal environment” was developed. The concepts resulting from the findings of the study, six elements of the Practice-Oriented theory (49), the WHO Framework and model (14) and Fayol’s Management theory (51) formed the basis for the development of this model. The purpose of this chapter is to describe the model for facilitating psychosocial, physical and personal environment to facilitate a wellness program for health professionals in the state health facilities of Oshikoto region in Namibia. The process of model description was guided by the Theory generation as described by Chinn and Kramer (53). An evaluation of the model was done according to Fawcett’s (55) criteria for evaluation of theories. The guidelines to operationalize the model were described in relation to three phases of needs assessment, managing and maintaining a conducive environment; and well-coordinated and supportive wellness program.

#### 7.2 MODEL DESCRIPTION

A model was described in accordance with Chinn and Kramer’s six descriptive components using the following headings: the purpose of the model, concepts, definitions of concepts, nature of the relationship, structure of the model and the assumptions (53). Moreover, the nature and process of describing a model creates a description that can then form the basis for critical reflection. An overview of the model was described prior to the description of the six components.

### 7.2.1 Overview of the model

An overview of the model was described based on Dickoff et al.'s six elements of Practice-Oriented theory, namely, the context, agent, recipient, dynamics, procedures and terminus (49). The schematic representation in Figure 7.1 depicts a model to facilitate psychosocial, physical and personal environment that will be conducive to the facilitation of a wellness program. In addition, it illustrates how management as agents, in collaboration with stakeholders, facilitates a psychosocial, physical and personal environment that is conducive to the facilitation of a wellness program in the health facilities.

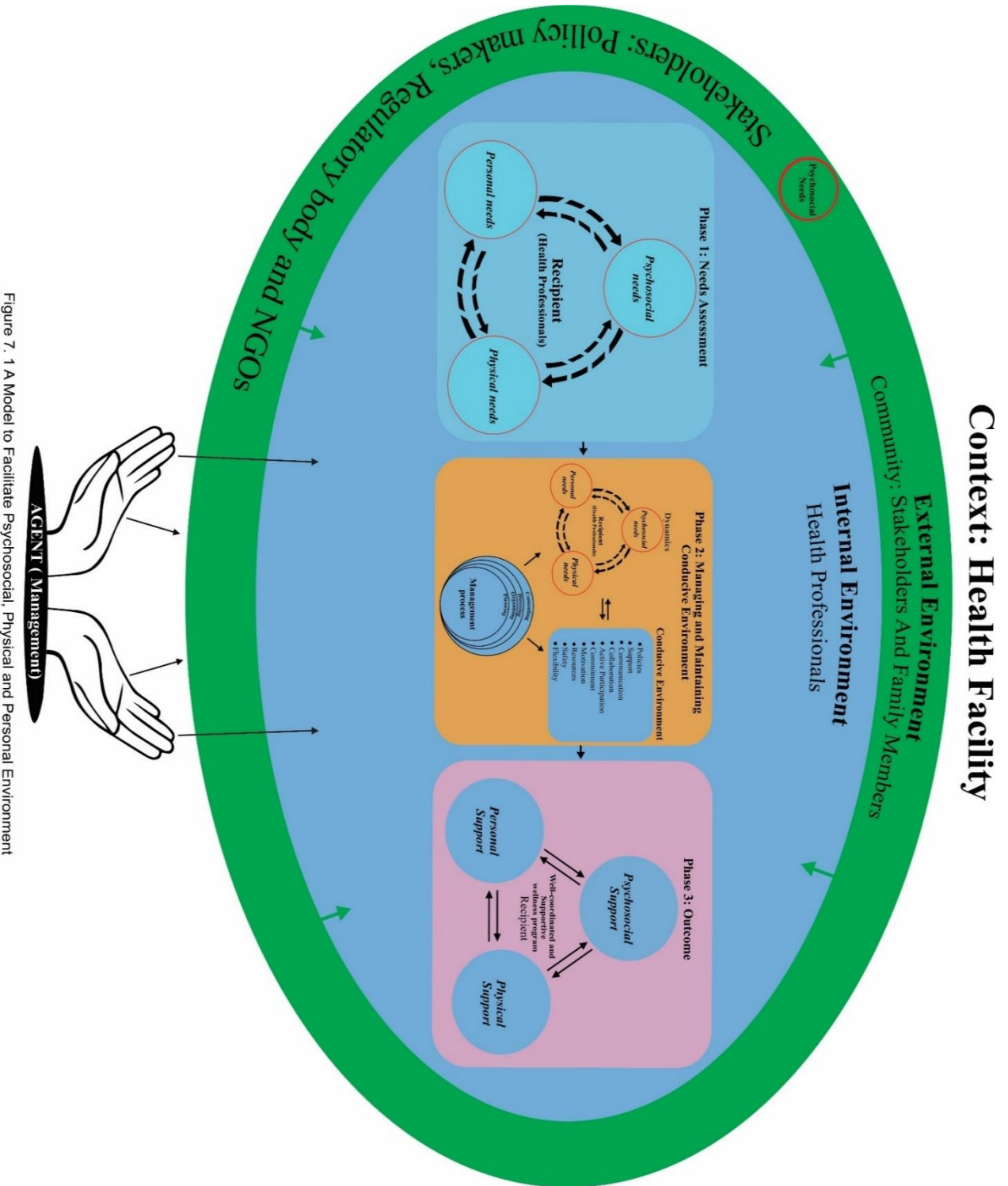


Figure 7. 1 A Model to Facilitate Psychosocial, Physical and Personal Environment

The health facility is the *context* in which health professionals are working. It is a dynamic and challenging environment that has an impact on the facilitation of a wellness program.

It operates within an internal and an external environment. The external environment consists of the community, including stakeholders (policymakers, regulatory body and NGOs) and family members, while the internal environment consists of health professionals. Each environment is characterized by *dynamics* (challenges) that hinder the facilitation of wellness program for health professionals in the health facilities. The challenges in respect of the external environment are mainly psychosocial, and they include unavailability of a wellness policy, scope of practice issues, staffing and management support, whereas the challenges in respect of the internal environment include the following:

- **Psychosocial challenges:** unavailability of a wellness program, pressure from the public demanding quality service delivery, lack of involvement and consultation regarding staffing, stress and burnout, workload, lack of advocacy, lack of leadership and co-worker support, time pressure, scope of practice issues, long hours and turnover, excessive night shift for extra earning and poor communication.
- **Physical challenges:** inadequate resources in terms of staff, facilities, equipment and materials.
- **Personal challenges:** lack of knowledge, lack of self-care, illnesses, poor practices regarding the facilitation of a wellness program.

The *agents* are the researcher, management and stakeholders (policymakers, regulatory body and NGOs). The agents possess knowledge and skills to develop a positive psychosocial, physical and personal environment. The researcher developed a model and guidelines to facilitate the implementation of the model that will be used to facilitate a wellness program for health professionals. Management plans, organizes, directs and

controls activities that facilitate needs assessment in both external and internal environment, and also manages and maintains a conducive and supportive psychosocial, physical and personal environment. The stakeholders have political, professional and financial responsibilities that contribute to the facilitation of a wellness program for health professionals in the health facilities.

The *recipients* are health professionals (primary recipients) and their immediate family members and the community (secondary recipients). The health professionals (nurses and doctors) will benefit and be actively involved in the implementation process of the model. Their immediate family members will also benefit from the services provided.

The *procedure / process* takes place in three phases, namely needs assessment, managing and maintaining a conducive environment; and outcome, to ensure a well-coordinated and supportive wellness program. The interactive facilitation process is the vehicle through which the process of facilitating a wellness program and ensuring psychosocial, physical and personal support for health professionals will occur in the health facilities. The model and the guidelines clarify the phases and activities that will be used to facilitate a wellness program in the health facilities.

#### 7.2.2 Purpose of the model

Chinn and Kramer (50) indicated that the purpose reveals the reason why the model was developed; and the contexts and situations to which the model can be applied. In this study the model intends to demonstrate how the psychosocial, physical and personal environment in the state health facilities can be improved in order to facilitate a wellness program for health professionals. This is done by providing a theoretical framework for the management and stakeholders to address psychosocial, physical and personal

challenges that affect health professionals in the state health facility context. This intention is realized through the utilization of the three phases, namely needs assessment, managing and maintaining a conducive environment and the outcome. The expected outcome is a well-coordinated and supportive wellness program.

The management and stakeholders, through the interactive facilitation process, assess needs, manage and maintain an environment that is conducive to the facilitation of a wellness program in the health facilities. These will lead to a well-coordinated and supportive wellness program as an outcome.

### 7.2.3 Structure of the model

The structure is the overall form of the conceptual interrelationships within the model (50). The reasoning underpinning the development of a positive psychosocial, physical and personal environment model in the state health facilities is clarified under the assumptions, theoretical definitions of central and related concepts, relation statements and the nature of its structure. The nature of the model structure is explained in terms of the meanings of shapes, features and colours used in the model. The meanings of the colours used in the model structure were adopted from Olesen (171). The schematic representation of the model is depicted by Figure 7.1.

#### *7.2.3.1 Assumptions of the model*

Chinn and Kramer (53) highlighted that assumptions are basic givens or accepted truths that are fundamental to theoretic reasoning. The model for facilitation of a supportive psychosocial, physical and personal environment will be based on the assumptions derived from the Health Promotion Theories (126).

Moreover, the Ecological Systems Theory (EST) (126) notes that behaviour is influenced by the person and the environment. It is assumed that individual efforts at behavioural change will be more likely to succeed within supportive environments (126). The Health Promotion Model, on the other hand, emphasizes that each individual has unique personal characteristics and experiences that affect subsequent actions (172).

Model assumptions are:

- Health professionals are individuals in their psychosocial, physical and personal complexity interact within the external and internal environment; and gradually being motivated and transformed over time to participate in the facilitation of a wellness program.
- Both external (policymakers, regulatory body, NGO's and family members) and internal (health professionals) environments have the potential to contribute to the facilitation of a wellness program for health professionals in the health facility context.
- The facilitation of a wellness program for health professionals in the health facilities is a collaborative and dynamic process that requires joint effort from management, individuals, policymakers, regulatory body, NGOs and family members (community).
- Management is a key agent that requires knowledge and skills to facilitate needs assessment, manage and maintain a conducive environment in the health facilities through the management process (planning, organizing, directing and controlling); and provide adequate psychosocial, physical and personal support that will empower the health professionals to commit and actively participate in the facilitation of a wellness program.

- The health professionals' individual efforts in the facilitation of wellness program will be more likely to succeed within a supportive environment.

### *7.2.3.2 Theoretical definition of central and related concepts*

The central statement of “facilitating psychosocial, physical and personal environment” and the related concepts are defined below.

#### **Central statement:**

- **Facilitation of psychosocial, physical and personal environment:** This is a comprehensive process whereby management and stakeholders create an interactive environment to address the challenges (dynamics) that hinder the facilitation of a wellness program for health professionals in the context of health facilities. It includes needs assessment, managing and maintaining a work environment that is conducive for health professionals to actively participate in the facilitation of a wellness program. It is facilitated by support from management through planning, organizing, directing and controlling activities and resources necessary for the facilitation of a wellness program. These lead to the attainment of the desired outcome of a well-coordinated and supportive wellness program.

#### **Related Concepts:**

- **Psychosocial:** “Psychosocial” describes the interactive process between the health professionals, management and stakeholders in the work environment that influences social behaviour, attitudes, beliefs, values, practices as well as physical and emotional health of the health professionals.

To facilitate psychosocial environment implies consultation and involvement of health professionals in decision making, support, effective communication, advocacy, lobbying

of policy makers and regulatory body to address issues related to policies and scope of practice to ensure a conducive environment. Management is expected to carry out a management process of planning, organizing, directing and controlling the activities and resources to achieve the goal. In addition, the management should use leadership and communication skills to facilitate the process and address psychosocial challenges in order to facilitate a wellness program.

- **Physical:** Physical denotes identifiable nature and material things such as human resources, facilities, equipment and materials that are required in the health facility to improve work performance, health, safety and wellbeing. This means adequate staffing, improved facilities, adequate equipment and materials needed to ensure a work environment that is conducive to the facilitation of a wellness program for health professionals. Management, in collaboration with stakeholders, facilitates a conducive physical environment through proper planning, organizing, directing and controlling of resources.
- **Personal:** Personal refers to a particular or individual health professional's character, feelings, body/self-care, interests, experience, health habit, behaviour, knowledge, practices and relationship; that may influence his / her health and well-being in the work environment (health facility). Facilitation of a positive personal environment requires a supportive environment in the form of regular health screening, provision of medical services, motivation, regular dissemination of health information, active participation in the facilitation of a wellness program, involvement in decision making, awareness and training, flexibility and financial support. Management and stakeholders are expected to facilitate the process through the management process.

- **Environment:** Environment refers to a conducive psychosocial, physical and personal environment which comprises external and internal settings that influence the behaviour, health and facilitation of a wellness program for health professionals in the health facility. The external environment includes stakeholders (policymakers, regulatory body and NGOs) and family members, while the internal environment includes health professional managers (management) and health professionals. A conducive environment means that health professionals should be safe, supported and motivated. It should have clear policies and adequate resources; and promote collaboration with stakeholders.
- **Needs assessment:** Needs assessment is a systematic process of gathering appropriate and sufficient data to determine and address the needs or gaps between current and desired conditions (148). Furthermore, it is an effective tool to clarify problems and identify appropriate interventions or solutions. Management conducts a need assessment process to identify needs and interests of health professionals in the health facilities and the results will guide subsequent decisions to address those needs.
- **Managing and maintaining a conducive environment:** These are the processes of managing and maintaining a positive psychosocial, physical and personal environment in order to create an environment that is conducive to the promotion of a wellness program for health professionals in the health facilities. Management, in collaboration with stakeholders, is responsible for addressing the needs that were identified, in order to create a conducive work environment. This is done through the management process of planning, organizing, directing and controlling.
- **Outcome:** An outcome is the end result of the first two phases, which, in this study, is a well-coordinated and supportive wellness program that comprises comprehensive

activities intended to provide psychosocial, physical and personal support and promote health and well-being of health professionals in the health facilities. It is aimed at improving health professionals' health which, in turn, can improve morale and increase productivity (173). This program often includes health/medical screening, social support, behaviour change interventions, fitness programs, recreational programs, stress management and other benefits.

#### *7.2.3.3 Relation statements*

Chinn and Kramer highlighted that relationship statements structurally interrelate the key concepts of the theory (50,53). The following relation statements were formulated for the model to facilitate a positive psychosocial, physical and personal environment.

- Management, as a key agent, facilitates the psychosocial environment through management functions (planning, organizing, directing and controlling); interacts and collaborates with stakeholders (in the external environment) and involves health professionals (in the internal environment) to assess and address their psychosocial needs in order to create an environment that is conducive to the facilitation of a wellness program in the health facilities.
- Management facilitates the physical needs assessment in the health facilities and addresses them, in collaboration with stakeholders, to ensure a conducive environment through proper resource planning, organizing adequate resources as well as directing and controlling the effective use of available resources.
- The health professionals (recipients) are required to show commitment and take responsibility for acquisition of knowledge and good practice regarding healthy

lifestyles through active participation and engagement in the facilitation of a wellness program.

- Vigorous, active involvement and engagement strengthens the facilitation process between the management, stakeholders and health professionals.
- Management is expected to create a supportive environment through regular screening, motivation, dissemination of health information, flexibility and other wellness interventions that facilitate a wellness program.
- An environment conducive to the facilitation of a wellness program in the context of health facilities should be supportive, safe, interactive, have clear policies and adequate resources to facilitate a wellness program.
- The achievement of the outcome of facilitation of a well-coordinated and supportive wellness program depends on the extent of facilitation, commitment and shared effort of everyone involved to improve the dynamics.
- This study has shown that it is essential to “facilitate a positive psychosocial, physical and personal environment” in order to create an environment that is conducive to the facilitation of a wellness program for health professionals in the state health facilities.

