



University of KwaZulu-Natal

**Reducing the Brain Drain: Determining factors for turnover of
Medical practitioners at a specialized tertiary institution in
South Africa**

UKZN GSB&L

by

Yakeen Harilall

Student Number: 216073452

**A dissertation submitted in partial fulfilment of the requirements for the degree of Master of
Business Administration**

**College of Law and Management Studies
School of Management, Information Technology and Governance**

Supervisor: Dr. Muhammad Hoque

2017

Declaration

I, Yakeen Harilall declare that:

(i) This research reported in this dissertation, except where otherwise indicated, is my original work.

This dissertation has not been submitted for any degree or examination at any other university.

(ii) This dissertation does not contain other person's data, pictures, graphs or other information, unless specifically acknowledged as being sourced from other persons.

(iii) This dissertation does not contain other person's writing, unless specifically acknowledged as being sourced from other researchers.

Whether other written sources have been quoted, then:

a. Their words have been re-written but the general information attributed to them has been referenced;

b. Where their exact words have been used, their writing has been placed inside quotation marks, and referenced.

(iv) Where I have reproduced a publication or which I am an author, co-author or editor, I have indicated in detail which part of the publication was actually written by myself alone and have fully referenced such publications.

(v) This dissertation does not contain text, graphics or tables copied and pasted from the internet, unless specifically acknowledged, and the source being detailed in the dissertation and in references section.

.....
Y Harilall

Date

College of Law and Management Studies

Supervisors Permission to Submit Thesis/ Dissertation for Examination

Name: Yakeen Harilall		No: 216073452	
Title: Reducing the Brain Drain: Determining factors for turnover of medical practitioners at a specialized tertiary institution in South Africa			
Qualification: Master of Business Administration		School: Graduate School of Business and Leadership	
	Yes	No	
To the best of my knowledge, the thesis/dissertation is primarily the student's own work and the student has acknowledged all reference source	YES		
The English language is of a suitable standard for examination without going for professional editing.	YES		
Turnitin Report %	0%		
Comment if % is over 10%:			
I agree to the submission of this thesis/dissertation for examination	YES		
Supervisors Name: Dr Muhammad Hoque			
Supervisors Signature:			
Date:			
Co- Supervisors Name:			
Co- Supervisors Signature:			
Date:			

Abstract

Medical practitioners form backbone of the health care system in South Africa. The skill of trained medical specialists is imperative for service delivery and the ongoing teaching of registrars at government training facilities. Against a backdrop of inequality, history dictates that a large populace of disadvantaged South Africans remain reliant on government health care institutions for medical treatment. Many departments within the KZN health system have seen an exodus of medical practitioners resulting in the brain drain phenomenon. To address the problem the purpose of the study was to determine the factors affecting high turnover of medical practitioners within the departments of Cardiothoracic Surgery and Anaesthesiology at Inkosi Albert Luthuli Central Hospital which is a specialized tertiary institution in South Africa. This was a cross sectional study conducted among 60 medical practitioners from the departments of Cardiothoracic and Anaesthetics at Inkosi Albert Luthuli Central Hospital using a self-administered questionnaire. The entire population from both departments were selected therefore there was no sampling that was being done with any relevance to a sample size. To gather data, a quantitative study was conducted to deduce findings. Results found that, remuneration within the public health care sector, quality of life, opportunities for training and development, governance in the public health care sector of KwaZulu-Natal and leadership were the main reasons for medical practitioners wanting to leave. The findings can be used to drive further interventions to reduce turnover rates and guide the formulation of policies.

Acknowledgements

It is with profound gratitude and indeed sincerest thanks that I extend my acknowledgements to the individuals that were of support and assistance to me through my MBA journey and completion of this dissertation:

- My appreciation to my supervisor, Dr. Muhammad Hoque, for his sound guidance and mentoring.
- To my MBA group, thanks for the time that we dedicated and strategies that we formulated to get through this course.
- To my kids, Anshul and Ariana who sacrificed weekends without me so that I could accomplish this degree.
- To Charlene, my wife who supported and inspired me throughout the duration of my MBA degree. You offered encouragement when things got tough. Thank you for the care and motivation that kept me going.
- To my parents, Harry and Reena. Thank you for guiding and leading me to achieve greater things in life.

TABLE OF CONTENTS

Declaration	2
Abstract	4
Acknowledgements	5
List of Figures.....	10
List of Tables.....	11
Abbreviations	12
Chapter 1: Overview of the Study	13
1.1. Introduction/Background	13
1.1.1 Background to the study	13
1.2 Focus of the Study	15
1.3 Problem Statement	16
1.4 Purpose of the Study.....	16
1.4.1 Objectives	17
1.4.2 Hypothesis	17
1.5 Motivation to conduct study.....	18
1.6 Significance of Research	18
1.7 Research Methodology	19
1.8 Expected outcome of the study.....	19
1.9 Scope/Delimitations of the study	19
1.10 Limitations/ Anticipated shortcomings	19
1.11 Assumptions	20
1.12 Conclusion	20
Chapter 2: Literature Review.....	21
2.1 Introduction	21
2.2 Theoretical Foundation	23
2.3 Employee Turnover Defined	25
2.4 Human Resource Management	26
2.5 Work related factors.....	27
2.6 Causes of staff turnover	28
2.6.1 Remuneration	28
2.6.1.1 Other Remunerative Work	29
2.6.2 Benefits.....	30
2.6.3 Advancement.....	31