#### *7.2.3.4 Nature of the model*

The structure of the model is presented in the form of oval shapes (elongated circles) representing the health facility *context* that has two environments - external (community) and internal (health professionals and management) that impact the facilitation of a wellness program as indicated by the arrows. The outside border (in green) depicts the external environment (community), which comprises stakeholders (policymakers, Regulatory body and NGOs) as *secondary agents* and immediate family members to

health professionals as *secondary recipients*. The green border represents the external environment, a red circle represents the psychosocial challenges from the external environment that hamper the facilitation of a wellness program. The green colour symbolizes a natural healthy and harmonious environment that gives people hope and makes them feel safe and secure (171). Management harmoniously collaborates with stakeholders to create an environment that is conducive to the facilitation of a wellness program for health professionals. The blue inside represents the internal environment (health professionals). The blue colour signifies calmness, trust, professionalism, confident and security (171). Oval shapes represent the notion of harmony and protection (174,175). A harmonious environment, with efficient management and stakeholders, creates an atmosphere that is conducive to the facilitation of a wellness program in the state health facilities. Management ensures total support, care and protection to health professionals.

An abstract picture of two hands at the base of the model depicts management as a *key agent*. The key agent is represented by the black layer. The black colour signifies power, sophistication and authority (171). Management, as an agent of change, has the power to coordinate both the external and internal environments in order to facilitate a wellness program for health professionals. The two hands holding the health facility context indicate the whole facilitation, co-ordination and interactive process involved in facilitating a wellness program for health professionals. The four arrows from the hands pointing to both the external and the internal environment indicate that management interacts and collaborates with the community (stakeholders and family members) and health professionals to effectively facilitate a wellness program in the health facility. In

addition, management possesses essential characteristics and values to co-ordinate the facilitation of psychosocial, physical and personal environment model. The essential characteristics and values include knowledge, integrity, communication skills, commitment and power to influence all parties involved in the facilitation of a wellness program. These competencies enable management to collaborate with stakeholders and involve them in activities such as needs assessment, managing and maintaining a conducive environment and thus enhancing the desired outcomes.

The three linked cycles of psychosocial, physical and personal needs surrounding the *recipients* (health professionals as *primary recipients*) depict the health professionals' *needs*, which will be identified during the process of needs assessment in the health facilities. The circles are bordered in red indicating danger, and connected by broken arrows indicating that the needs are currently unmet but interrelated.

The four interrelated circles in blue represent the management process comprising planning, organizing, directing and controlling. Management carries out the management functions to manage and maintain a conducive environment by addressing the identified needs as indicated by the two arrows from the management process to the dynamics and conducive environment respectively. The blue colour signifies integrity, knowledge, intelligence, trust, peace, power and seriousness (171). Management, as an agent of change, should be knowledgeable, intelligent, serious, trustworthy, powerful and honest to carry out the management process of maintaining a conducive environment. The detailed description of the management process is presented below in *phase 2*.

The three linked cycles in a circular form surrounding the *recipients* depict *dynamics* represent the psychosocial, physical and personal challenges - identified as needs. The

dynamics are inter-connected, with a divided arrow symbolizing unmet needs. Circles resemble unity, wholeness and infinity. The dynamics are encircled in red, which was used to draw the attention of management and stakeholders to take immediate action and address the challenges which hinder the facilitation of a wellness program. The colour red was also used to signify the danger / threat of a non-conductive environment in the health facilities which need quick decisions. It is a colour that represents passion and energy (171).

The square shape in sky blue depicts a conducive environment created after the dynamics have been addressed. Sky blue indicates calmness, trustworthiness, reliability, communication, trust and confidence. These characteristics fit well in a conducive environment. Two arrows from and to the dynamics denote that if the needs are addressed, that creates a conducive environment, but if needs are not met the environment remains non-conductive. Management facilitates the process to address the dynamics and maintains a conducive environment.

The three circles within a triangle shape signify psychosocial, physical and personal support provided to the *primary recipients*, namely the health professionals (doctors and nurses) in the centre. The health professionals are represented by the blue colour, which signifies professionalism, loyalty, intelligence, responsibility, unity, confidence, harmony, truth, trust, calmness, care, cooperation, honesty and introspection (171). The wide base of the triangle represents the extent of psychosocial, physical and personal support rendered to health professionals in the health facilities. The health professionals depend on support from management and stakeholders to facilitate a wellness program. The health professionals' responsibility, commitment, involvement, motivation and

knowledge enable the process of facilitating a positive psychosocial, physical and personal environment in order to realize the goal. Towards the end of phase 3, the triangle becomes narrow as the health professionals are expected to actively and meaningfully participate in a well-coordinated and supportive wellness program in the health facilities.

The *process and procedure* of the model to facilitate a positive psychosocial, physical and personal environment consists of activities occurring in the three phases of the model. The square shapes in the internal environment represent the three phases of the model that describe the *procedures* followed to facilitate a supportive psychosocial, physical and personal environment in order to facilitate a wellness program in the health facilities. Square shapes signify stability, professionalism, efficiency, strength and balance (174,175). These features fit well in the health facility environment. The phases are inter-related, as indicated by the arrows from each phase. The process and procedure are presented in light turquoise (phase 1), orange (phase 2) and pink (phase 3). According to Olesen (171), turquoise symbolizes calmness, clarity, emotional stability, refreshing, and increase empathy and compassion; while orange denotes enthusiasm, energy, optimistic, positivity, spontaneous and creativity. Pink represents calmness, love, warmth, respect, gratitude, kindness, sympathy, compassion, nurturing and acceptance. The pink colour fits well with the *outcome* phase in the health facilities. The *outcome* of the *procedures* will be a well-coordinated and supportive wellness program.

#### 7.2.4 The process description of the model

The process description of a model clarifies the procedures followed to facilitate a psychosocial, physical and personal environment that is conducive to the facilitation of a

wellness program in the health facilities. The process of the model happens in three inter-related phases as described below.

#### *7.2.4.1 Phase 1: Needs assessment*

Phase one of the model focuses on the facilitation of needs assessment. In order for management to facilitate a wellness program, the needs, interests and concerns of health professionals should be understood (176). The agent (management) facilitates the process of gathering appropriate and sufficient information to determine and address the needs of health professionals in the health facilities in both the external and the internal environments. The facilitation is demonstrated by the two arrows from the agent to the external and internal environment of the health facility, as indicated in Figure 7.1. Needs assessment enables clarification of problems that hinder the facilitation of a wellness programs in the health facilities and identification of appropriate interventions or solutions. Management collaborates with stakeholders (policymakers, regulatory body and NGOs) to identify needs, determine priorities for the facilitation of a wellness program and make a collective decision to address the needs. Health professionals, as primary recipients, are actively involved in the process of needs assessment. The focus is on identifying barriers to the facilitation of a wellness program in the health facilities and possibly finding solutions to these challenges.

Based on the findings of this study, which are covered in chapters four and five, the following needs may be used as a guide for needs assessment in either the external or internal environment. These are interrelated and currently unmet psychosocial, physical and personal needs in the health facility environment, as indicated by broken arrows in figure 7.2.

**In the external environment:**

- **Psychosocial needs** - development and implementation of a wellness policy, revision of nursing regulations and scope of practice (to allow nurses to do some functions that were supposed to be done by the doctors in order to address work overload), support from all levels of management, consultation and involvement in staffing or decentralization of staff recruitment.

**In the internal environment:**

- **Psychosocial needs** - development and implementation of a wellness program, management and co-worker support, reduction of workload, alleviation of stress and burnout, reduction of time pressure and lengthy night shifts, effective communication, advocacy and involvement in decision making.
- **Physical needs:** adequate resources such as staff, facilities, equipment and materials.
- **Personal needs:** adequate knowledge and skills, self-care, motivation, training/education and awareness on wellness, regular health screening and medical services.

Achievement of phase one will ensure a smooth transition to managing and maintaining a conducive environment (phase 2). The facilitation of needs assessment is depicted in Figure 7.2 below.

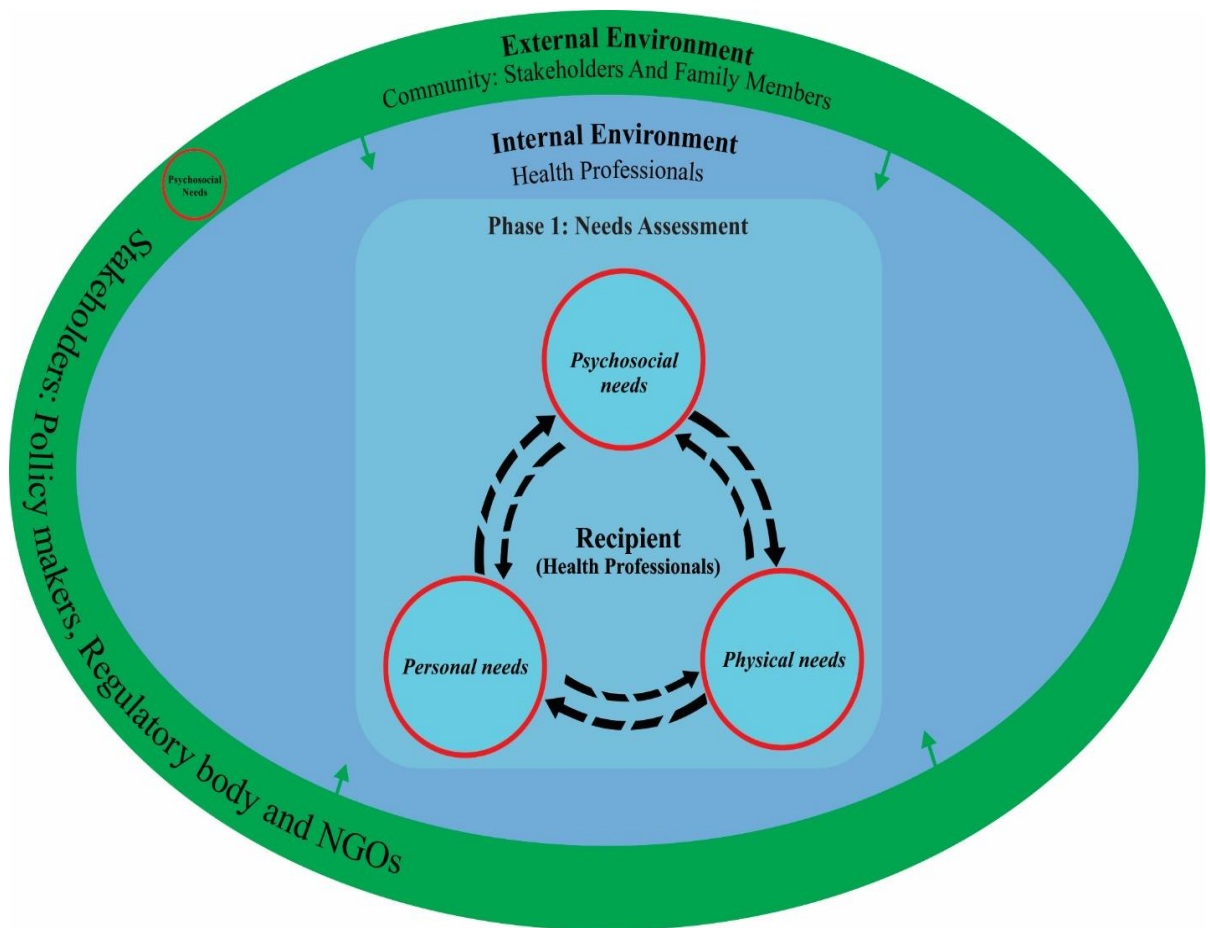


Figure 7.2 Phase 1: Needs assessment

#### 7.2.4.2 Phase 2: Managing and maintaining a conducive environment

After needs assessment in phase 1, the managing and maintaining a conducive environment phase begins. Phase two is characterized by management (agent) using the *management process* to address the *dynamics* in order to create a *conducive environment* for the facilitation of a wellness program in the health facilities. Management collaborates with stakeholders to manage and maintain a conducive environment through the management process. They interact with health professionals to enable active participation in the facilitation of the wellness program. The phase is coloured orange to symbolize

enthusiasm, energy, optimism, positivity, spontaneity and creativity (171). Phase two is the central phase where the key activities of facilitating a psychosocial, physical and personal environment model that facilitates a wellness program occur. Therefore, the collective effort of all parties involved is ensured so as to enable the achievement of intended goals. Managing and maintaining a conducive environment is illustrated in Figure 7.3.

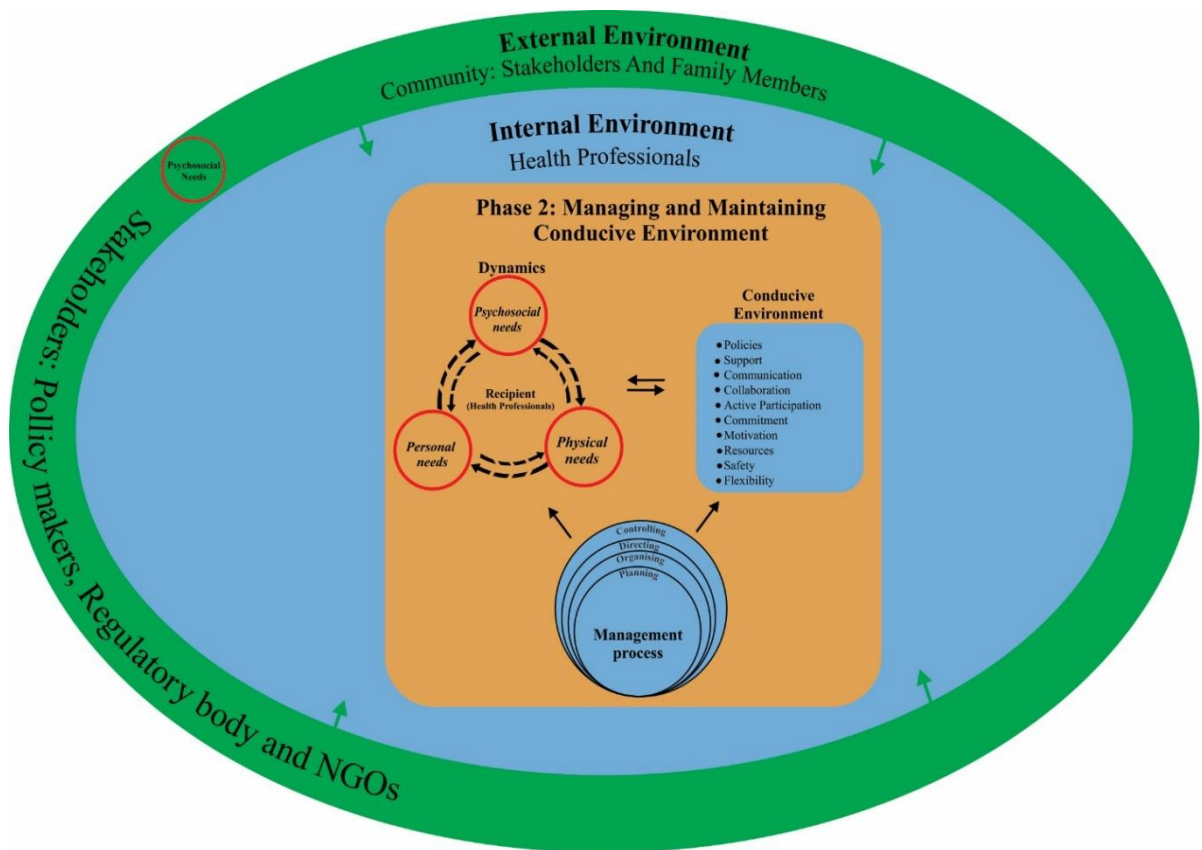


Figure 7.3 Phase 2: Managing and maintaining a conducive environment

□ **Management process**

Management uses leadership and communication skills to guide stakeholders and health professionals to implement activities that will address the needs and challenges identified

in phase 1 that hamper the facilitation of a wellness program in the health facilities. The agent implements the management functions of planning, organizing, directing and controlling to address these challenges.

- **Planning:** After needs assessment in the external and internal environments, management sets goals and priorities that will address the dynamics and needs identified in phase 1 to facilitate a wellness program based on available resources. The agent collaborates with stakeholders to make a collective decision on the best ways to attain set goals. Management is expected to facilitate the development of an action plan as well as formulation of strategies that will guide the execution and evaluation of activities. The plan should be flexible to allow management to adjust it and be more accurate and consistent while facilitating a psychosocial, physical and personal environment model that facilitates a wellness program in the health facilities.
- **Organizing:** This step should follow as soon as the goal setting, priorities and action plan have been determined. The agent assigns responsibilities and authority to those who will perform the activities and clarifies the type of activities such as political tasks assigned to policymakers, financial tasks to the NGOs and professional tasks to the Regulatory body. This is the step where management coordinates the activities properly and delegates tasks, while ensuring that the goals are successfully achieved. Management, in collaboration with the stakeholders, assigns resources such as staff, facilities, materials and equipment that are required to ensure an environment that is conducive to the facilitation of a wellness program.
- **Directing:** In this step, the agent should employ leadership skills to lead and guide the stakeholders and health professionals (recipients) to achieve the goals. Management

should also act as role models in the facilitation of the wellness program. Health professionals should be motivated to participate actively in the activities that facilitate the wellness program in the health facilities.

- **Controlling:** The agent is expected to set standards of evaluation to ensure that the goals are successfully achieved. They should conduct continuous monitoring of performance and make corrections to ensure quality control of the activities performed. The agent gives timely feedback and suggestions for improvement to ensure attainment of the desired results.

#### □ **Dynamics**

The agent (management) is expected to implement the management process to address the dynamics in the health facility (context). The dynamics in this study were the challenges that tally with the needs (in phase 1) experienced by the health professionals, which hamper the facilitation of a wellness program.

Management uses skills and knowledge to address the non-conducive environment in the health facilities in terms of **psychosocial** challenges (unavailability of policies, scope of practice issues, workload that leads to stress and burnout, lengthy night shifts for extra earnings, lack of support), **physical** challenges (inadequate resources) and **personal** challenges (such as lack of knowledge, poor wellness practices, illnesses and lack of self-care). Management collaborates with stakeholders and engages recipients to address the challenges that hamper the development of a conducive environment.

Management lobbies the policymakers, regulatory body and NGOs to develop wellness policy, provide adequate resources, revise regulations and scope of practice and provide financial assistance respectively to ensure an environment that is conducive for the

facilitation of a wellness program in the health facilities. The agent motivates, guides and involves recipients in the process of addressing dynamics to ensure an environment that is conducive to the facilitation of wellness a program.

□ **Conducive environment**

The agent is responsible for spearheading the management and maintenance of a conducive environment that is characterized by policies, revised nursing regulations, support, effective communication, collaboration, active participation, commitment, motivation, adequate resources and safety. The agent is expected to collaborate with stakeholders by lobbying policymakers and the regulatory body to ensure that a wellness *policy* is developed and regulations (scope of practice) are revised. A *supportive* environment fosters *active participation* in the facilitation of a wellness program and *safety* from factors that may threaten the good health of health professionals. The agent creates a supportive environment by being inclusive in planning such as *collaborating* with stakeholders to set goals and decide jointly on the best strategies to achieve the objectives. Health professionals and stakeholders should feel connected to the team and *safe* to share their ideas.

The agent ensures *effective communication* by creating a trust relationship through being truthful, open and respectful. Health professionals are *motivated* through praise and rewards in the process of knowledge acquisition and practices on wellness. The agent guides the health professionals who have inadequate knowledge and poor practices on wellness interventions. The health professionals *actively participate* in the facilitation of the wellness program. The agent, stakeholders and health professionals show *commitment* to the facilitation of a psychosocial, physical and personal environment that is conducive

to the facilitation of a wellness program. The agent and stakeholders ensure that there are *adequate resources* (staff, facilities, equipment and materials) to enable an environment that is conducive for the facilitation of a wellness program in the health facilities.

#### *7.2.4.3 Phase 3: Outcome*

The outcome of facilitation of a psychosocial, physical and personal environment model is a well-coordinated and supportive wellness program for health professionals in the health facilities. Once the environment becomes conducive, the management, health professionals and stakeholders should feel safe and encouraged, and would then jointly be committed to attain a successful outcome. Even though it is the responsibility of all parties involved to facilitate the wellness program, the agent (management) has a significant role to play by overseeing the provision of adequate psychosocial, physical and personal support to address the needs and challenges identified in the health facilities (as per Table 5.2). Figure 7.4 shows phase 3, outcome.

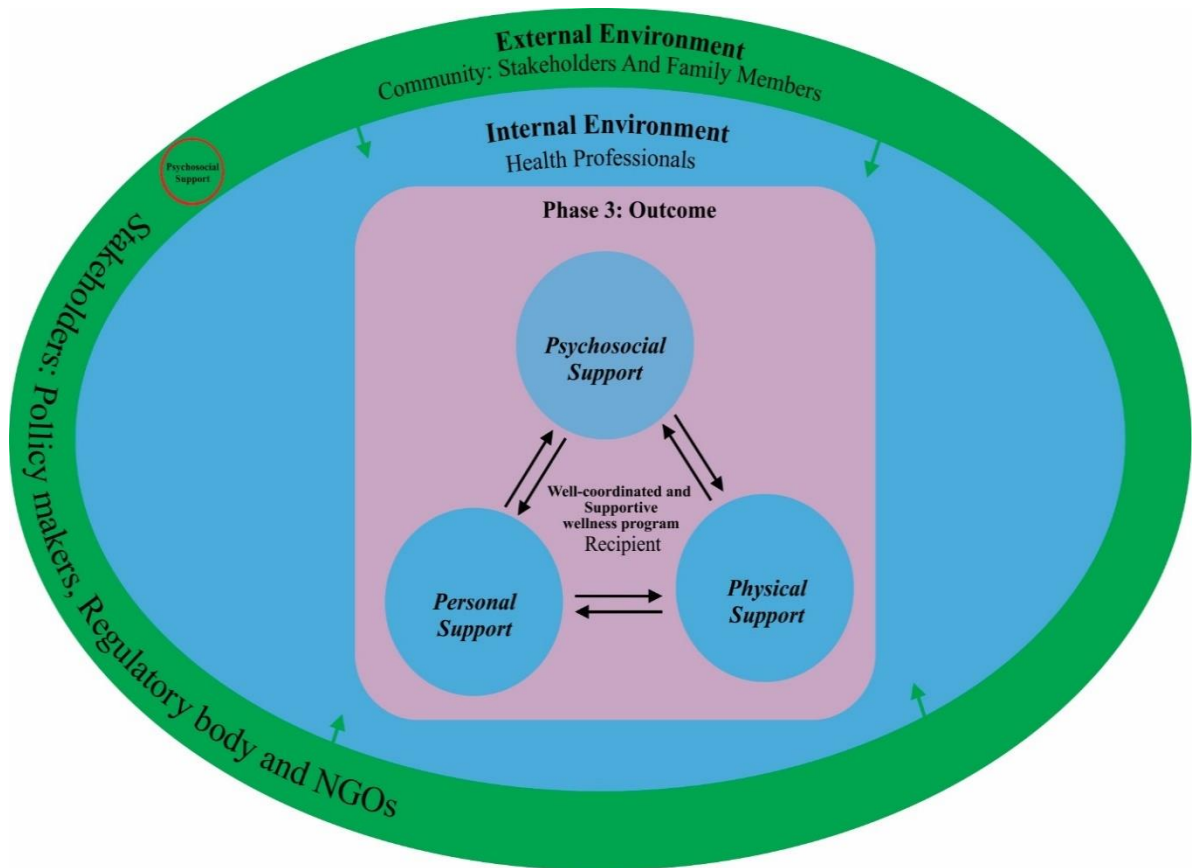


Figure 7.4 Phase 3: Outcome

❑ **Psychosocial support**

The agent has the primary responsibility for ensuring that psychosocial support is provided and maintained to ensure a well-coordinated wellness program for health professionals in the health facilities. The basic benefit of adequate psychosocial support is reduction of stress and burnout among health professionals. The psychosocial support to be provided by either management or stakeholders includes:

- Wellness policy development and implementation that leads to the development of a wellness program in the health facilities;

- Revision of nursing regulations (adjustment of the scope of practice for nurses that will reduce the workload for doctors);
- Provision of financial support to reduce excessive shifts for extra earnings;
- Effective communication;
- Advocacy;
- Staff motivation and provision of emotional support;
- Good interpersonal relationships and teamwork;
- Involvement in decision making and consultation regarding staff recruitment (decentralize staff recruitment); and
- Reduction of workload, time pressure and long working hours by recruiting adequate staff.

□ **Physical support**

The agent is responsible to oversee that physical support is provided to address the needs and challenges of health professionals in the health facilities. The agent collaborates with stakeholders to ensure the provision of adequate resources, including recruitment of adequate staff to reduce stress and burnout due to workload and long working hours; improvement of facilities to allow staff to do recreational activities, provision of adequate equipment and materials that ensure that quality service is provided to the community.

□ **Personal support**

Management provides adequate personal support to health professionals in collaboration with stakeholders, particularly NGOs. Personal support includes creation of awareness, training and regular dissemination of information (health education) regarding the

facilitation of a wellness program to ensure adequate knowledge among health professionals as well as provision of regular screening and medical services. Health professionals are supported, guided and motivated to practice healthy lifestyles and to participate actively in the facilitation of a wellness program.

### 7.3 EVALUATION OF THE MODEL

The model to create a psychosocial, physical and personal environment to facilitate a wellness program in the health facilities was conducted under the supervision and guidance of two individual experts with doctorate-level knowledge. One supervisor is an expert in model development, qualitative research and nursing management, while the second supervisor is an expert in model development, qualitative research and psychiatric nursing. The process of model development was closely monitored and peer evaluation was done by other researchers for clarity purposes. The model was evaluated in accordance with the criteria proposed by Fawcett (55) for model evaluation, which addressed questions regarding its significance, internal consistency, parsimony, testability, empirical adequacy and pragmatic adequacy and described as follow:

#### 7.3.1 Significance of the model

Significance is the quality of being worthy of attention or importance (59). The significance criterion needs justification of the importance of the model to the discipline of nursing. In this study, the metaparadigmatic, philosophical and conceptual origins of the theory are clear and antecedent nursing knowledge is cited (55). The focus of significance is on the context of the theory. Fawcett (55) identified the following four pertinent questions to be asked when evaluating the significance of a theory: Are the metaparadigm concepts and proposition addressed by the theory explicit? Are the

philosophical claims on which the theory is based explicit? Is the conceptual model from which the theory was derived explicit? Are the authors of antecedent knowledge from nursing and adjunctive discipline acknowledged and are bibliographical citations given?

In this study, the model listed assumptions, with the first assumption reflecting the metaparadigm concepts of psychosocial, physical, personal and environment by acknowledging that in order to facilitate a wellness program for health professionals, there is a need to address these concepts in the external and internal environments. The model further acknowledges that the facilitation of a wellness program requires collaboration between management, health professionals, policymakers, regulatory body and NGOs.

This model is important in the health facilities context and the discipline of nursing in general because it aims to facilitate a wellness program in the health facilities, which is an important step in improving the well-being and productivity of health professionals. The envisaged wellness program will help health professionals to improve their overall health, which in turn will lower the risk of chronic diseases and reduce absenteeism. This will benefit the Ministry of Health and Social Services (MoHSS) as well, because a healthier workforce (health professionals) will contribute to lower healthcare costs. All the authors of antecedent knowledge used in the development of the model were acknowledged and listed in the references.

### 7.3.2 Internal consistency of the model

Internal consistency is the degree of interrelationship among the items on a test such that they are consistent with one another and measuring the same thing (177). Internal consistency focuses on both the context and the content of the theory (55). Internal consistency requires that the linkages between concepts (structural consistency of

propositions) are specified. The three pertinent questions to be asked include: are the context and the content congruent? Do the concepts reflect semantic clarity and semantic consistency? Do the propositions reflect structural consistency?

To ensure internal consistency in this study, the following were observed:

The language used within the model is consistent and concepts were defined consistently, as each concept was defined from the dictionary, subject and context point of view. Similar definitions of concepts were used in all the discussions of the model. Furthermore, the concepts were theoretically defined to reflect semantic clarity; also, the same term and same definitions were used for each concept to give semantic consistency. Relationships between concepts were specified to reflect linkages and structural consistency.

### 7.3.3 Parsimony of the model

Parsimony refers to extreme unwillingness to spend money or use resources or the use of extreme caution in spending money (117). Fawcett (55) indicated that the parsimony criterion necessitates that a theory should be specified in the most economical way possible without oversimplifying the phenomena of interest. The focus of parsimony is on the content of the model. The pertinent question to ask is whether the theory content was stated clearly and concisely. In this study, parsimony was achieved by giving clear and concise content of the model in a way that makes it understandable to the reader. The different presentations of the model content, such as description of the nature and process, the flowcharts and diagrams were presented in a simple and understandable way; and model assumptions enhanced the readability.

#### 7.3.4 Testability of the model

Testability is a measure of whether or not data gained through empirical research can be measured and "tested" sufficiently to determine whether or not the premise that is being tested can be reliably labeled as true or false (178). Fawcett (55) highlighted that testability is classically viewed as an empirically-based criterion of testing a theory scientifically. To evaluate testability of a theory for grand theories, descriptions of personal experiences from inductive qualitative research may be used (55). Furthermore, this criterion for middle range theories is attained when specific instruments have been developed to observe the theory concepts as well as statistical techniques to measure assertions. The following questions should be considered: Is the research methodology qualitative and inductive? Is the research methodology congruent with the philosophical claims and content of the grand theory? Does the research methodology reflect the middle range theory? A qualitative study that was done on the perceptions of health professional managers regarding facilitation of a wellness program evidenced testability that gave an in-depth description of opinions. Research instruments (interview guide, questionnaire and check list) that were used are appropriate empirical indicators of the concepts.

#### 7.3.5 Empirical adequacy of the model

Empirical adequacy requires that the assertions made by the theory should be congruent with empirical evidence (55). This criterion further seeks to find out whether the findings from studies of descriptions of personal experiences are congruent with the concepts and propositions; or whether theoretical assertions are congruent with empirical evidence. In this study, the findings from available published studies describing the health professionals' perceptions and knowledge on wellness programs were congruent with the

concepts and relational statements of the model. Also, the theories used to guide the model development are congruent with empirical evidence.

#### 7.3.6 Pragmatic adequacy of the model

Pragmatic adequacy refers to feasibility of the model; and it is determined by the resources available and expertise of personnel needed to implement the model (59). This criterion seeks to find out how practicable the model is. This includes, but is not limited to, whether education and special skills training is needed before the application of the theory in nursing; if the theory has been applied in the real world of nursing practice; whether it is generally feasible to implement it on the basis of the theory; and whether the practitioner has the legal ability to implement and measure the effectiveness of theory-based nursing actions.

The model for facilitation of a positive psychosocial, physical and personal environment outlined the phases of needs assessment, managing and maintaining an environment that is conducive to the outcome. It was indicated that management (agent) needs knowledge and skills to ensure enablement and implementation of the model. Moreover, it was indicated that other resources will be required such as staff, facilities, materials and equipment. The model emphasizes the facilitation of a wellness program in the health facilities and has been applied in various real-world practice settings (23). The model is flexible and comprehensive, and that makes it easy to modify to a specific situation and thus feasible for implementation. The model schematic shows the phases as a guide to the management (agent) to facilitate the implementation of the model. The outcome of the model is clearly and concisely indicated.