2.6.4 Performance Management	31
2.6.5 Environment of Employment.....	32
2.6.5.1 Governance	33
2.6.5.2 Expenditure / Budgets.....	35
2.6.5.3 Equipment & Resources	36
2.6.6 Work Processes.....	37
2.6.7 Dissatisfaction and Work Stress	37
2.6.8 Managerial Role.....	39
2.6.9 Retention of Staff	40
2.6.9.1 Motivation	41
2.6.9.2 Recognition and Accomplishment.....	42
2. 7 Organisational factors including Culture	42
2.8 Economic factors	43
2.9 Leadership and Supervision.....	44
2.10 Training and Development	45
2.11 Job Expectation and Satisfaction	47
2.12 Reputation of Organisations and prospects of NHI	48
2.13 Unionisation	49
2.14 Quality of life	49
2.15 Retention Strategy	52
2.16 Conclusion	53
2.16.1 Summary of Major Contributions of significant studies	53
2.16.2 Major flaws and gaps	53
2.16.3 Need for more research	53
2.16.4 Contribution to or extended knowledge in the area.....	54
Chapter 3	55
Research Methodology	55
3.1 Introduction	55
3.1.1 Research aim and objectives	55
3.2 Research Paradigm	56
3.3 Study Area	56
3.4 Target Population.....	57
3.5 Sampling Techniques	57
3.6 Sample Size	57
3.7 Research Instruments	57

3.8 Instrument Pre-testing.....	58
3.9 Reliability and Validity	58
3.10 Data Collection Methods.....	59
3.11 Data Analysis	59
3.12 Ethical Issues.....	59
3.13 Conceptual Framework and Measurement of Variables	60
3.14 Conclusion	61
Chapter 4	62
Research Analysis & Findings.....	62
4.1 Introduction	62
4.2 Descriptive Statistics	62
4.2.1 Demographics.....	62
4.2.2 Research Construct 1- Remuneration	66
4.2.3 Research Construct 2- Quality of Life	68
4.2.4 Research Construct 3- Leadership within Departments.....	71
4.2.5 Research Construct 4- Training and Development	74
4.2.6 Research Construct 5- Governance/ Expenditure and Equipment	77
4.2.7 Research Construct 6- Intention to Leave	80
4.3 Inferential Statistics	85
4.3.1 Correlation	85
Chapter 5	88
Discussion, Conclusions & Recommendations	88
5.1 Introduction	88
5.1.1 Demographic Data.....	90
5.2 Constructs.....	91
5.2.1 Objective 1 – The objective was to determine if remuneration positively affected or had no effect on practitioner’s intent to leave.....	91
5.2.1.1 Conclusions related to objective 1	92
5.2.1.2 Recommendations related to objective 1	93
5.2.2 Objective 2 – was to identify whether quality of life was affected when working for the government sector.....	93
5.2.2.1 Conclusions related to objective 2	95
5.2.2.2 Recommendations related to objective 2	95
5.2.3 Objective 3 – was to identify whether leadership within the departments had any influence on the turnover of medical practitioners.....	96
5.2.3.1 Conclusions related to objective 3	97

5.2.3.2 Recommendations related to objective 3	98
5.2.4 Objective 4- To determine the quality of specialists training within the departments of Cardiothoracic Surgery and Anaesthesiology	98
5.2.4.1 Conclusions related to objective 4	100
5.2.4.2 Recommendations related to objective 4	100
5.2.5 Objective 5- to identify if practitioners view governance, budgets and supply of equipment and consumables to the departments as a reason for turnover.	101
5.2.5.1 Conclusions related to objective 5	103
5.2.5.2 Recommendations related to objective 5	103
5.2.6 Objective 6- To identify medical practitioners that intend on leaving the government sector.	104
5.2.6.1 Conclusions related to objective 6	104
5.2.6.1 Recommendations related to objective 6	105
5.3 Limitations of the study	105
5.4 Recommendations for further Research	106
5.5 Summary of Chapter	106
Bibliography	108
Appendix A	118
Appendix B	119
Appendix C	123
Appendix D	124

List of Figures

Number	Description	Page
2.1	Kurt Lewin's theory depicting the change process.....	24
2.2	Factors contributing to work dissatisfaction.....	38
2.3	Psychological process resulting in motivation.....	42
2.4	Factors affecting Quality of life.....	51
3.1	Conceptual framework showing relationship between the independent and dependent variables.....	60
4.1	Males vs Females.....	63
4.2	Age groups.....	63
4.3	Number of year's practitioners spent in government facilities.....	64
4.4	Current employment positions held by participants.....	65
4.5	Level of education amongst participants.....	65
4.6	Questions related to construct 1- Remuneration.....	66
4.7	Questions related to construct 2- Quality of life.....	69
4.8	Questions related to construct 3- Leadership.....	72
4.9	Questions related to construct 4- Training and development.....	75
4.10	Questions related to construct 5- Governance/Expenditure/Equipment..	78
4.11	Practitioners view on leaving.....	80
4.12	Practitioners feelings about the future.....	81
4.13	Views on leaving the department.....	82
4.14	Results showing preference to remain or leave the department.....	82
4.15	Practitioners view on the importance of continuing a career within the department.....	83

List of Tables

Number	Description	Page
4.1	Frequency distribution for Remuneration.....	68
4.2	Frequency distribution for Quality of Life.....	71
4.3	Frequency distribution for Leadership.....	74
4.4	Frequency distribution for Training and Development.....	77
4.5	Frequency distribution for Governance/Expenditure and Equipment.....	79
4.6	Frequency distribution for Turnover.....	84
4.7	Spearman's rank order correlation between variables.....	86
4.8	Comparing mean rank of turnover with regards to age of Participants.....	87
4.9	Comparing mean rank of turnover with regards to gender of participants.....	87

Abbreviations

ANC	African National Congress
BEE	Black Economic Empowerment
CEO	Chief Executive Officer
HPCSA	Health Professionals Council of South Africa
IALCH	Inkosi Albert Luthuli Central Hospital
KZN	KwaZulu-Natal
MASEA	Ministers Annual Service Excellence Awards
NDP	National Development Plan
NHI	National Health Insurance
OSD	Occupation Specific Dispensation
ORWOPS	Other Remunerative Work Outside Provincial Service

Chapter 1: Overview of the Study

1.1. Introduction/Background

This chapter provides the background and the focus of the research problem and research statement of the study. The purpose, specific objectives, expected outcomes and research objectives, scope/delimitations are also presented in the chapter. In addition, the chapter also addresses the limitations and anticipated shortcomings and assumptions.