## 7.4 GUIDELINES FOR THE OPERATIONALISATION OF THE MODEL

Guidelines have been developed to enable the implementation of the model for the facilitation of a wellness program in the health facilities. These guidelines will be discussed in terms of the purposes, activities and strategies for each phase to provide direction to the management, health professionals and stakeholders involved in the implementation of the model. The guidelines are presented in relation to the three phases of the model as shown in Figure 7.1, namely:

- Phase 1: Needs assessment
- Phase 2: Managing and maintaining a conducive environment
- Phase 3: Outcome

### 7.4.1 Phase 1: Needs assessment

#### *7.4.1.1 Objective*

The objective of this phase is to help management to assess and identify unfulfilled psychosocial, physical and personal needs of health professionals in both the external and internal environments of the health facilities context that affect the facilitation of a wellness program. The aim of needs assessment is to clarify problems and identify appropriate interventions or solutions that will lead to the facilitation of a wellness program in the health facilities. Needs assessment is the collection and analysis of information that relates to the needs of the affected population, and the resources necessary to address the needs (179). In this case, needs assessment would focus primarily on health professionals (key informants) to provide information regarding their needs in the health facilities that would facilitate a wellness program. Gupta (180) emphasized that needs assessment relies on people who have inside information about the situation.

Needs assessment is crucial in the initial stage of intervention as it will inform the decisions that management makes to address the barriers to successful facilitation of a wellness program.

#### *7.4.1.2 Activities and strategies to address facilitation of needs assessment*

The activities and strategies that would be executed to conduct a needs assessment in both internal and external environments of health facilities should include planning and designing the process of gathering data by conducting individual interviews, assessment and survey, as well as designing instruments for data collection and strategies for analyzing data, communicating and reporting findings.

In this study, the researcher planned and conducted the needs assessment for the management and health professionals in the state health facilities. It was indicated that it would be essential to form a Needs Assessment Committee that would be responsible for planning and managing the needs assessment process; and providing timely reports (180). Furthermore, the Needs Assessment Committee would focus on gathering data by means of established procedures and methods; set priorities and make sound decisions to determine the criteria for solutions. Data collection and analysis are cornerstone skills of any needs assessment process (180). In this case, the management should set criteria for determining how best to allocate available resources (money, staff, facilities and materials) to address the priority needs that will ultimately lead to action that will facilitate the wellness program in the health facilities.

The external environment comprises the community, which includes stakeholders (policymakers, regulatory body and NGOs) and family members; whereas the internal environment includes the health professional managers and health professionals. The

researcher coordinated and conducted needs assessment through interviews, a checklist to assess the health facilities and surveys following the steps for needs assessment (180) as indicated below:

- Plan and design (define scope and objectives of the assessment, engage management and health professionals, organize logistics and operations, methodology, instruments for data collection and organizing data analysis),
- Implement (data collection process)
- Clean and process (data entry, cleaning and processing)
- Data analysis
- Report and dissemination of findings (communication of findings internally and externally will be done as proposed)

❖ **Aspects that need to be assessed in the external environment include:**

- Psychosocial: In this study, as indicated in Chapter 6, the psychosocial aspects in the external environment include availability of a wellness policy, scope of practice, leadership/management support (from top level management), consultation and involvement in staffing/ decentralization of staff recruitment.

❖ **Aspects that need to be assessed in the internal environment include:**

- Psychosocial: The researcher explored the perceptions of health professionals on availability of wellness programs (such as Employee Assistance Program [EAP], nutrition program, other educational programs on diseases prevention, fitness program, screening/ immunization program for health professionals), workload, working relationship and support for healthy lifestyle, management and co-worker

support, financial support, advocacy, communication, emotional and social support at the work place, health professional engagement / involvement in decision making.

- **Physical:** The researcher explored the resources that affect the facilitation of a wellness program in the health facilities including staff, facilities (such as fitness centres) equipment and materials (to deliver quality service to the public).
- **Personal:** The researcher explored knowledge, practices, behaviour, experiences and interest in the facilitation of a wellness program, health status; and perceptions on what individuals would like to do to improve their health and how they think the employer could help. These include assessment of the level of knowledge, practices regarding healthy lifestyles, management support, training, health education and creation of awareness on wellness, health screening and medical services.

#### 7.4.2 Phase 2: Managing and maintaining a conducive environment

##### *7.4.2.1 Objective*

The purpose is to assist management with activities and strategies to manage and maintain a conducive environment through the management process (planning, organizing, directing and controlling) in order to create a psychosocial, physical and personal environment model that facilitates the development of a wellness program for health professionals in the health facilities. Management will spearhead the management and maintenance of a conducive environment by addressing the needs and challenges (psychosocial, physical and personal) experienced in the health facilities that hinder the facilitation of a wellness program. A conducive environment should ensure the following: management support, safety, motivation, collaboration, policies, adequate resources, encouragement, active participation, commitment and effective communication.

#### *7.4.2.2 Activities and strategies to address management and maintenance of a conducive environment*

The activities and strategies that would be executed to address planning, organizing, directing and controlling are described below:

##### □ **Activities and strategies for planning**

Management will involve stakeholders and health professionals through effective consultations in the following activities and strategies:

- Develop an action plan and formulate strategies to guide execution and evaluation of activities that would address the identified needs.
- Set relevant goals that will address the identified psychosocial, physical and personal needs and dynamics in the health facilities to ensure a conducive environment for health professionals.
- Make informed and collective decisions about the priority needs, alternatives and their solutions to facilitate a wellness program based on the needs assessment results.
- Suggest ways to create awareness, knowledge and skills building and behaviour change among health professionals regarding the facilitation of a wellness program in the health facilities.
- Ensure that the plan is flexible and continuous for possible adjustments based on the outcome.
- Devise ways to implement and evaluate strategies on the management and maintenance of a conducive environment in the health facilities in order to measure the outcome of each activity.

□ **Activities and strategies for organizing**

Management, in collaboration with stakeholders, should:

- Ensure the plan is prepared and strictly carried out, and make sure that resources are consistent with objectives.
- Analyse objectives and resources (such as staff, money, facilities, equipment and materials) available to ensure effective and efficient use of resources in the facilitation of the wellness program.
- Distribute available resources and develop general operating policies to achieve the goals.
- Delegate and assign responsibilities and tasks to the personnel in order to achieve the objectives set in the planning phase.
- Lobby policymakers to develop a wellness policy as a starting point for the facilitation of a wellness program in the health facilities.
- Advocate for adequate resources such as staff, facilities, materials and equipment to ensure a conducive work environment.
- Advocate for additional funds from NGOs and other stakeholders to supplement the budget from MoHSS, which might not be sufficient to satisfy the needs of health professionals in the health facilities.
- Lobby the regulatory body to revise the nurses' scope of practice.
- Clarify and communicate the responsibilities as well as authority to the stakeholders.
- Set up a single guiding authority and establish lines of communication in the health facilities.

- Ensure that responsibilities relating to addressing the psychosocial, physical and personal challenges faced in the health facilities are understood.
  - Harmonise activities and coordinate efforts; and encourage team spirit to achieve the goals.
  - Determine the timing and sequencing of activities so that they interconnect properly.
- **Activities and strategies for directing**

Management should:

- Gain thorough knowledge of the staff, to be able to fairly assign work for which each employee has been trained.
- Employ interpersonal skills to lead, guide and instruct health professionals and stakeholders to perform to the best of their abilities in order to achieve the goals.
- Create a conducive environment through effective communication so that health professionals feel safe and supported; offer positive reinforcement to health professionals who participate in the facilitation of the wellness program; and motivate health professionals to actively participate and take initiative in the facilitation of the wellness program in the health facilities.
- Appraise the health professionals fairly and objectively; and provide honest feedback.
- Offer guidance and training to the health professionals on the facilitation of the wellness program.
- Set a good example (role model) by actively participating in the facilitation of the wellness program.
- Supervise resources and maintain order and discipline.

❑ **Activities and strategies for controlling**

Management is responsible to:

- Check that the plan was implemented according to the set standards so as to achieve the goals.
- Monitor that all the activities on the facilitation of the wellness program were carried out according to the plan adopted, principles established and the instructions issued.
- Measure health professionals' and stakeholders' performance; and take appropriate corrective action by conducting performance appraisals and rewarding excellent performers.
- Periodically evaluate weaknesses, errors and deviations from the plan; and give timely feedback as well as suggestions for improvement.
- Check that the plan is kept up to date and adjust when necessary.

❑ **Activities and strategies for dynamics**

It is anticipated that management will implement the management process and address the dynamics to create a conducive environment. In this study the dynamics were the challenges (psychosocial, physical and personal) experienced by health professionals.

These are the needs that were identified in phase 1 and should be addressed as follows:

- **Psychosocial:**
  - ✓ Management should lobby policymakers to develop a wellness policy; the regulatory body to revise the scope of practice and NGOs to provide financial support.

- ✓ Advocate for the implementation of the model to facilitate a wellness program for health professionals in the state health facilities.
- ✓ Offer support and encourage co-worker support as well as good interpersonal relationships.
- ✓ Advocate for financial support to avoid lengthy shifts for extra earnings.
- ✓ Guide and involve health professionals in the process of addressing the dynamics so as to ensure a conducive environment.
- **Physical:**
  - ✓ The management should advocate for adequate resources (staff, facilities, equipment and materials)
- **Personal:**
  - ✓ The management should collaborate with stakeholders to create awareness among health professionals about the facilitation of a wellness program.
  - ✓ Offer training on the wellness program and healthy lifestyles.
  - ✓ Motivate and encourage health professionals to actively participate in the process of addressing the dynamics.
  - ✓ Appraise those who are working hard fairly and objectively.
  - ✓ Organize regular health screenings and medical services for health professionals.
- **Activities and strategies for creating a conducive environment**

Management leads the process of managing and maintaining a conducive environment through the following activities and strategies:

- ✓ Collaborate with stakeholders and set goals together on the best strategies to achieve the goals.
- ✓ Collaborate with stakeholders and ensure that policies are developed, scope of practice is revised and financial assistance is secured.
- ✓ Create a supportive and safe environment to encourage active participation in the facilitation of the wellness program.
- ✓ Create a trust relationship that ensures effective communication by being open, honest and respectful.
- ✓ Motivate health professionals in their process of acquiring knowledge and good practices about the facilitation of wellness programs.
- ✓ Ensure that there are adequate resources (staff, facilities, equipment and materials) to ensure an environment that is conducive to the facilitation of a wellness program.

### 7.4.3 Phase 3: Outcome

#### *7.4.3.1 Objective*

The objective of this phase is to guide management to ensure that a well-coordinated and supportive wellness program for health professionals in the state health facilities is realized, through the provision of psychosocial, physical and personal support.

#### *7.4.3.2 Activities and strategies to address the outcome*

##### **□ Activities and strategies for psychosocial support**

Psychosocial support in the health facility refers to an interactive process within the work environment that influences social behaviour, attitudes, values, beliefs, practices as well

as physical and emotional health. This includes psychosocial aspects such as interactions in the work environment and organizational culture (e.g. policies, leadership and management support). The following activities and strategies may be implemented to provide psychosocial support to the health professionals in the health facilities.

- Management and stakeholders should ensure that a wellness policy, which is the core to the facilitation of a wellness program, is developed and implemented. Management should advocate and lobby the policymakers to develop wellness policies.
- Clear policies and guidelines on the facilitation of the wellness program should be developed, communicated effectively to the health professionals and implemented.
- Awareness and training on wellness policy should be conducted prior to implementation.
- Management should advocate and lobby the regulatory body to amend the scope of practice for nurses.
- The roles and responsibilities of stakeholders in the provision of psychosocial support to the health professionals should be clearly spelt out.
- Management must ensure that the wellness program is developed and effectively implemented in the health facilities.
- Management should involve the health professionals in decision making.
- Management must provide support and respond appropriately to the psychological and mental health issues of health professionals.
- Management should ensure that the work environment is characterized by safety, trust, honesty, respect; and fairness as well as consideration in the interactions with one another.

- Management, in collaboration with stakeholders, should come up with ways to motivate health professionals and assist them financially, for example through staff appraisal and EAP. In addition, health professionals should be recognised, praised and rewarded as a way of motivating those who actively participate in the facilitation of the wellness program. Acknowledgement and appreciation of health professionals' efforts should be done in a fair and timely manner.
- Management should recognise the need for balance between the demands of work, family and personal life for health professionals.
- Management must devise ways to encourage interpersonal relationships and teamwork among health professionals in the health facilities.

□ **Activities and strategies for physical support**

Physical support in the health facility environment denotes identifiable nature and material things, including resources such as human resources, facilities, equipment and materials that improve work performance, health, safety and well-being for health professionals and will help to realize the goals. The following activities and strategies may be implemented to promote physical support:

- Management, in collaboration with stakeholders, should ensure that adequate resources (staff, facilities, equipment and materials) are provided to ensure a well-coordinated and supportive wellness program in the health facilities.
- Management should advocate for recruitment of adequate, knowledgeable and skilled health professionals to meet work demands for the realization of the set goals.
- Management should know the competencies, talents and skills possessed by the health professionals to ensure job fit with the positions they hold.

- Management should lobby for sponsorships of resources such as materials, equipment and financial support from the stakeholders to supplement the budget from the MoHSS, which might not be sufficient.
- Management should create recreation facilities for health professionals in the health facilities to ensure a well-coordinated and supportive wellness program.
- Clear policies and guidelines on the maintenance and control of resources should be developed and communicated to health professionals to ensure effective utilization.

#### ✚ **Activities and strategies for personal support**

- Creation of awareness must be conducted among health professionals through education and training to ensure adequate knowledge on the facilitation of wellness program.
- Management should provide regular health screening and medical services for the health professionals and motivate them to actively participate in the health promotion services to ensure staff well-being. Provision of regular health screening encourages self-care among health professionals.
- Health professionals should be encouraged and supported to grow and develop their interpersonal, emotional and job skills on a continuous basis.
- Clear policies and guidelines should be developed on the promotion of wellness in the health facilities and should be communicated to health professionals.
- Management must ensure regular dissemination of information about the facilitation of the wellness program.

- Health professionals who actively participate in the facilitation of the wellness program should be rewarded as a way of demonstrating appreciation for their efforts and encouragement to keep up good practices.
- Management must support health professionals through effective communication on the available wellness interventions and find out about their interests so that the necessary adjustments can be made in order to facilitate the wellness program.

## 7.5 SUMMARY OF THE CHAPTER

This chapter presented the description and evaluation of the model to facilitate a psychosocial, physical and personal environment that will ensure a well-coordinated wellness program for health professionals in the health facilities. The model was described based on Chinn and Kramer's (53) method under the following sub-headings: description, overview, purpose, structure, assumptions, definitions of concepts, relation statements, nature and process of the model.

Furthermore, the chapter described the nature of the model based on Dickoff et al.'s (49) six elements. The process of describing the model in relation to three phases; namely needs assessment, managing and maintaining conducive environment, and outcome was also presented. The model was evaluated using Fawcett's (55) six criteria for evaluation of nursing theories. Lastly, the guidelines for the facilitation of a positive psychosocial, physical and personal environment model were described in relation to three phases of the model. Chapter eight will report on the study's conclusion, contribution, limitations and recommendations.

## CHAPTER 8

### CONCLUSION, CONTRIBUTION, LIMITATIONS AND RECOMMENDATIONS OF THE STUDY

#### 8.1 INTRODUCTION

The previous chapter described the structure and process of the model as well as the evaluation and guidelines to operationalize the model. This chapter outlines the conclusions according to the four phases of the study. Furthermore, the contributions, limitations and recommendations that are made from the findings of the study are presented.

#### 8.2 PURPOSE OF THE STUDY

The purpose of the study was to develop a model for health professionals to facilitate a wellness program in the state health facilities of Oshikoto Region in Namibia. The purpose was achieved through the use of the clearly stated objectives; which were achieved by employing a convergent parallel mixed methods research design. A descriptive quantitative approach was used to assess the state health facilities in Oshikoto region regarding the facilitation of wellness program and also to describe knowledge, practices and experiences of health professionals with regard to the facilitation of a wellness program. In addition, an exploratory, descriptive, qualitative approach assisted the researcher to explore and describe health professional managers' perceptions concerning the facilitation of a wellness program in their health facilities. A checklist and questionnaires were used; and individual interviews were conducted to collect the data that provided the evidence for model development.