1.1.1 Background to the study

Employee turnover is regarded as an essential metric that is used as a planning and strategy tool of major organisations globally. The impact of employee turnover has received widespread attention which has been proven to be the greatest human resource challenges of recent times (Ayobami, Wallis, & Karodia, 2016). Health care professionals in South Africa are regarded as an essential service. They play a critical role in the provision of health care to a large population of South Africans that are economically inactive (Fairall & Bateman, 2017). The impact and prevalence of HIV/Aids in the country places a huge demand on the need for retention of health care professionals in the public sector. In order to ensure service delivery and the basic right to health care, it is imperative that the Department of health in KwaZulu-Natal ensure that skilled health professionals such as specialist doctors, general practitioners, nurses, pharmacists, radiographers and other allied health care workers are retained resulting in staff turnover in the public sector which is appropriately managed. The exodus of trained and experienced staff in the public sector results in a brain drain effect leaving inexperienced or under qualified clinical personnel to deal with patient management that could be detrimental to the patient and open the door to litigation issues that the department may face due to medical negligence (Bateman, 2016b).

The KwaZulu-Natal Department of health is faced with high vacancy rates due to employees exiting the organization. The greatest challenge is dealing with the problem which seems unsuccessful or unattainable. Attempts to curb employee turnover seem fruitless and merits investigation. The ever increasing shortage of trained and qualified

staff is fuelled by options to join the private health care sector or opportunities for work abroad in countries such as New Zealand, Canada, United States of America, United Kingdom and United Arab Emirates (Tshitangano, 2013). The South African nursing profession is facing a major crisis as scores of professionals seek greener pastures in other countries (Mutula, 2016). A direct currency to currency comparison may be the core of the problem as employees compare salaries between South Africa and developed countries. The prevalence of HIV/Aids increases the management burden of critically ill patients resulting in higher employee stress levels which may be a contributing factor of employee turnover. High vacancy rates may result in professionals becoming demoralized which may lead to poor patient care. The government sector is yet to develop effective strategies that effectively attract health care professionals whose skill is in great demand.

According to the KwaZulu-Natal Department of Health annual report, recruitment and retention of health care professionals is a major contributor that inhibits effective service delivery. Many professionals cite poor treatment as a consequence for them resigning. The strain placed on existing workers to continue to provide a service based on the moral high ground of patient care is not sustainable. This ultimately results in fatigue, medical negligence and excessive periods of overtime work being performed. This results in an exacerbated staff exodus from the public health sector. According to the KwaZulu-Natal Health annual report for the period 2014-2015, a total of 6200 terminations of staff occurred. Three thousand four hundred and eighty six of this number were employee resignations making up 56.2 %. The turnover rate for medical practitioners and pharmacists were 17.2% and 16.2% respectively (KZN Dept Of Health, 2015). Mental and physical fatigue occur as a result of long working hours (18-22 hours) which is a direct result of employers not giving staff time off due to staff shortages. Government hospitals constantly face a problem of overcrowding which could be partially attributed to lack of health care workers. The resulting long waiting lists become a push factors for many medical health care professionals. Negative effects of turnover are loss of productivity, low morale and a breakdown in communication (Hayward, Bungay, Wolff, & MacDonald, 2016). The cost in hiring and training of new staff members increases as adequate training takes a number of years. Professionals that exit the system leave a huge gap in the system, leaving inexperienced employees to render a service which may be complex for their level of

training (KZN Dept Of Health, 2015). This inadvertently affects the quality of health care that patients receive with government having to fork out large sums of money on medical litigation which could of otherwise be utilised to upgrade infrastructure and employ more professionals.

Various departments have curtailed surgical lists due to a shortage of medical doctors leaving for the private sector. Research into the issue of high turnover rates resulting in numerous vacant posts can be beneficial in understanding the factors that contribute to the phenomenon. The majority of South Africans remain without medical aid leaving them totally dependent on state facilities for health care (Surender, 2017). Access to health care is a basic fundamental right which is enshrined in our constitution. Long waiting lists for treatment can be attributed to the high turnover rate which merits investigation such that the public health care system becomes efficient and effective.

The literature review unpacks some of the key areas thought to contribute to the intention of leaving and high turnover rates. Remuneration packages, other remunerative work outside of province, human resource management, work benefits, career advancement, working environments, quality of life, governance, dissatisfaction at work resulting in stress and burnout have been identified as broad areas contributing to the exodus of health workers.

A better understanding of these phenomenon and the cracks in the system can drive interventional strategies to promote staff retention.

1.2 Focus of the Study

Increased turnover of medical practitioners is adversely affecting the provision of health services to the majority of South African citizens. The brain drain occurs as a direct result of inadequate retention strategies to keep employees in the public sector. The cost implication of training highly skilled individuals escapes countries who recruit South African trained professionals. The ratio of health care professionals to patients is ever increasing causing professionals to leave for reduced workload and better working conditions. The lack of mechanisms to deal with the problem is pushing workers away. If the government health sector does not function at full staff compliment then the standard of care may be greatly compromised. Thus the need to understand and highlight factors that contribute to medical practitioner turnover within

specialized tertiary facilities and the strategies to deal with the issue needs to be investigated. This may lead to health care facilities becoming more supportive in the promotion of employee satisfaction and ultimately result in greater employee retention.

1.3 Problem Statement

The South African public health care sector is experiencing a critical shortage of skills amongst a scare population of medical practitioners. Employee turnover is a challenge that has the greatest impact on the health system resulting in poor service delivery and long waiting ques for patients (KZN Dept Of Health, 2015).