### 8.3 CONCLUSIONS OF THE STUDY

The conclusions of this study were reached in line with the research questions as illustrated on page 9 of the thesis. The research questions are in line with the study objectives.

- The main research question was: how is the wellness program for health professionals facilitated in the state health facilities of Oshikoto region in Namibia?

The main research question was addressed by answering the research questions formulated in line with the research objectives under the four phases of the study. These phases are based on the four steps of Theory generation by Chinn and Kramer (64) namely: identification and analysis of concepts, construction of a relationship statement, description and evaluation of a model as well as guidelines for operationalizing the model. Therefore, the major findings of the study were concluded as outlined below.

#### ✚ **Phase 1: Identification and analysis of concepts**

8.3.1 Research question 1: What are the appropriate concepts that could guide the development of a model for health professionals to facilitate a wellness program in the state health facilities?

To address this research question, concepts from quantitative and qualitative findings of the three sub-objectives of the study as presented in chapters 4 and 5 were identified. Findings were merged, interpreted and compared; then the main concepts were identified.

*8.3.1.1 Sub-question 1: What conditions are state health facilities in in terms of the facilitation of a wellness program? / How is the situation at the state health facilities in terms of the facilitation of wellness program?*

This research question was addressed by assessing the state health facilities in Oshikoto region with regard to the facilitation of a wellness program. A checklist was used to collect data from the three state health facilities. Data was analysed using descriptive analysis by comparing the three health facilities. The findings in response to this research question indicated that health professionals are affected by the following challenges in their work environment:

- Resource challenge:
  - staff shortage in the state health facilities
- Organizational challenges:
  - unavailability of wellness policy (100%)
  - unavailability of wellness programs and focal persons (100%)
  - inadequate wellness interventions (66.7%)
  - inadequate health screening and education for health professionals (66.7%)
- Psychosocial challenges:
  - poor communication and irregular dissemination of wellness information (66.7%)
  - insufficient management support

*8.3.1.2 Sub-question 2: What knowledge and experience do health professionals have concerning the facilitation of a wellness program; and what are their practices that facilitate wellness program in the state health facilities?*

This question was addressed by describing the knowledge, practices and experiences of health professionals about the facilitation of a wellness program in the state health facilities. A questionnaire was used to collect data from the health professionals and the data was analysed using SPSS version 25. The following conclusions were made based on the findings:

- Inadequate knowledge concerning facilitation of a wellness program, scored 4.88% (personal challenge)
- Significant relationship between the age and level of agreement on knowledge whether wellness refers to physical and emotional health only ( $p < 0.01$ ), gender ( $p < 0.05$ ), marital status ( $p < 0.05$ ) and working department ( $p < 0.05$ ).
- Age associated with the level of agreement on workplace wellness as education and activities that a worksite may do to promote healthy lifestyles for employees and their families ( $p < 0.05$ ).
- Working department and rank were found to have a significant effect on the level of agreement on the relationship between high workload, staff shortage and job satisfaction ( $p < 0.05$ ).
- Poor lifestyle practices concerning nutrition, physical and emotional habits and health screening scored 31.7% (personal challenge)
- Years of experience were found to be significantly correlated with health professionals' practice regarding nutrition ( $p < 0.05$ ).

- Years of experience associated with practice regarding health habits ( $p < 0.05$ ), age ( $p < 0.05$ ) and gender ( $p < 0.01$ ).
- Association was found between the variables below and health screenings/examinations in the past 12 months:
  - age and blood sugar testing ( $p < 0.05$ ), age and cholesterol testing ( $p < 0.01$ ), position of the health professional and cholesterol testing ( $p < 0.05$ ), working department and flu vaccination ( $p < 0.01$ ).
- Borderline correlations between experience and blood sugar ( $p < 0.05$ ); and department and BMI ( $p < 0.05$ ).
- Significant correlation between marital status and prostate examination ( $p < 0.01$ )
- Nurses and males are significant predictors of the practice with significant ( $p < 0.05$ ) and ( $p < 0.01$ ) respectively
- Insufficient support from management in terms of provision of health promotion sessions and programs scored 76.2% (psychosocial challenges)
- Significant relationships between the department and offering of financial management session ( $p < 0.05$ ), “I am encouraged to take adequate time for lunch away from my work” ( $p < 0.01$ ), “we are encouraged to balance work and home life” ( $p < 0.01$ ), “health professionals who work extra hours are not seen as “harder-working” employees than those who work regular hours” ( $p < 0.05$ ).
- Borderline association between gender of participants and the statement “management frequently does things to demonstrate that they value subordinates” ( $p < 0.05$ )
- Borderline association between gender and years of experience and the statement “I am encouraged to take adequate time for lunch away from my work” ( $p < 0.05$ ).

- Health professionals expressed high interest in wellness interventions such as heart disease prevention, work stress management, healthy eating and nutrition topics, score 63.4%.
- Borderline correlation between the working department and educational program on heart disease prevention ( $p < 0.05$ ); age and work stress management ( $p < 0.05$ ); age and nutrition education program on healthy eating ( $p < 0.05$ ); and years of experience and presentations on nutrition topics ( $p < 0.05$ ).

*8.3.1.3 Sub-question 3: How do health professional managers perceive facilitation of wellness programs in the health facilities?*

To address this research question, in-depth individual interviews were conducted to explore and describe the perceptions of health professional managers concerning the facilitation of a wellness program in the state health facilities. Thematic analysis was done using Tesch's eight steps. The following conclusions were made based on the findings of the themes:

Health professionals perceived the following challenges that affect the facilitation of a wellness program in the state health facilities:

- Organizational challenges:
  - unavailability of wellness policy and wellness program
  - pressure from public demanding service delivery
  - lack of consultation regarding staff recruitment
- Psychosocial challenges:
  - stress and burnout
  - workload

- lack of advocacy and leadership support
- lack of co-worker support
- scope of practice issues
- time pressure
- long hours and turnover
- excessive night shifts for extra earning
- Resources challenges:
  - staff shortage
  - inadequate facilities and equipment
- Personal challenges:
  - lack of knowledge
  - illnesses and
  - lack of self-care

Health professionals recommended the following approaches to facilitate a wellness program in the state health facilities:

- Create a conducive working environment with adequate resources (staff, facilities, equipment and materials)
- Wellness policy development to institute a wellness program
- Establish a wellness directorate at the National level
- Staffing and staff development
- Adequate equipment to deliver service
- Awareness creation and in-service training on wellness
- Strengthening support and team work among health professionals

The central concepts of psychosocial environment, physical environment and personal environment were identified and classified using the WHO framework and model (14) after the quantitative and qualitative data analysis of research findings as presented in table 5.2.

8.3.2 Research question 2: How will the identified concepts that guide the development of a model be analysed?

The concepts that were analysed are psychosocial, physical, personal and environment. These concepts were identified from the findings of the study and formed the basis of model development. Concepts were defined from dictionaries, followed by subject and then context. Their usages were identified from the dictionaries, thesaurus, theories and literatures. The six elements of Practice-Oriented theory by Dickoff et al. (49) was adopted in the process of conceptualization. In this study, the six elements included: the agent (researcher, health professional managers and stakeholders), recipient (health professionals and family members), context (health facilities), dynamics (challenges experienced by health professionals in terms of psychosocial, physical and personal environment), procedures (facilitation of wellness program including development of a model and guidelines) and terminus (outcome: well-coordinated and supportive wellness program for health professionals in the state health facilities).

#### **🚩 Phase 2: Construction of relationship statements**

8.3.3 Research question 3: What would be the nature of relationships among the central concepts that could guide the development of the model?

The central concepts were identified and analysed. The concept analysis resulting from the study findings formed the basis for the development of the model. Relationships are

linkages between and among the identified concepts that started to take form as the concepts of psychosocial, physical and personal environment emerged. The relationships provided clues concerning the purposes and assumptions of the model. Based on the findings of the study, it was concluded that to facilitate a wellness program for health professionals in the state health facilities, it is essential to facilitate a supportive psychosocial, physical and personal environment. The construction of relationship statements between concepts was done among the following: central concepts identified from the study findings and analysed (phase 1), Practice-Oriented theory by Dickoff et al. (49), the WHO Framework and model (14) and Fayol's Management theory (51,52). These guided the development of a model.

### **🚩 Phase 3: Description and evaluation of a model**

8.3.4 Research question 4: What model could be developed to facilitate a wellness program for health professionals in the state health facilities?

Following the construction of relationship statements among concepts that were identified, the description of the facilitating psychosocial, physical and personal environment model followed, guided by Theory generation of Chinn and Kramer (58). The model was described in terms of its purpose, structure, assumptions, concepts definitions, relationships statements, nature and process. This model aimed to facilitate a wellness program for health professionals in the state health facilities of the Oshikoto region. The development of this model was informed by the findings of the study. A schematic representation of the model showing the structure and process was presented in Figure 7.1 as per three phases of the model (phase 1; needs assessment, phase 2: managing and maintaining a conducive environment and phase 3: outcome).

Description of the model was followed by an evaluation process. Evaluation of the model was done to assess the model in relation to its objectives. The model was evaluated by the two supervisors (experts in model development) and peer evaluation was also done. This model evaluation was based on Fawcett's (55) criteria for theory evaluation, namely significance, internal consistency, parsimony, testability, empirical adequacy and pragmatic adequacy.

#### **✚ Phase 4: Guidelines for operationalizing the model**

8.3.5 Research question 5: What guidelines could be developed to operationalize such a model?

Following the description and evaluation of the model, the guidelines for operationalizing the model were developed using the findings of the study. Guidelines were developed to enable the implementation of the model to facilitate a wellness program in the state health facilities. The guidelines were developed based on the objectives, activities and strategies to guide the management, stakeholders and health professionals in the facilitation of a wellness program. Guidelines were presented in relation to the three phases of the model.

#### **8.4 LIMITATIONS OF THE STUDY**

The study encountered methodological, literature availability as well as testing and implementation limitations as outlined below:

##### **8.4.1 Methodological limitations**

Although the study achieved its objectives, there were limitations identified during this study related to sampling and data collection.

- Sampling limitations

This study was restricted to one region, which is Oshikoto, and the number of participants used for data collection was low. For the qualitative element of the study, the sample size was only six (6) health professional managers, which was not representative of the study population. However, in qualitative research the main goal is to provide a rich understanding of issues and this has been achieved in this study.

There was limited sample size for the doctors which was only seventeen (17) due to a small population size in the state health facilities. Hence, a convenience sampling was employed and data was collected from the doctors who were available during the time of data collection. Therefore, the findings could not be generalized to the greater population.

- Data collection limitations

There were limitations encountered during data collection of quantitative information; some questionnaires were not returned due to time pressure. Some health professionals were too busy and had no time to complete the questionnaires. The researcher allowed them to complete questionnaires during their free time, but that affected the number of returned questionnaires. The researcher distributed 186 questionnaires of which 25 questionnaires were not returned; however, the response rate was 70%. Another limitation was the delay in collection of questionnaires because health professionals work in different shifts. An arrangement was made to collect the questionnaires during different shifts.

#### 8.4.2 Literature availability

Limited relevant literature was available for this study, especially in relation to Africa and Namibia. This made it difficult for the researcher to adequately validate findings against existing literature.

#### 8.4.3 Testing and implementation limitations

In this study, the model and guidelines for operationalization were developed. Even though different experts have evaluated the model, the implementation and testing were not done due to time constraints. Also, the guidelines developed for the implementation of the model have not yet been tested, and therefore their actual practicality has not been determined. These will be done as post-doctoral contribution.

### 8.5 RECOMMENDATIONS

The following recommendations were made based on the findings of the study, in terms of their application to the stakeholders (policymakers {OPM}, Health Professions Council of Namibia {Regulatory body}), MoHSS, Management and for future research.

#### 8.5.1 Recommendations for the stakeholders

The findings of the study highlighted that health professionals experienced psychosocial, challenges from the external environment (stakeholders). The following recommendations were made for the policymakers and Regulatory body:

##### Recommendation for the policymakers

- The researcher recommends that a comprehensive and inclusive wellness policy needs to be developed in order to institute a wellness program in the state health facilities.

- Stakeholders should consider utilizing the proposed model to facilitate a wellness program for health professionals in the state health facilities.
- ✚ Recommendations for the Regulatory body (Health Professions Council of Namibia)
- It was found that there is a need to revise the scope of practice for nurses to make it flexible for them to be able to do some procedures that are currently being done by doctors. This would reduce the workload for doctors and retain them in their profession.

#### 8.5.2 Recommendations for the MoHSS

The study revealed that health professionals are affected by psychosocial, physical and personal challenges in their internal environment that hinder the facilitation of a wellness program. The researcher recommends the following:

- The MoHSS should consider piloting and implementing the model as well as the guidelines that have been developed in this study by influencing policymakers to develop a comprehensive and inclusive wellness policy that will lead to the facilitation of a wellness program in the state health facilities.
- The MoHSS should establish a wellness directorate at the national level that will advocate for the facilitation of a wellness program in the state health facilities. This directorate would be in a better position to lobby both policymakers and NGOs for political and financial support respectively towards the realization of the goal of facilitating a wellness program in the state health facilities.
- Additionally, there is a need to develop policy guidelines to guide management, health professionals and stakeholders on how to facilitate a wellness program in the state health facilities.

- The MoHSS should create awareness among all the managers and offer training regarding facilitation of wellness program.
- The MoHSS should create a conducive work environment for health professionals by providing adequate psychosocial, physical and personal support.
- There is a need to do consultations regarding staffing needs and to decentralize staffing to the regions, to ensure involvement of all parties in the process of recruitment.
- The MoHSS should provide adequate staff, materials and equipment needed to ensure a conducive work environment. This can be done through a well-coordinated and supportive wellness program in the state health facilities.
- The MoHSS should improve health facilities in such a way that they allow health professionals to do recreational activities.
- They should strengthen support at all levels of management and encourage teamwork among health professionals.

### 8.5.3 Recommendations for Management

It is recommended that management should:

- Advocate and facilitate the implementation of the model to the stakeholders and MoHSS, which would subsequently lead to the establishment of a wellness program in the state health facilities.
- Advocate for and facilitate the revision of the scope of practice for nurses to the Health Professions Council of Namibia (Regulatory body) in order reduce the nurses' workload and thus reduce stress and burnout among doctors.
- Advocate for and facilitate the provision of physical support (staffing, equipment and materials) to ensure a conducive work environment in the state health facilities.

- Create awareness among health professionals and offer training regarding facilitation of a wellness program in the state health facilities. Adequate knowledge will encourage health professionals to actively participate and improve practices concerning the facilitation of a wellness program.
- Strengthen management support to the health professionals through encouragement and motivation such as rewarding staff members whose performance is outstanding. This will encourage health professionals to cope with work related stress.
- Address personal needs of health professionals, including health screening, medical services and health education on healthy behaviour and lifestyles, to help them cope with their illnesses.
- Maintain effective communication within the work environment to identify needs and involve health professionals in decision making regarding the facilitation of a wellness program.

#### 8.5.4 Recommendation for training

- The training and education institutions should create awareness among all the pre-service nursing students regarding facilitation of wellness program.
- Offer trainings concerning facilitation of wellness program and include a component in the pre-service curriculum.

#### 8.5.5 Recommendations for further research

The following is recommended for future research:

- A study with adequate representativeness of all health professionals such as social workers, radiologists, pharmacists and physiotherapists in the region should be undertaken at some time in the future to inform policy.

- A similar study needs to be conducted among health professionals in other regions regarding the facilitation of a wellness program in their health facilities.
- Future research needs to be conducted among all health care workers and stakeholders in order to facilitate wellness programs for all health care workers.
- There should be a study on implementation and evaluation of the effectiveness of the model that has been developed to facilitate a wellness program in the state health facilities.
- There is a need to conduct a research on systematic and scoping review in terms of facilitating the development of a wellness program for health professionals in the health facilities in Upper-middle income countries.

## 8.6 CONTRIBUTION TO THE BODY OF KNOWLEDGE

The findings of this study contributed to the body of knowledge in the following ways:

### 8.6.1 Identification of challenges experienced by health professionals that hinder facilitation of a wellness program in the state health facilities of Oshikoto Region.

This study has provided a broader understanding of wellness programs for health professionals through identification of challenges. This is a significant addition to the evidence-base since there are currently very few studies in this field that have been conducted in Namibia. The study further contributed to new knowledge by identifying challenges faced by the health professionals in the state health facilities that hamper the facilitation of a wellness program that would promote health and well-being. This study has identified challenges related to the psychosocial environment, physical environment and personal environment. These challenges have been found to expose health professionals to a non-conducive working environment.

Also, undertaking literature review and conducting concept analysis for this study added to the model development, which contributed valuable information to the body of knowledge.

#### 8.6.2 Facilitation of psychosocial, physical and personal environment model

Another valuable contribution to the body of knowledge is the development of a model for health professionals to facilitate a wellness program in the state health facilities of the Oshikoto region. Once implemented, it is expected that a wellness program will be developed and implemented whereby health professionals would get support (psychosocial, physical and personal) that would, in turn, ensure a conducive working environment.

#### 8.6.3 Operationalization guidelines of the model

To make it possible for the model to be operational, guidelines, which were previously non-existent, were developed. These guidelines will ensure that the challenges and needs identified are addressed during the implementation of such model.

### 8.7 DISSEMINATION OF THE FINDINGS

The findings of the study will be disseminated through publications, paper presentations and contributions to books or chapters as outlined below:

#### 8.7.1 Publications

The researcher proposes to publish the following papers:

- Conditions of the state health facilities in Oshikoto Region concerning the facilitation of a wellness program (quantitative)
- Knowledge, practices and experiences of health professionals concerning the facilitation of a wellness program in the state health facilities (quantitative)

- Perceptions of health professional managers concerning the facilitation of a wellness program in the state health facilities
- Development of a model for health professionals to facilitate a wellness program
- Guidelines to implement the model for the facilitation of a supportive psychosocial, physical and personal environment.

#### 8.7.2 Paper presentation

The researcher proposed to present papers during conferences (national and international) on:

- Challenges experienced by health professionals that hinder the facilitation of a wellness program in the state health facilities
- The need for a wellness program in the state health facilities in Namibia

#### 8.7.3 Book and chapters

The researcher proposes to convert this dissertation into a book or chapter that will include:

- Background of wellness program
- Practice of wellness program in the workplace (worldwide, Africa and Namibia)
- Legal framework for wellness program and practice (international and national)
- Development of a model to facilitate psychosocial, physical and personal environment.
- Development of guidelines to operationalize the model

## 8.8 SUMMARY OF THE CHAPTER

This chapter presented the purpose and conclusions of the study. The conclusions were based on the five research questions of the study and the four steps of Theory generation by Chin and Kramer (64). Furthermore, this chapter described the contribution of the study to new knowledge, including identification of challenges experienced by health professional that hinder the facilitation of a wellness program, model development and development of guidelines for operationalization of the model. The chapter also discussed the limitations that were experienced during the study including limited sample size, non-returned and delayed collection of questionnaires and limited literature. The recommendations were made to policymakers, the regulatory body, MoHSS, management and training. Recommendations for future research were also presented. Additionally, the proposed channels for dissemination of the findings of the study were described and they include publications, paper presentations and a book or chapters. The researcher believes that the effective implementation of the model will contribute to a well-coordinated and supportive wellness program that addresses the psychosocial, physical and personal needs of health professionals in the state health facilities of Oshikoto Region.

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## ANNEXURE B: PERMISSION LETTER FROM MOHSS



### REPUBLIC OF NAMIBIA

#### *Ministry of Health and Social Services*

Private Bag 13198  
Windhoek  
Namibia

Ministerial Building  
Harvey Street  
Windhoek

Tel: 061 - 203 2562  
Fax: 061 - 222558  
E-mail: hnangombe@gmail.com

#### OFFICE OF THE PERMANENT SECRETARY

**Ref:** 17/3/3 JA

**Enquiries:** Dr. H. Nangombe

**Date:** 08 November 2017

**Ms. Julia Amadhila**  
P.O. Box 2240  
Ondangwa  
Namibia

Dear Ms. Amadhila

**Re: Perceptions of Health Professionals on wellness in the Health Facilities of Oshikoto Region: Development of a model for Health Professionals to facilitate the wellness program in the Health Facilities in Oshikoto Region, Namibia.**

1. Reference is made to your application to conduct the above-mentioned study.
2. The proposal has been evaluated and found to have merit.
3. **Kindly be informed that permission to conduct the study has been granted under the following conditions:**
  - 3.1 The data to be collected must only be used for operational purposes;
  - 3.2 No other data should be collected other than the data stated in the proposal;
  - 3.3 Stipulated ethical considerations in the protocol related to the protection of Human Subjects' should be observed and adhered to, any violation thereof will lead to termination of the study at any stage;

- 3.4 A quarterly report to be submitted to the Ministry's Research Unit;
- 3.5 Preliminary findings to be submitted upon completion of the study;
  
- 3.6 Final report to be submitted upon completion of the study;
- 3.7 Separate permission should be sought from the Ministry of Health and Social Services for the publication of the findings.

Yours sincerely,



Andreas Mwoonhola (Dr)  
Permanent Secretary



*"Health for All"*

ANNEXURE C: PERMISSION LETTER FROM OSHIKOTO REGIONAL

DIRECTOR




P.O.Box 2240

Ondangwa

13 December 2017

The Regional Director  
Ministry of Health and Social Services  
Oshikoto Region

Dear Sir

SMOS x 3 districts  
Allow the applicant to  
conduct research as approval  
was granted by PS  
 18.12.2017

**Re: Request for permission to conduct research at Intermediate Hospital  
Onandjokwe, Omuthiya and Tsumeb district hospitals, Oshikoto region.**

I am Julia Amadhila, doing a Doctor of Philosophy (PHD) in Public Health at the University of Namibia under the supervision of Dr. Amukugo Hans, Dr. Hedimbi Marius and Dr. Shifiona Ndapeua Nehale. I hereby wish to request a permission to conduct a research to meet the requirements for the above mentioned degree.

The Title of the study: *Perceptions of health professionals on wellness in the health facilities of Oshikoto region, Namibia: A model to facilitate the development of a wellness program in the health facilities of Oshikoto region, Namibia.*

The purpose of the study is to explore and describe the perceptions of health professionals with regard to employees' wellness for the development of a model to facilitate the development of a wellness program in the health facilities of Oshikoto region in Namibia and to formulate guidelines to implement such model.

The result of the study will be used to develop a model to facilitate the development of a wellness program in the health facilities of Oshikoto region. A model will also guide the policy makers in the Office of the prime Minister as well as Ministry of Health and Social Services to formulate the wellness policy and to establish the wellness programs in other health facilities in Namibia. A wellness program will be necessary to improve employees' well-being, increase productivity and efficiency, thus lower health care costs.

The proposal is already approved by the University of Namibia and by the Ministry of Health and Social Services.

Enclosed, please find the following documents:

- Approval letter from the Ministry of Health and Social Services and
- Ethical clearance from the University of Namibia

ANNEXURE D: PERMISSION LETTER FROM THE MEDICAL SUPERINTENDED

OF IHO

9-0/0001



**REPUBLIC OF NAMIBIA**  
*Ministry of Health and Social Services*

Private Bag X5501  
OSHAKATI

Tel: + 264 65 2233000  
Fax: + 264 65 221390/224564

**INTERMEDIATE HOSPITAL OSHAKATI**

Enq: Dr A Kibandwa

2 January 2019

TO: Ms Julia Amadhila  
Cell: +264 81 2867126  
Email: [jamadhila@unam.na](mailto:jamadhila@unam.na)

**AUTHORIZATION TO CONDUCT RESEARCH STUDY.**

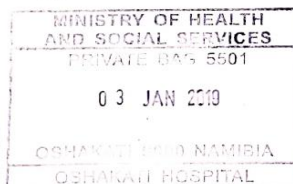
This is to inform you that your request to conduct a research study in Oshakati State Hospital have been approved.

Kindly be informed that confidentiality of the patient information seen during your research must be observed, in case of breach of confidentiality you will be charged by the Medical and Dental Council of Namibia Regulation Act.

We wish you all the best during your research.

Yours Sincerely

  
**DR K V AMUTENYA**  
ACTING MEDICAL SUPERINTENDENT



*"Your Health, Our Concern"*

Scanned with CamScanner

ANNEXURE E: CHECKLIST FOR ASSESSING HEALTH FACILITIES

**STRUCTURED OBSERVATION CHECKLIST TO ASSESS THE HEALTH FACILITIES REGARDING THE FACILITATION OF WELLNESS PROGRAM.**

A.	<b>HEALTH FACILITIES DEMOGRAPHIC DATA</b>			
1.	Name of health facility: .....			
2.	District: .....			
3.	<b>Number of health professionals:</b>  Doctors: .....  Nurses: .....  Others: .....			
<b>Questions</b>				
<b>B.</b>	<b>OFFERING / PROVISION OF WELLNESS</b>		<b>YES</b>	<b>NO</b>
4.	Does the hospital currently have a wellness program?			
5.	Does the hospital have other initiatives to improve well-being for health professionals?			
6.	Is there a focal person leading the wellness activities in the hospital?			
7.	In the last 12 months, has your hospital provided education and resources for healthy living?			
8.	In the last 12 months, has your hospital offered an onsite screening for any of the following? Choose all that are applicable.			
8.1	Blood pressure			
8.2	Blood sugar			
8.3	Cholesterol			
8.4	Body mass index (BMI)			

8.5	Does the hospital serve deep fried products either in the cafeteria or to patients?		
<b>C.</b>	<b>POLICIES AND ENVIRONMENTAL SUPPORT</b>		
9.	Are there written wellness policies in the hospital e.g. food policy, physical activity policy, tobacco policy, stress management policy, Weight management policy,		
10.	Does your hospital have Employee Assistance programs? E.G. Stress management, time management, controlling anger /emotions, wellness education and awareness.		
11.	Does your hospital have fitness programs? E.g. worksite recreation (e.g. volleyball), presentations on physical activity, fitness lunch?		
12.	Does it have immunization programs for health professionals? E.g. flu shots, tetanus shots, Hepatitis B vaccine		
13.	Are there any Educational programs i.e. Cancer prevention, managing chronic pain, managing chronic conditions?		
14.	Are there any Nutrition education programs, i.e. weight management, healthy eating, healthy cooking?		
<b>D.</b>	<b>COMMUNICATION</b>		
15.	Does the hospital post signs promote healthy choices?		
16.	Does the hospital post nutritional information about the food it serves?		
17.	Does your hospital use any of the following methods to communicate worksite wellness to its employees? Choose all that apply.		
17.1	Bulletin boards		
17.2	Emails		
17.3	Direct mailing		
17.4	Flyers		
17.5	Meetings		
18.	Does your hospital disseminate worksite wellness information regularly?		

ANNEXURE F: HEALTH PROFESSIONALS QUESTIONNAIRE

**QUESTIONNAIRE FOR DESCRIBING THE KNOWLEDGE, PRACTICES AND EXPERIENCES OF HEALTH PROFESSIONALS REGARDING FACILITATION OF WELLNESS PROGRAM IN THE HEALTH FACILITY.**

Identification code: .....

Health facility name: .....

District: .....

**SECTION A: DEMOGRAPHIC DATA**

No.	Question	Coding category		
1.	Gender	Male		1
		Female		2
2.	Age	20 - 29		1
		30 - 39		2
		40 - 49		3
		50+		4
3.	Marital status	Unmarried		1
		Married		2
		Divorced		3
		Widow [Female]		4
		Widower [Male]		5
4.	Rank / Position	.....		
5.	Department / Unit	.....		
6.	Years of working experience			
		1 to 5 years		1
		6 to 10 years		2
		11 and above		3

**OBJECTIVE:** Explore and describe health professionals' knowledge, practices and experiences regarding workplace wellness.

Please indicate the extent of your agreement / disagreement with each one of the following statements by ticking (x). Choose the number of your responses as follow: Strongly agree (5), Agree (4), Unsure (3), Disagree (2), Strongly disagree (1)

**SECTION B: KNOWLEDGE ON WELLNESS PROGRAM**

No.	Statement	Level of agreement				
		5	4	3	2	1
7.	Wellness refers to physical and emotional health only					
8.	Workplace wellness is education and activities that a worksite may do to promote healthy lifestyles to employees and their families.					
9.	Wellness programs are key components to the health and well-being of employees.					
10.	The core of wellness program is physical activity, nutrition and stress.					
11.	Workplace wellness programs decrease healthcare costs and increase productivity.					
12.	A successful worksite wellness program needs leadership support.					
13.	Poor nutrition and physical inactivity increase the risk of metabolic diseases and musculoskeletal diseases.					
14.	Poor health consequently impact on work performance					
15.	High levels of stress result in lower levels of professional performance.					
16.	There is a relationship between high workload, staff shortage and job dissatisfaction.					

**SECTION C: HEALTH PROFESSIONALS' PRACTICES REGARDING FACILITATION OF WELLNESS PROGRAM.**

Please indicate the extent of your agreement/disagreement with each one of the following statements by ticking (x), choose the number of your responses as follow: Strongly agree (5), Agree (4), Unsure (3), Disagree (2), Strongly disagree (1)

No.	Statement	Level of agreement				
		5	4	3	2	1
<b>17</b>	<b>Current nutritional status:</b>					
17.1	I eat breakfast every day.					
17.2	I don't eat fruits and vegetables regularly.					
18.3	I have been eating fruits and vegetables every day for the last 6 months.					
17.4	I don't cook, eat or purchase low-fat food.					
17.5	I have been cooking, eating and purchasing low-fat food every day for the past 6 months.					
17.6	I don't cook, eat or purchase whole grain foods.					
17.7	I have been cooking, eating and purchasing whole grain foods every day for the past 6 months.					
17.8	I buy snacks / fast food from the cafeteria for lunch most of the time.					

18.	<b>Current level of physical &amp; emotional activity and health habits:</b>					
18.1	I don't exercise or walk regularly.					
18.2	I have been doing moderate physical activities for at least 20 minutes in two or more days per week.					
18.3	I regularly smoke cigarettes.					
18.4	I have at least three drinks containing alcohol every day.					
18.5	I practice some stress management on a regular basis.					
18.6	I feel fatigued as a result of my current work.					
18.7	I am satisfied with my work.					
18.8	I often find my work stressful.					
18.9	In general I would say my health is good.					
18.10	The demand of my work interferes with my family life.					

**19. Please indicate whether or not you have had the following health screening/ examination / preventive measures in the past 12 months:**

No.		Yes	No
19.1	Blood pressure		
19.2	Blood sugar		
19.3	Cholesterol		
19.4	Electrocardiogram (ECG)		
19.5	Prostate examination		
19.6	Mammogram		
19.7	Pap smear		
19.8	Body mass index (BMI)		
19.9	Flu Shots		
19.10	Hepatitis B vaccine		

**SECTION D: HEALTH PROFESSIONALS' EXPERIENCES REGARDING FACILITATION OF WELLNESS PROGRAM.**

**Please indicate the extent of your agreement/disagreement with each one of the following statements by ticking (x), choose the number of your responses as follow: Strongly agree (5), Agree (4), Unsure (3), Disagree (2), Strongly disagree (1)**

No.	Statement	Level of agreement				
		5	4	3	2	1
20.	Our employer cares about our health and wellness because the following are offered:					
20.1	Diseases education program					
20.2	Nutrition education program					
20.3	Work stress management session					
20.4	Financial management session					
20.5	Worksite fitness program					
20.5	Immunization program					
20.6	Time management session					
21.	<b>Experience in management support:</b>					
21.1	Our management is concerned about the wellness of health professionals and considered as a high priority.					
21.2	Management members serve as role models for healthy lifestyles.					
21.3	The relationship between management and subordinates is quite good in our health facility.					