The high turnover and vacancy rate in the public health sector cannot go unnoticed (Bateman, 2016a). The current gap that needs to be explored is the understanding of the root cause of the problem and the development of an appropriate framework that can be used to determine employee satisfaction such that turnover can be minimized and medical practitioners retained. The goal of the research is to explore and unpack the various factors that contribute to the turnover. Research is merited in this area as no concrete strategies for staff retention exist. Many of the research studies in this area have focused predominantly on nursing turnover in in different parts of South Africa and greater emphasis needs to be placed on medical doctors who provide an essential service to the government health care system (Gautam & Tuswa, 2016a). Recommendations based on the findings can assist government to revise policy on staff retention.

1.4 Purpose of the Study

The main objective of the study is to determine the factors affecting high turnover of medical practitioners within the departments of Cardiothoracic Surgery and Anaesthesiology at Inkosi Albert Luthuli Central Hospital.

1.4.1 Objectives

- To identify if medical practitioners leave because of remuneration.
- To identify if quality of life is affected in the government sector.
- To identify if leadership is a cause of turnover.
- To identify medical specialists that intend on leaving the government sector.
- To determine the quality of specialists training within the departments of Cardiothoracic Surgery and Anaesthesiology.
- To identify if practitioners view governance, budgets and supply of equipment and consumables to the departments as a reason for turnover.
- To provide the KZN department of Health with findings and possible recommendations to reduce the exodus of medical practitioners from government health care facilities.

1.4.2 Hypothesis

- H_0 Remuneration has no effect on turnover amongst medical practitioners
- H_1 Remuneration positively affects turnover amongst medical practitioners

- H_0 Quality of life is negatively affected in the government sector
- H_1 Quality of life is positively in the government sector

- H_0 Leadership within the department has no effect on turnover amongst medical practitioners
- H_1 Leadership within the department directly affects turnover amongst medical practitioners

- H_0 Departments training does not affect turnover amongst medical practitioners
- H_1 Departments ability to train positively affects the rate of turnover amongst practitioners

- H₀ Governance/ Equipment and Expenditure has no impact on turnover amongst medical practitioners
- H₁ Governance/ Equipment and Expenditure directly affects turnover amongst medical practitioners

1.5 Motivation to conduct study

Turnover amongst health care professionals is a worldwide phenomenon. Currently South Africa faces a huge challenge of training and retaining skilled medical personnel with particular reference to medical practitioners who go on to become medical specialists. Research in the area focuses primarily on nursing staff without much understanding on the reasons as to why medical doctors choose to leave the government sector. Against a backdrop of inequality, the present South African government faces the challenge of ensuring that health care reaches the mass populace of the country. The brain drain or exodus of medical practitioners reduces the overall capacity of hospitals in the public sector to function optimally. The problem is further exacerbated by a lack in training and development of registrars by senior consultants that have the skill and knowledge but have since vacated government posts. In order to understand the trend and possible reasons for turnover, it is important to establish a global picture of the situation affecting the government sector. The departments of Cardiothoracic and Anaesthetics have witnessed waves of staff exodus resulting in curtailing of surgical lists. Understanding the various reasons that result in turnover serves as a motivation to drive changes in government strategy to implement future policies that can assist in reducing the turnover phenomenon amongst medical practitioners.

1.6 Significance of Research

The survey of existing staff within the departments of Cardiothoracic and Anaesthetics serves as a blueprint to gather information on the issue. Findings of the research can be used as a tool to better understand the reasoning for turnover amongst medical practitioners within the departments. This will help drive refinements in strategies to affect change.

1.7 Research Methodology

To gather data, a cross-sectional study was conducted among all 60 medical practitioners that belong to the departments of Cardiothoracic Surgery and Anaesthesiology using a self-administered questionnaire. The 60 medical specialists representing consultants, heads of departments, clinical unit heads, registrars and medical officers were recruited to eliminate any element of bias. The recruitment of respondents were conducted in person, requesting them to complete the survey, explaining to them that their input is invaluable as it will be taken into account to improve service delivery in the public health care sector. An exploratory research design was chosen. Various variables were measured quantitatively using a questionnaire on a Likert scale. The results of the survey were analysed using the SPSS data analysis package. Inferential statistics to establish correlations amongst variables was conducted using Spearman's rank correlation analysis.

1.8 Expected outcome of the study

The findings of the study will assist in understanding the factors and reasons that contribute to high turnover rates among medical practitioners in the public sector. The findings will help to understand medical practitioner's perceptions of governance and the intention to leave. The findings can be used by government in all provinces to drive refinements in policy such that turnover is reduced. The findings can be used by management to motivate healthcare professionals to remain in the public health care sector.

1.9 Scope/Delimitations of the study

The study focuses primarily on a tertiary state facility which offers specialized medical treatment. The facility comprises of specialist medical practitioners.

1.10 Limitations/ Anticipated shortcomings

The study focuses on one specific tertiary hospital in KwaZulu-Natal. The study focuses on medical practitioners which has been limited to two departments within the hospital. The problem affects the entire country therefore further studies in other state

hospitals within KZN and various provinces need to be conducted to obtain a global picture of the problem in its entirety.

1.11 Assumptions

Recruitment and retention of medical professionals in the public sector remains to be an ongoing challenge. Therefore the vacancy rate in public health care facilities remains relatively high.

1.12 Conclusion

The chapter presents an overview of the study. Motivation as to why the study has been conducted together with a description of the problem statement, focus of the study including objectives and various hypotheses has been presented. The limitations of the study have been highlighted. The following chapter represents the literature review on various objectives covered on the subject.

Chapter 2: Literature Review

2.1 Introduction

The focus of the research is to determine factors that result in high turnover rates among medical practitioners. South African public health care facilities are constantly faced with the inability to retain health professionals such as medical specialists, medical practitioners, pharmacists, nurses, emergency medical personnel and allied health care workers. The KwaZulu-Natal Department of health is faced with high vacancy rates due to employees exiting the organization (KZN Dept Of Health, 2015). The greatest challenge is dealing with the problem which seems unsuccessful or unattainable. The key areas that are covered in the literature review support the constructs tested in the study. These include: remuneration, quality of life, leadership, training and development, governance/equipment and expenditure. The various constructs have been used to determine predictors of turnover amongst medical practitioners. The majority of studies conducted in South Africa centre around nursing staff. Attempts to curb employee turnover seem fruitless. The reason for high turnover rates among medical practitioners therefore merits investigation. The ever increasing shortage of trained and qualified staff is fuelled by options to join the private health care sector or opportunities for work abroad in countries such as New Zealand, Canada, United States of America, United Kingdom and United Arab Emirates (Tshitangano, 2013). The major challenge faced by developing countries including South Africa is the international migration of health care workers seeking more lucrative remuneration and exposure abroad. The Rural parts of the country has seen an exodus of health professions who migrate to urban areas for better training and job prospects. The urban health care facilities see a gravitation of fully trained specialists into the private sector. This cycle creates a void which exacerbates the problem (Ayobami et al., 2016).

The strain placed on existing workers to continue to provide a service based on the moral high ground of patient care is not sustainable. This ultimately results in fatigue, medical negligence and excessive periods of overtime work being performed (Bateman, 2016b). The result is an exacerbated staff exodus from the public health sector (KZN Dept Of Health, 2015). Professionals that exit the system leave a huge gap in the system, leaving inexperienced employees to render a service which may

be complex for their level of training. The nature of employee turnover does not underscore its importance and the deleterious effects it has on the health sector with the central theme being knowledge (Ashmore & Gilson, 2015).

Recently the South African Human Rights commission released a damning report against the KwaZulu-Natal department of health for the lack of oncology services for cancer patients. The report fingered a lack of staff and non-functional CT (computerized tomography) scanners as the key source of the problem. In response the health MEC cited a shortage of oncologists who left the department for the private sector as a major contributing factor for the long waiting periods for treatment (approx. 8months). The department has head hunted oncologists which has been fruitless. The findings of the commission also highlighted that existing staff members had to work beyond working hours to ensure that scheduled chemotherapy secessions for the day were complete. Furthermore the department took long periods of time to repair scanners which impacted on patient care. Patients that were interviewed attested to the long waiting periods for health care, one patient went on to secure a loan to get treatment at a private facility. The commission found that patient's fundamental rights were violated (KZN Dept Of Health, 2015).

Against this backdrop, the South African public sector has been criticized for its inability to provide effective and quality service delivery. In contrast the private sector has been noted to provide a world class service thereby creating a divide. The discrepancy between the two sectors may be in part attributed to the negative factors faced by public sector employees. Low levels of satisfaction resulting in demoralised individuals result in lower levels of commitment towards work, which impact on the overall service provided. Demoralised public servants often revolt expressing disgruntlement with working conditions resulting in the government having to contend with labour unrest and constant negotiations with labour unions. Employees face enormous pressure from the community, media, medical negligence lawyers and expectations of the employer resulting in a rise in tension, anxiety and frustration therefore understanding the various factors resulting in dissatisfaction could result in the formulation of interventions to drive change (Mafini & Dlodlo, 2014).

The literature review looks holistically at employee turnover in South Africa and abroad with specific emphasis on medical practitioners and the impact on health care. The findings of other investigators can be used to establish predictors of turnover amongst medical practitioners. The literature review focuses on remuneration, quality of life, leadership, training and governance as the central theme to understand predictors of turnover such that interventions can be proposed to drive policy change.

2.2 Theoretical Foundation

The two factor theory developed by psychologist Frederick Herzberg states that factors in the working environment cause job satisfaction and dissatisfaction. He theorized that job satisfaction and dissatisfaction act independently of each other. According to Herzberg, Mausner and Snyderman (2011), individuals are not satisfied with low work order requirements such as minimum wage, safety and pleasant working conditions. In contrast the authors found that employees looked for gratification in higher order psychological needs associated with recognition, advancement in career, greater responsibility and an overall sense of achievement. The authors linked their theory to the Abraham Maslow's theory of motivation. The two factor theory distinguishes the motivators and hygiene factors. Motivators arising from intrinsic factors which include challenging work, recognition of accomplishment and responsibility are the drivers of positive job satisfaction. The absence of Hygiene factors such as salary, fringe benefits, working conditions, security and status on the other hand results in dissatisfaction (Almaaitah, Harada, Sakdan, & Almaaitah, 2017). These factors are extrinsic to the work function and include company policy, salaries and supervision. Herzberg and colleagues established that both motivating and hygiene factors are needed for employee satisfaction (Herzberg, Mausner, & Snyderman, 2011).

Lewin's theory of institutional change forms the foundation of the concept of turnover. The theory can be used to explain the various forces and factors that result in turnover, with job dissatisfaction being a major factor (Lewin & Dorwin, 1963). The resultant is push factors that drive employees to voluntarily leave work. Selection of candidates, unclear work expectations, no upward movement in the organisation, management

issues amongst others have been identified as push factors (Matlala.D, 2012). The figure below illustrates Lewin's theory of Unfreeze, Change and Refreeze.