21.4	The management frequently does things to demonstrate that they value subordinates.					
21.5	I am encouraged to take work breaks as allowed in my job description.					
21.6	I am encouraged to take adequate time for lunch away from my work.					
21.7	We are encouraged to balance work and home life.					
21.8	Health professionals who work extra hours are not seen as “harder-working” employees than those who work regular hours.					
	<b>Please rate your interests in the following workplace wellness programs, choose the number of your response as follow: Very high (5), High (4), Unsure (3), Low (2) and Very low (1)</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
<b>22</b>	<b>Educational programs:</b>					
22.1	Cancer prevention					
22.2	Heart disease prevention					
22.3	Cholesterol reduction					
22.4	Cold/flu prevention					
22.5	Managing chronic health conditions (e.g. diabetes, hypertension)					
22.6	Managing chronic pain (e.g. back injuries)					
<b>23</b>	<b>Employee assistance programs:</b>					
23.1	Work stress management					
23.2	Financial management					
23.3	Controlling anger/emotions					
<b>24</b>	<b>Fitness programs:</b>					
24.1	Worksite recreation (volleyball, netball, soccer)					
24.2	Attending regular presentations on physical activity topics					
24.3	Walk-fit-program					
<b>25</b>	<b>Immunization programs:</b>					
25.1	Flu Shots					
25.2	Hepatitis B vaccine					
<b>26</b>	<b>Nutrition Education program:</b>					
26.1	Healthy cooking					
26.2	Healthy eating					
26.3	Weight management programs(diet & exercise)					
26.4	Attending regular presentations on nutrition topics					
<b>27</b>	<b>Screening programs:</b>					
27.1	Stress reduction programs					
27.2	Smoking cessation programs					
27.3	Time management programs					

28. Give any other suggestions or interests on what you would like to see in your hospital that could improve the well-being of health professionals?

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**THANK YOU FOR YOUR TIME**

## ANNEXURE G: INTERVIEW GUIDE

### INTERVIEW GUIDE FOR HEALTH PROFESSIONAL MANAGERS ON THEIR PERCEPTIONS REGARDING FACILITATION OF WELLNESS PROGRAM FOR HEALTH PROFESSIONALS IN THEIR HEALTH FACILITIES.

#### **Welcome**

Thank you for agreeing to participate in the interview. I appreciate your willingness to participate. I am very much interested to hear your valuable opinion on your perception regarding the provision of wellness in your hospital.

#### **Introduction**

My name is Julia Amadhila, a Ph.D. student, registered at the University of Namibia. I will be interviewing you.

#### **Purpose of the interview**

The purpose of this interview is to determine your perceptions regarding workplace wellness for health professionals in your hospital. Your opinion will help the researcher to develop a model that facilitates the development of a wellness program in your hospital. I hope to learn more things that your hospital does/does not do to promote health professionals' well-being.

#### **Main question**

*What is your perception regarding facilitation of wellness program for health professionals in the hospital?*

#### **Probing questions**

1. How do you understand the concept workplace wellness?
2. Is there a wellness program that promotes well-being among health professionals in the hospital?
3. If yes, what wellness activities/sessions offered in the hospital to promote well-being among health professionals?
4. If no, what is currently done to meet the wellness needs of health professionals in the hospital?
5. Is there a focal person leading the wellness activities in the hospital? In your opinion, do you think what is done / offered is enough to meet wellness needs and promote health among health professionals?
6. What are the challenges towards effective facilitation of wellness program for health professionals in the hospital?
7. What do you think can be done to promote / improve the well-being of health professionals in the hospital?

## ANNEXURE H: CONSENT FORM FOR QUANTITATIVE STUDY

Dear Participants,

My name is Julia Amadhila, student no. 9205179 a PhD student, registered at the Faculty of Health Sciences, School of Public Health - University of Namibia. I am conducting a research on facilitation of wellness program.

Workplace wellness is any workplace health promotion activity or organizational policy designed to support healthy behavior in the workplace and to improve health outcomes. This questionnaire is aimed at determining your knowledge, practices and experiences regarding the facilitation of wellness program at your health facility.

Please be assured that all your responses will be kept strictly confidential, as the researcher will administer the questionnaires and collect them herself. This questionnaire does not require your name or identity. Participation in this study is voluntary, and a refusal to participate will not impose any penalty.

Please answer the questions to the best of your ability and as truthfully as possible. Your responses will assist the researcher in developing a model to facilitate wellness program in your health facility. There are no right or wrong answers in this study. A researcher is available to help you fill the questionnaire if need be and to collect completed questionnaires.

Please indicate your responses to all the questions by marking with “x” in the blocks that you feel are the most appropriate.

Participant signature: ..... Date: .....

By signing in the space above, you agree that you have read and agree to participate in this study.

## ANNEXURE I: CONSENT FORM FOR QUALITATIVE STUDY

### **Consent Form to participate in interview**

My name is Julia Amadhila, a PhD student at the University of Namibia (UNAM), student number: 9205179. You are being asked to participate in an interview. The purpose of this interview is to determine your perception regarding facilitation of wellness program in the health facility. The information gathered will help the Ministry of Health and Social Services to improve well-being of health professionals in the health facilities.

You can choose whether or not to participate in the interview and stop at any time. Although the interview will be audio recorded, your responses will remain anonymous and no names will be mentioned in the report and the audios will be destroyed as soon as they are transcribed.

There are no right or wrong answers to the interview questions. I want to hear your honest viewpoints. You can always contact these phone numbers: +264 65 2232292 or 0812867126, should you have any questions after we have completed the interview.

I understand this information and agree to participate fully under the conditions stated above:

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

## ANNEXURE J: INDIVIDUAL INTERVIEW TRANSCRIPTION

### INDIVIDUAL INTERVIEW TRANSCRIPTION

PLACE: TSUMEB. HOSPITAL

DATE: 13.02.2019

DURATION: 22 MINUTES 23 SECONDS

PARTICIPANT: PMO

Interviewer: The main question for the study is “what is your perception with regard to facilitation of wellness program for health professionals in the hospital?”

Participant: Ok, mhh, if you have ...a...sick work force you cannot be productive. So you need to have a health team work force. Eehm, you know the ...yes there are policies that are not really strengthened when it comes to the wellness of a healthcare workers, probably because of the pressure, that one is looking at patient, patient only and forgetting that there's people who are rendering care, and they are human beings, they need to be taken care of and the leaders of today, put in the conducive environment that they can be more productive. So, wellness for healthcare workers is an important concept, as a manager myself yes at one... but it could not work, just because of the structure itself. Yeah

Interviewer: Ok! You said as a manager you tried to bring in something...can you explain more on that one?

Participant: You know, I was looking at the working environment, at least the staff at least their fitness because if you talk about wellness it is not just the physical, it is the mental and the physical. So, if you combine the two, yes you have a whole human being that will be productive. But when it comes to physical wellness, most of the time people are just on duty at work, so they don't have time even to exercise for themselves. And they don't have time to socialize, even to talk to share. If you look at the structure where we are currently, so when you enter 6h45 for the nurses, it has ...that 19h00 they go out with a breaking between of lunch, but in between the tea break, there's no tea break,

because during the tea break someone can see they can exchange, and just to recover from the first part of work and ...but it is not there.

Ok, the mental one that's when they are resting, the physical, at least the exercise, I try to ask staff in the department, at least to make use of our rehabilitation centre, just even to exercise for 30 minutes, few of them tried but it didn't work x2.

Yeah, but if you look at this, the system itself, if you look at other companies you will find people will come...

But in other areas you find, people come 7 o'clock they go through exercise they take a shower, they start working they are at least fit ready, then people will have time, they can sit watching even a movie, talking about the environment they work and what is being done elsewhere, from there you can learn and then you x3 have taken this visual memory whereby you learn something. It remains in your mind and if you start performing even if you were negative towards some new concepts brought in a system, you'll find that you open up because of what now you've learned.... But if you come in and say no we need to do A B C, the first is, it will not work. Why? Because people, they are just coming, for them is just work, but they don't have time at least to relax, so that they can recover and then to look at what is happening elsewhere. Yeah!

Interviewer: Ok! If I have to ask you to summarise the concept, how do you understand the concept itself, workplace wellness.

Participant: Workplace wellness, this is an environment that is created so that physically, mentally a worker should be able to be productive but at the same time to benefit from that environment and to be productive. Yes

Interviewer: Ok, is there a wellness program, that promotes the well-being among health professionals in your hospital?

Participant: As I said the x3, we try to come up with something, but it did not work as I said. You know, if you look at the wellness when it comes to the Ministry [of Health and Social Services] there should be policy at work, it is part of wellness. But they are just looking at one concept, you know if you have a virus or you don't have a virus then you are fit. But then fitness is not just when you have a virus. One can have a virus but

then you fairly fit if mentally and physically the person is strong, but one cannot have a virus and weakened by the work the person is performing. If you are [working]7-7 for a week, you get tired, mentally and physically, so your performance will be... and that person will not even...by the time that person reaches 60 years it is a finished person. You will not be strong enough, you see there are areas where people are really taking that concept into consideration. You find someone 65 years still strong, they are still performing, but you have some staff here, one he/she reaches 65 you look at the person you think it is a very old person...because they were not taken care of and that concept was not really utilized and people take just to work x3.

Interviewer: Hmm, ok, in the absence of the wellness program in the hospital, currently, what do you do as the hospital or as a health facility, what do you do to promote the well-being among the health professionals?

Participant: It is a bit difficult that one. What I have been...when I came here, I found there were staff, working throughout, no leave nothing. The only leave that they will get is a sick leave, so I made sure that every person should get at least 25 days in a year, annual leave. Regardless of whatever you may tell us, as management we will find a way out if you are not there. Some people will say, no I am alone in the department and so on and so forth, I cannot go on leave. But at the end of the day someone cannot work 365 days and then you expect that person to be [not well]...and then you find that person, someone working like that. .If you go into the record, you'll find that those are people who are booked off most of the time, just because they are tired. They are...you know, they can even get paid out because of...now...what is there is we said everyone should at least go on leave. Then, we x3...we trying to push but it is a little bit difficult but we were trying to...especially the nurses, doctors we cannot even talk about it. Where people are working straight shifts for days, it is tiresome, I have seen people walking around here, [and] you see that this person is tired. And that is why a lot of mistakes come in, when someone is not fit mentally and physically, they make a lot of mistakes. But it will just a...the body that is there that you can see, but mentally there is nothing, so that is one. The story of exercising, I've tried but up to now, you know people are not buying it, because it is not in the mentality. And this is a new concept by the way, you find in the

big companies, this is what is happening now. But for us here, it is not yet there and people are not easily buying it.

Yes sometime[s] you know, I picked at a time, where people, [when they] need some money you find some nurses doing night duty, but is not fit because you can be in night duty for 3 months it is fine but not beyond that. Because it puts the person in danger, this is a married person, this is someone who is in relationship. If you do your night duty for more than 3 months, what are you expecting your partner is doing [to do] there? Because when you get... your partner will not wait for someone because you are...[working]. But at the same time, it is the system also, when they need money, they have to work a night shift, they kept more their need then just to work in day shifts. I picked some of these issues, I stopped I say no, 3 months it is enough,... should come out of a night shift.

You know, those are ...intervention[s] that are coming if you have done...but what is needed...yes we have talked about it but at the same time the structure does not allow that. Why am I saying this? You know the interpretation of policies it is different. For some people, if they see ...doctor that is not there for 30 minutes it becomes a problem, people will ...and people working in fear you know, like if they are being monitored by others so they have just to be there, regardless whether productive or not just to be there.

Now the other problem is the staff establishment, it is not allowing...if we were well staffed and fully staffed, you find that yes people will be getting their days off they can travel, they can do their thing but now because of the structure that is really putting us under pressure, then it is a bit difficult. But...interventions here and there but it is something that we know about and we think it should be introduced in the system. Where people should have some time of free...where they have to be someone, just...with companies...weekend the staff can be out there just to share, socializing. It brings another environment, another aspect to life and you will find that when people come back they have a different environment, even relaxed...so it...that.

Interviewer: Hm, now having said that, you have said you tried the interventions that you tried to put in place, when you introduced some interventions then some failed, some worked. Did you try to make the health professionals aware about the interventions and do you have a focal person or was it yourself who was leading these interventions?

Participant: Mhh! I went through also the head of department, so that they could, they encourage that, but like I said that it is a concept, you know I did not have such a focal person to say...but I was expecting the head of department to take it up and encourage the staff in the department to do that, it is something new and...

Interviewer: In your opinion, do you think what is in place now, what you tried, the interventions that were successfully and some were not, do you think it is enough to meet the wellness needs of health professionals in the hospital?

Participants: No, it is not enough, because it is not fully implemented. But I think if it was fully implemented and if there was a revision on the staff establishment, it may bring a plus to the wellness of the staff, yes,

Interviewer: Hmm, you have mentioned some challenges, staff establishment, the structure of the hospital, what are the other challenges do you think maybe preventing the effective promotion of the wellness of the staff.

Participant: The structure itself, we as a hospital we don't have the resource center, that is one, you cannot have a sit to read, you know sometime you cannot read in your office. There will be people coming, you cannot read in the ward, so there should be a resource center where someone can go sit and read, [and] we don't have that one.

Secondly, there's no tea room. So, that is the infrastructure, the structure itself really it is not allowing a number of things also, yeah.

Interviewer: Hmm, Ok. Now what do you think can be done to promote the /or to improve the well-being of the health professionals.

Participant: This concept should come also from up there. This is a Ministry [of Health and Social Services], so if they can introduce a clear policy from up there. Because, you know sometime these things are failing when people look at it and say no, this is ... and they try to identify the person that bring in the idea, that idea. When they will say no this is "XX" [X]'s story. So those who are open to you they may buy it, but those who are oppose to you they will oppose it, even if it is a good thing.

Yeah, if it comes from up there at the Ministry, ok, for the sake of our workforce, we should introduce the wellness [program]of the staff in the system, and then I think it will work that way, yeah.

R: Hmm. Let me take you back before we end our interview session. In case, may be you mentioned about burnout, stress among health professionals, how do you identify and how do you deal with health professionals, whenever you identify there is something like that, among them, among the health professionals?

Participant: Yeah, what I ... personally what I do, if I pick up a thing I will not go to the staff straight. I will go through the supervisor, the head of that division, say ok I have noticed such and such thing happening in such and such staff, [and] can we-address that one?

So, those who are... as I said those you see that are really tired and burnout. We give them enough room, for them to rest, we look after the whole program. Was the person on leave when was the last person was on leave? If the person was not on leave, we force that person to go on leave then you look at, how many sick leaves that person has taken and this can be due to that...

Or I 'll give you an example, there is a cleaner that we are using as a driver, and is a very committed person, he cannot refuse any order, you see you say, can you drive [to] Oshakati he will go, come back late, now there's a patient you need to take to Windhoek, he will go. He comes back and ...Now picked one thing...involved in accident so you see that this is a person that is tired besides that commission I don't want to mention it here, but what I said to the head of department and said this person, for the next 3 months, let him concentrate on cleaning. Don't use him as a driver anymore, so that he can recover, and once he recovers I don't want him to be misused, because that was a misuse because other drivers, you know they will come up with excuses and say no I am not feeling well and then he will step in, no there are people employed as drivers and they have to do their work. These are just people who are helping, because of the shortage...So these are some of the interventions.

Then those you see that this one is stressed, you look at, ok, I have identified for the hospital one Doctor to be attending to the staff. So that we don't get sick leave(s) left and right and it will affect the running of the institution. Then we may be advising, can you

see the colleague, if you are not confident with the colleague for any reason, can you see me, if you are not confident with me can you see your private practitioner? Where you usually go, so that they attend to you. And then from there we see what happen next.

Interviewer: Hmm. In other words, you identify and then you refer them, based on their choices?

Participant: Choices yes

Interviewer: Hmm, Ok, incase if you happen to have a wellness program in this hospital, what activities do you think/do you consider that need to be included in such program?