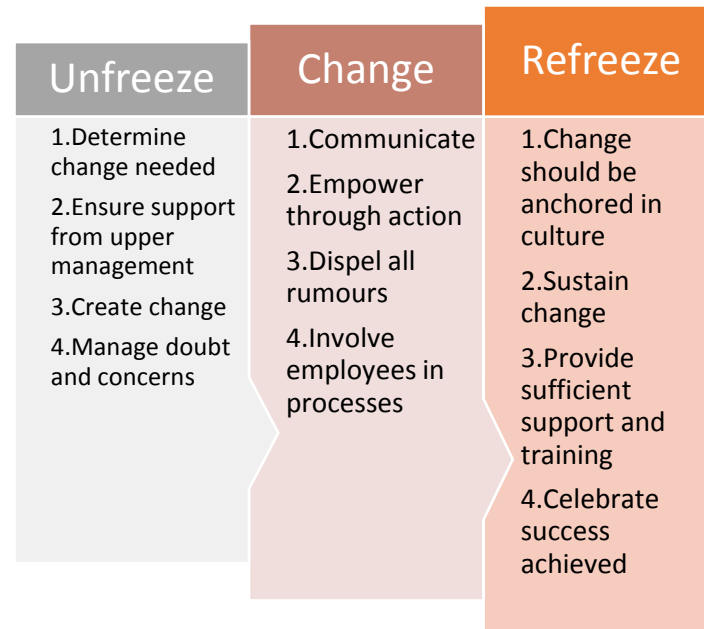


Figure 2.1: Kurt Lewin's theory depicting the change processes

A widely acknowledged theory that addresses the direct relationship between satisfaction at work and quality of life satisfaction is Chacko's (1983) spill over model. The model suggests that being satisfied in one area of life automatically extends to other areas thus a positive relationship can be established between job satisfaction and quality of life. Invariably dissatisfaction with life can manifest itself as dissatisfaction with work (Chacko, 1983). Recently Unanue, Gómez, Cortez, Oyanedel, and Mendiburo-Seguel (2017) also concluded from their research that work and life satisfaction are directly related. The investigators suggested that making people feel good about daily activities together with having meaningful relations are important ingredients to full filling employee's psychological needs resulting in satisfaction with both their lives and jobs (Unanue et al., 2017).

2.3 Employee Turnover Defined

Employee turnover is regarded as a fundamental metric that is used as a planning and strategy tool of major organisations globally. It can be defined as the entrance of new employees into companies or organisations and the voluntary withdrawal of staff from organisations. Turnover rate is the number of new recruitments that have occurred to replace those that have resigned, thus turnover becomes successful when a replacement occurs. Studies suggest that turnover is a rotation of employees within the labour market between organisations and between employment and unemployment (Arokiasamy, 2013). In an organizational setting it can be understood as a cessation of an employee's career trajectory within the organisation. Employee turnover can be further explained as voluntary based on an employee's discretion, involuntary due to discharge by the employer or retirement and death as well as avoidable or unavoidable whereby movement may be due to life's decisions such as moving to a new location. Empirical evidence supports the position that voluntary turnover is directly related to employees intentions to stay or leave. A study conducted by George, Gow, and Bachoo (2013) on 694 health care workers in the province of KwaZulu-Natal revealed that the public sector workforce is overburdened. The investigators found a huge disparity between workloads experienced in the government sector when compared to the private sector. The results showed that private sector employees were satisfied with their work whilst those in the public sector were dissatisfied. Remuneration, accommodation, training and workload contributed most to their dissatisfaction. The study highlights the need for non-financial factors that influence work in the public sector.

Turnover can also be differentiated into controllable and uncontrollable. Uncontrollable turnover can take the form of retrenchments, death or incapacitation. Controllable turnover on the other hand can be defined as voluntary resignations or dismissal. Voluntary turnover can be controlled via better work opportunity, salary structure and favourable working conditions whilst dismissal can be avoided with better selection of employees, constant training and policies on discipline to shape individuals according to desired levels (Akgunduz & Sanli, 2017).

The business environment is faced with rivalry amongst competitors making skilled human resources the major differentiating factor to obtain a competitive advantage.

Recent studies have shown that it is becoming more difficult to retain highly skilled individuals as multiple organisations seek to attract them with various incentives (Lambert, Basuil, Bell, & Marquardt, 2017).

2.4 Human Resource Management

High turnover within organisations can be attributed to management instability. Employee's preferred to work in a stable and consistent environment. High levels of inefficiency result in higher levels of turnover. Organisational culture and structure have been well defined in terms of theory, measurement, and empirical links to overall effectiveness, employee attitudes and productivity, as well as employee turnover (Yeun & Han, 2016). Culture of an organisation plays a pivotal role in retention or turnover in an organization. It is categorised as a shared meaning which differentiates organisations from others. Research has identified support from supervisors as a positive factor preventing staff from getting burnt out. Adopting a cost driven approach in the management of staff increases the overall staff turnover. Employees thrive on open channels of communication and a need to be well informed. Staff that is involved in a certain degree of decision making generally stay longer in an organization. High rates of turnover point to improper management, poor policies, poor grievance handling, no motivation or drive and poor self-esteem (Djukic, Jun, Kovner, Brewer, & Fletcher, 2017). Developing countries are constantly faced with inefficient work designs coupled with ineffective human resource management which is a barrier to a proper functioning health care system. Improving the design and human resource management policy is essential to universal primary health care. It is essential in aligning the attitudes of employees both attitudinal and emotional to the interest of the organisation (Roy, van der Weijden, & de Vries, 2017). Further a study conducted in Ghana supported the belief that strengthening human resource management of health managers is important in the motivation of health professionals resulting in job satisfaction and retention (Bonenberger, Aikins, Akweongo, & Wyss, 2014).

According to Purohit and Martineau (2016), the recruitment of civil servants in many developing countries has been associated with corruption and incompetent individuals being recruited. The authors have suggested merit based recruitment which results in better productivity and greater competence. Recruitment is the initial step to employment. To ensure a sustainable health care system, policies and human

resource management systems are greatly emphasized. Matching health care needs to that of individual needs is an important step to human resource management (Purohit & Martineau, 2016). Proper screening of doctors is essential in the verification and elimination of bogus doctors which result in medical negligence, medical litigation and in the private sector commit fraudulent acts resulting in millions being paid to unscrupulous bogus doctors (Govan, 2017).