Participant: We need to divide things, cause the wellness of a human being is a tripartite being, is it? There is a physical aspect, there is a spiritual aspect and there is an emotional aspect. So if you take care of those three then it will be fine...and exercise, no emotional, you look at how people can socialize within and outside...and then spiritual, you know I have been talking to some staff ... you know some people come weekend...people that they come they...even go to church, can you take, because it x3...we are in the system, they try to pretend like God is not there and it is a reality. If you are not in the relationship with God also, you will be affected spiritually, because this is a different world... so if people can understand that they try to put harmony between those three and then someone will leave a life, it is not a perfect life, because none is perfect...But at least a balanced life whereby someone can take things easy you say when someone is leaving under stress, it is just a matter of small problem and then you make it a very big. You hear the voice on top of the roof there and... but if someone is fit, you will have time even to reflect on things, yeah.

Interviewer: That brought us to the end of our interview session. Let me thank you once again for your opinion and for your time.

Participant: Thank you.

ANNEXURE K: CROSS TAB, ORDINARY REGRESSION AND CHI-SQUARE

TABLES

Table 4.8 Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	Degrees of freedom	p-value
Intercept Only	422.184			
<b>Final</b>	<b>401.253</b>	<b>20.931</b>	<b>11</b>	<b>0.034</b>

Link function: Logit.

Table 4.9 Goodness-of-Fit

	Chi-Square	Degrees of freedom	p-value
<b>Pearson</b>	<b>413.812</b>	<b>373</b>	<b>0.071</b>
<b>Deviance</b>	<b>336.810</b>	<b>373</b>	<b>0.911</b>

Link function: Logit.

Table 4.10 Association between knowledge on wellness and age, gender, marital status and department.

Parameter Estimates

		Estimate	Std. Error	Wald	df	p-value	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[SECT_B_KQ7 = 1]	1.534	1.646	0.869	1	0.351	-1.692	4.760
	[SECT_B_KQ7 = 2]	2.256	1.651	1.867	1	0.172	-0.980	5.493
	[SECT_B_KQ7 = 3]	3.105	1.657	3.512	1	0.061	-0.142	6.353
Location	<b>[SECT_B_KQ7 = 50-59]</b>	<b>4.459</b>	<b>1.668</b>	<b>7.144</b>	<b>1</b>	<b>0.008</b>	<b>1.189</b>	<b>7.729</b>
	Age 20-29, 30-39, 40-49	-0.429	0.253	2.862	1	0.091	-0.925	0.068
	Years_of_working_experience	0.245	0.172	2.026	1	0.155	-0.092	0.582
	<b>Male</b>	<b>0.975</b>	<b>0.412</b>	<b>5.603</b>	<b>1</b>	<b>0.018</b>	<b>0.168</b>	<b>1.782</b>
	[Marital_status=married]	1.349	1.358	0.987	1	0.321	-1.313	4.012
	[Marital_status=unmarried]	1.646	1.322	1.552	1	0.213	-0.944	4.236
	<b>[Marital_status=Divorce]</b>	<b>3.575</b>	<b>1.728</b>	<b>4.282</b>	<b>1</b>	<b>0.039</b>	<b>0.189</b>	<b>6.961</b>
	[Rank=1] Nurses	0.416	0.530	0.616	1	0.432	-0.622	1.454
	[Rank=2] Doctors	0.070	0.527	0.018	1	0.894	-0.963	1.104
	[Department=1]	1.059	0.699	2.296	1	0.130	-0.311	2.429
[Department=2]	0.851	0.681	1.558	1	0.212	-0.485	2.186	
<b>[Department=Maternity]</b>	<b>1.806</b>	<b>0.744</b>	<b>5.897</b>	<b>1</b>	<b>0.015</b>	<b>0.348</b>	<b>3.263</b>	

Link function: Logit.

**Table 4.11 Cross Tabulation between the department and level of agreement on workplace wellness**

			DEPART		Total
			Outpatient	Inpatient	
Workplace wellness is education and activities that a worksite may do to promote healthy lifestyles to employees and their families	Strongly disagree	Observed frequency	7	27	34
		Expected Frequency	12.0	22.0	34.0
		% within Workplace wellness is education and activities that a worksite may do to promote healthy lifestyles to employees and their families	20.6%	79.4%	100.0%
		% within DEPART	12.1%	25.5%	20.7%
		% of Total	4.3%	16.5%	20.7%
	Disagree	Observed frequency	7	18	25
		Expected frequency	8.8	16.2	25.0
		% within Workplace wellness is education and activities that a worksite may do to promote healthy lifestyles to employees and their families	28.0%	72.0%	100.0%
		% within DEPART	12.1%	17.0%	15.2%
		% of Total	4.3%	11.0%	15.2%
Unsure	Observed frequency	8	13	21	
	Expected frequency	7.4	13.6	21.0	
	% within Workplace wellness is education and activities that a worksite may do to promote healthy lifestyles to employees and their families	38.1%	61.9%	100.0%	
	% within DEPART	13.8%	12.3%	12.8%	
	% of Total	4.9%	7.9%	12.8%	
Agree	Observed frequency	25	31	56	

	Expected frequency	19.8	36.2	56.0
	% within Workplace wellness is education and activities that a worksite may do to promote healthy lifestyles to employees and their families	44.6%	55.4%	100.0%
	% within DEPART	43.1%	29.2%	34.1%
	% of Total	15.2%	18.9%	34.1%
Strongly agree	Observed frequency	11	17	28
	Expected frequency	9.9	18.1	28.0
	% within Workplace wellness is education and activities that a worksite may do to promote healthy lifestyles to employees and their families	39.3%	60.7%	100.0%
	% within DEPART	19.0%	16.0%	17.1%
	% of Total	6.7%	10.4%	17.1%
Total	Observed frequency	58	106	164
	Expected frequency	58.0	106.0	164.0
	% within Workplace wellness is education and activities that a worksite may do to promote healthy lifestyles to employees and their families	35.4%	64.6%	100.0%
	% within DEPART	100.0%	100.0%	100.0%
	% of Total	35.4%	64.6%	100.0%

**Table 4.12 Results of the Chi-Square Tests between the department and level of agreement on workplace wellness**

Chi-square test	Chi-square value	Degrees of freedom	Asymptotic Significant p-value (2-sided)
Pearson Chi-Square	6.207	4	0.184
Likelihood Ratio	6.454	4	0.168
Linear-by-Linear Association	4.946	1	0.026

Table 4.13 Cross tabulation between age and level of agreement on workplace wellness

			Age			Total
			20 -29	30 -39	40+	
Workplace wellness is education and activities that a worksite may do to promote healthy lifestyles to employees and their families	Strongly disagree	Observed frequency	13	12	9	34
		Expected frequency	8.5	14.3	11.2	34.0
		% within Workplace wellness is education and activities that a worksite may do to promote healthy lifestyles to employees and their families	38.2%	35.3%	26.5%	100.0%
		% within Age	31.7%	17.4%	16.7%	20.7%
		% of Total	7.9%	7.3%	5.5%	20.7%
	Disagree	Observed frequency	8	14	3	25
		Expected frequency	6.3	10.5	8.2	25.0
		% within Workplace wellness is education and activities that a worksite may do to promote healthy lifestyles to employees and their families	32.0%	56.0%	12.0%	100.0%
		% within Age	19.5%	20.3%	5.6%	15.2%
		% of Total	4.9%	8.5%	1.8%	15.2%
	Unsure	Observed frequency	4	8	9	21
		Expected frequency	5.3	8.8	6.9	21.0
		% within Workplace wellness is education and activities that a worksite may do to promote healthy lifestyles to employees and their families	19.0%	38.1%	42.9%	100.0%
		% within Age	9.8%	11.6%	16.7%	12.8%
		% of Total	2.4%	4.9%	5.5%	12.8%
	Agree	Observed frequency	8	27	21	56
		Expected frequency	14.0	23.6	18.4	56.0
		% within Workplace wellness is education and activities that a worksite may do to promote healthy lifestyles to employees and their families	14.3%	48.2%	37.5%	100.0%
		% within Age	19.5%	39.1%	38.9%	34.1%
		% of Total	4.9%	16.5%	12.8%	34.1%
Strongly agree	Observed frequency	8	8	12	28	
	Expected-frequency	7.0	11.8	9.2	28.0	
	% within Workplace wellness is education and activities that a worksite may do to promote healthy lifestyles to employees and their families	28.6%	28.6%	42.9%	100.0%	
	% within Age	19.5%	11.6%	22.2%	17.1%	
	% of Total	4.9%	4.9%	7.3%	17.1%	
Total	Observed frequency	41	69	54	164	
	Expected frequency	41.0	69.0	54.0	164.0	
	% within Workplace wellness is education and activities that a worksite may do to promote healthy lifestyles to employees and their families	25.0%	42.1%	32.9%	100.0%	

% within Age	100.0%	100.0%	100.0%	100.0%
% of Total	25.0%	42.1%	32.9%	100.0%

**Table 4.14 Results of Chi-Square tests of association between age and level of agreement on workplace wellness**

Chi-square test	Chi-Square Value	Degrees of freedom	Asymptotic Significant p-value (2-sided)
Pearson Chi-Square	14.781	8	0.064
Likelihood Ratio	15.918	8	0.044
Linear-by-Linear Association	5.604	1	0.018
Sample size	164		

**Tables 4.15 Model Fitting Information**

Model	-2 Log Likelihood	Chi-Square	Degrees of freedom	Significant p-value
Intercept Only	166.390			
<b>Final</b>	<b>151.436</b>	<b>14.954</b>	<b>5</b>	<b>0.011</b>

Link function: Logit.

**Table 4.16 Goodness-of-Fit**

	Chi-Square	Degrees of freedom	Significant p-value
<b>Pearson</b>	<b>155.028</b>	<b>131</b>	<b>0.075</b>
<b>Deviance</b>	<b>89.816</b>	<b>131</b>	<b>0.998</b>

Link function: Logit.

**Table 4.17 Ordinal regression for department recoded and rank**

**Parameter Estimates**

	Estimate	Standard Error	Wald	Degrees of freedom	Significant p-value	95% Confidence Interval	
						Lower Bound	Upper Bound
Threshold [B_KQ16 = 1]	-1.733	0.778	4.957	1	0.026	-3.259	-.207
[B_KQ16 = 2]	-1.343	0.764	3.089	1	0.079	-2.841	.155
[B_KQ16 = 3]	-0.799	0.753	1.127	1	0.288	-2.275	0.676
[B_KQ16 = 4]	0.339	0.747	0.206	1	0.650	-1.125	1.803
Location Age_	-0.330	0.321	1.060	1	0.303	-0.960	.299
Experience_	0.027	0.280	0.009	1	0.924	-0.522	0.575
[DEPART =Outpatient]	<b>1.503</b>	<b>0.448</b>	<b>11.272</b>	<b>1</b>	<b>0.001</b>	<b>0.626</b>	<b>2.380</b>
[DEPART =Inpatient]	0 <sup>a</sup>	.	.	0	.	.	.
[Rank =Nurses]	<b>1.257</b>	<b>0.581</b>	<b>4.675</b>	<b>1</b>	<b>0.031</b>	<b>0.118</b>	<b>2.396</b>
[Rank=Doctors ]	0 <sup>a</sup>	.	.	0	.	.	.
[SECT_A_Gender=1]	-0.300	0.476	0.397	1	0.529	-1.234	.634
[SECT_A_Gender=2]	0 <sup>a</sup>	.	.	0	.	.	.

Link function: Logit.

a. This parameter is set to zero because it is redundant.

**Table 4.20 Cross tabulation on age and categorized practice 2**

CATEGORIZED PRAC 2	Bad Practice	Count	Age_			Total
			20 -29	30 -39	40+	
		Count	11	15	4	30
		Expected Count	7.5	12.6	9.9	30.0
		% within CATEGORIZED PRAC 2	36.7%	50.0%	13.3%	100.0%

	% within Age	26.8%	21.7%	7.4%	18.3%
	% of Total	6.7%	9.1%	2.4%	18.3%
Good Practice	Count	30	54	50	134
	Expected Count	33.5	56.4	44.1	134.0
	% within CATEGORIZED PRACTICE 2	22.4%	40.3%	37.3%	100.0%
	% within Age	73.2%	78.3%	92.6%	81.7%
	% of Total	18.3%	32.9%	30.5%	81.7%
Total	Count	41	69	54	164
	Expected Count	41.0	69.0	54.0	164.0
	% within CATEGORIZED PRACTICE 2	25.0%	42.1%	32.9%	100.0%
	% within Age	100.0%	100.0%	100.0%	100.0%
	% of Total	25.0%	42.1%	32.9%	100.0%

**Table 4.21 Chi-Square Tests of association between age and categorized practice 2**

Chi-Square Tests	Value	Degrees of freedom	Asymptotic Significant p-value (2-sided)
Pearson Chi-Square	6.828	2	0.033
Likelihood Ratio	7.603	2	0.022
Linear-by-Linear Association	6.224	1	0.013
Sample size	164		

**Table 4.22 Ordinal regression on rank as well as gender and categorized practice 2**

Parameter Estimates								
		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[PRACTICE_2 = 7]	-5.601	1.189	22.192	1	<0.001	-7.932	-3.271

Location	[PRACTICE_2 = 8]	-4.476	0.867	26.669	1	<0.001	-6.175	-2.777
	[PRACTICE_2 = 9]	-3.095	0.712	18.907	1	<0.001	-4.490	-1.700
	[PRACTICE_2 = 10]	-1.875	0.663	7.994	1	0.005	-3.174	-0.575
	[PRACTICE_2 = 11]	-1.000	0.648	2.376	1	0.123	-2.270	0.271
	[PRACTICE_2 = 12]	-0.217	0.645	0.114	1	0.736	-1.481	1.047
	[PRACTICE_2 = 13]	0.433	0.647	0.447	1	0.504	-0.835	1.701
	[PRACTICE_2 = 14]	1.479	0.659	5.037	1	0.025	0.187	2.771
	[PRACTICE_2 = 15]	2.392	0.687	12.135	1	<0.001	1.046	3.737
	[PRACTICE_2 = 16]	3.675	0.799	21.157	1	<0.001	2.109	5.242
	[PRACTICE_2 = 17]	5.119	1.182	18.751	1	<0.001	2.802	7.436
	Age_	.332	0.274	1.469	1	0.226	-0.205	0.868
	Experience	.074	0.243	0.092	1	0.761	-0.403	0.551
	[DEPART =1]	.587	0.323	3.291	1	0.070	-0.047	1.221
	[Rank =0]	-1.042	0.499	4.351	1	0.037	-2.020	-0.063
	[Rank =3]	0 <sup>a</sup>	.	.	0	.	.	.
[SECT_A_Gender =1]	-1.710	0.407	17.616	1	<0.001	-2.509	-0.912	

Link function: Logit

**Table 4.23: Model fitting information**

Model	-2 Log Likelihood	Chi-Square	Degrees of freedom	Significant p-value
Intercept Only	366.166			
Final	340.968	25.198	5	<0.001

Link function: Logit.

**Table 4.24 Goodness-of-Fit**

	Chi-Square value	Degrees of freedom	Significant p-value
Pearson	353.013	369	0.717
Deviance	223.216	369	1.000

Link function: Logit.

## ANNEXURE L: CONFIRMATION OF PROFESSIONAL EDITING

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### CONFIRMATION OF PROFESSIONAL EDITING

Date: 15 June 2022

I hereby confirm that I have done comprehensive technical layout and language editing of the following PhD dissertation:

Student: Julia Amadhila (9205179)  
Title: A Model for Health Professionals to Facilitate a Wellness Program in the State Health Facilities of Oshikoto Region, Namibia  
Degree: Doctor of Philosophy in Public Health  
University: University of Namibia

I started my career as a Lecturer in the Department of Communication at the University of Fort Hare and I am an Applied Linguistics specialist with extensive, senior-level writing and editing experience in a broad spectrum of disciplines, including editing of academic dissertations and journal articles.

Kind Regards

A handwritten signature in black ink, appearing to read "Kefilwe Makhanya".

Kefilwe Makhanya  
Editor