Currently the South African health sector suffers from a dearth of skilled medical specialists and the continuous brain drain further exacerbates the situation leaving junior doctors to their own devices. The retention of talent being skilled doctors is a major concern to human resource practitioners. Equity policies on employment also puts pressure on human resources to obtain skilled employees that are already in short supply, therefore human resources management have to continuously evolve to formulate strategies that would attract and retain employees thereby increasing the achievement of organisational goals (Ayobami et al., 2016).

2.5 Work related factors

There is little empirical evidence to suggest that diversity of employees results in lower turnover rates. However evidence suggests that employee turnover may be due to poor management (Zhang, Luo, Chen, Min, & Fang, 2017). Research shows that employees quit for economic reasons (Purl, Hall, & Griffeth, 2016). Large companies can retain staff because of their size and ability to advance career paths. Organisations assess how workers perceive their jobs by establishing what they are capable of doing and what they are actually doing. Turnover matters most in organisations where there is no standardisation and lack of knowledge being transmitted. Recent studies have demonstrated the economic benefits of eliminating strain that is work related. Strain is related to depression for which employers have to bear the financial costs. This leads to a loss of productivity and higher turnover rates (Cocker, Sanderson, & LaMontagne, 2017). High levels of stress and increased workload that results in professionals burning out is a predictor of increased medical malpractice and error. Burnout results in a loss of professional effort and loss of productivity resulting in patients not being satisfied with the level of health care

achieved. Studies have also show that health care workers become dependent on alcohol resulting in substance abuse. Working hours, weekend and night calls increase the occurrence of conflict with family life (Shanafelt, Dyrbye, & West, 2017).

Understaffing is said to play a critical role in the intention of health care workers wanting to resign. Research has shown that long working hours, often without breaks makes employees despondent with the conditions they work in resulting in a case of selflessness with employees felling unappreciated and overworked. High levels of absenteeism is often manifested which is a sign of underlying problems within the organisation (Wendsche, Hacker, & Wegge, 2017).

2.6 Causes of staff turnover

A Clear understanding of causes of turnover can help to establish action plans to reduce the overall turnover rate. Some of the factors found by other researchers include lack of stimulation from the job, poor training, a lack of challenge, no development opportunities, unapproachable and uncaring managers, disappointment with the organization (Kramer & Son, 2016). It is imperative to conduct exit interviews with employees before they leave in order to ascertain the reason for leaving so that mechanisms can be put into place to reduce turnover and it can be utilized as a measuring tool for the organisation. In contrast some investigators have found that employees do not provide accurate information when leaving therefore exit interviews should be used as a secondary tool (Matlala.D, 2012).

2.6.1 Remuneration

Academics have argued about the influence of money as a motivating factor. It is believed that once a person has accumulated enough money then they may not be attracted to remain within an organization purely based on monetary value. Salary and benefits have been widely used as an incentive to motivate employees to achieve the goals of the organisation. Today the size of the package is what largely contributes to employees joining or leaving an organisation. Doctors however have stated the conditions under which they work are most important and not salary that is the driving force. Various studies have concluded that salary is a key component and unless employers realise that incentives and conditions are improved on an ongoing basis, employees will not be retained. In the public health sector, employee salaries are

determined centrally and may differ in each province (Gautam & Tuswa, 2016b). Upward movement usually relies on salary increments or movement to different grades after serving a number of years. A study on 576 Iraqi doctors revealed that more than half the study population intended to leave. Disillusionment with wages was a key contributing factor for the catastrophic collapse in the healthcare system resulting in turnover and migration of doctors (Jadoo et al., 2015). Similar findings were made by Fang, Liu, Huang, Zhang, and Fang (2014) in their investigation on 1184 Chinese village clinics. Doctors revealed that they were most dissatisfied with pay and the amount of work they do. In contrast they were most satisfied with their managers and the chance to do something that makes use of their abilities.

In South Africa, doctors receive a rural allowance which is viewed as a positive mechanism. Studies have shown that the increased salaries have resulted in private sector doctors returning to the public sector. Various doctors have cited delays in salary payments, poor promotion prospects amongst others as a drawback. The greatest problem that doctors faced in rural areas was accommodation facilities which has been aging and poorly maintained. Career and grade progression has also be regarded as an important retaining factor in the government health care sector (Ayobami et al., 2016).

Investigators have observed an overall decrease in the migration of health care workers due to the implementation of the occupation specific dispensation policy (OSD) which increased the wages of health care workers. It has been described as critical in the retention of South African nurses. Theses domestic policies have appeared to decrease the emigration of health care workers (Labonté et al., 2015). The authors report that the biggest negative influence still centres on the implementation of the national health insurance (NHI) due to the lack of information around it.

2.6.1.1 Other Remunerative Work

The bulk of health professionals that have left South Africa are said to be practising in Australia, Canada, New Zealand, the United Kingdom and United States of America. Even though Bi-lateral agreements between countries exist, poaching of doctors continue to occur. The phenomenon of poaching occurs internally as well with many senior and skilled nursing staff joining private hospitals as a team when specialists

leave the government sector. Recently the trend in teams of health professionals working in the public sector seem to be leaving en-block to continue the level of service that they deliver in the private sector. The issue of moonlighting for nurses being able to work in both the government and private sector has come to the fore. Doctors in various public hospitals are generally granted permission to perform other remunerative work outside the province (ORWOPS), however this has been an area of much debate where non-uniformity in granting permission amongst provinces in South Africa has become the norm (Taylor & Kahn, 2014). Doctors generally perform other remunerative work in the private sector after normal working hours and on weekends when not on call in the government sector to supplement their income (Kwinda, 2016). Provinces such as Gauteng offered doctors and nurses the opportunity to perform ORWOPS, whilst the Kwa-Zulu Natal provincial department chose not to grant health workers permission. This created a disparity amongst provinces where a polarisation of health professionals to certain provinces in the country was seen (Labonté et al., 2015). Recently, mounting pressure from the South African Medical Association (SAMA) and from health professionals who continued to work in the private sector without permission saw the implementation of a national government policy on other remunerative work outside of province. This occurred against a backdrop of the nationwide ORWOPS clamp down which saw many senior doctors exiting the public sector (Bateman, 2013b). In 2017 the KwaZulu-Natal provincial health department set up an ethics committee to review application to perform work in the private sector under the supervision of managers at public hospitals. This has been seen as an incentive to retain and lure practitioners back to the government sector. The luxury of remaining in the public sector with a plethora of patients presenting with various medical conditions remains a core reason that drives skill development. The issue of dual practise has been well documented with various investigators reporting a trend of wanting to work in both government and private practice (Moghri, Rashidian, Mohammad, & Sari, 2017).

2.6.2 Benefits

Employees are drawn to organisations that offer greater benefits. It is an indication of the support received from the company. Many employees prioritise benefits received in their decision to stay or leave. Flexibility of benefits is regarded a key component in

ensuring retention as individual needs are met. Public sector employees enjoy the benefits of government contribution towards pension funds and medical aid subsidies (Tondini, Ardington, & Woolard, 2017).

2.6.3 Advancement

Career advancement directly affects the turnover decision in different ways such as immediate level of career attainment, upward movement in the organisation and future career advancement. Effective career management is the utilisation of employee's different levels to assume more responsible posts when needed provided that are adequately qualified and highly motivated. It is important for companies to create opportunities for promotion and continuously develop training skills as it serves as an incentive to retain employees. Various authors have concluded that promotional opportunity is positively related to satisfaction at work. If employees perceive that there is a better opportunity for growth in their career resulting in personal advancement then they are motivated to work harder with a view to elevating their rank in the organisation (Kilpatrick et al., 2016). In South Africa, various push factors that drive migration have been identified. Substandard living and working conditions and a lack of career advancement seem to be the dominant factors (Labonté et al., 2015).

Investigations amongst health professionals in rural districts of South Africa have put opportunity for growth at the forefront of requirements at work. They expressed the need and desire for challenging and stimulating work environments coupled with professional development and teaching by outreach specialists to advance their clinical skills (Jenkins, Gunst, Blitz, & Coetzee, 2015).

2.6.4 Performance Management

The management of performance of staff must be effective so as to ensure that those who make a meaningful contribution are retained. Studies have shown that companies generally tolerate low performers which are resented by good performers leading to them leaving the organisation thus employers should actively deal with under performers to reduce the chances of losing good ones. Skilled employees must be remunerated for their knowledge in a professional or technical area. In this way the incentives encourage employees to make a positive contribution on the organisation. The department of health introduced the Occupational Specific Dispensation for public

service employees in order to recognise performance, knowledge and career paths (Labonté et al., 2015). However those that perform may choose to leave if they receive the same incentive benefits as those who do not perform well.

A key to performance management is the collaboration between management and doctors such that outcomes are met and responsibilities of all parties are acknowledged. This serves as a platform for representation of both doctors and senior management (Denis & van Gestel, 2016).

Literature has convincingly demonstrated that management is important for performance in the public sector. The decisions made by managers empower employees to innovate which impacts on the service and success of government sector organisations (Nicholson-Crotty, Nicholson-Crotty, & Fernandez, 2017).

Health care workers in developing countries generally face challenging environments with a vast number working in rural areas. They represent the front lines of the health care system as they are in direct contact with patients. The levels of education and training vary and some have limited resources and tools at their disposal. The disease burden of each country necessitates the need to provide a greater complexity of care. Robust support systems must be in place to ensure a high quality of care and performance is achieved. Traditionally under performance was linked to lower standards of education, training and knowledge. Research has found that materials and guidelines given through in service training to be ineffective. A far superior method was that of supervision and audit systems where feedback helped to identify problems in real time situations (Vasan, Mabey, Chaudhri, Brown Epstein, & Lawn, 2017).

2.6.5 Environment of Employment

Employees are better attracted to an environment with better working conditions. Working conditions play a vital role when deciding to stay or leave and serves as a motivating factor. Nurses in the public health sector found employment security, work environment and organisation as important factors thus service benefits in staff retention must not be ignored. Benefits in South Africa are governed by legislation. These include leave, sick leave, working hours, remuneration and termination of employment to mention a few. In this way public and private sector employment must comply with the Employment Act whereby working conditions are continuously

improved. However if organisations want to retain staff then conditions must attract employees. Various organizations go beyond the basic terms and conditions of employment to attract and retain staff.

Violence against doctors has become an increasing phenomenon in the working environment with, Anaesthesiologists in the intensive care units being the dominant target. The medical profession till the end of the 20th century had been hailed as a noble profession. Doctors today face being man handled, threatened or even killed. The medical profession has recently been regarded as a trade with the patient being a consumer and doctors likened to extortionists who extract money. Bribes or commission have taken centre stage whereby doctors have been caught in exchange for using products of pharmaceutical companies. The media has lambasted doctors as being agents of commission with nobility taking the backseat. The scourge that plagues the public sector with tender fraud and the general perception that doctors are corrupt and diggers of gold make the working environment tarnished even for those with pure intention (Kapoor, 2017).

The public health care sector in South Africa is constantly marred by reports of poor quality of medical services. Recently the “Oncology Saga” came to the fore after the commission for human rights found that equipment and oncologists to treat cancer patients were not almost dormant in the KwaZulu-Natal. Heightened awareness fuelled by media reports have fuelled medical disputes and violence against practitioners. Adverse outcomes have evoked frustrations and outcry from the lay public who vent their feelings on social media to obtain medical treatment. A culture of comparison is drawn to patients receiving treatment in the private sector to those who receive free treatment in public facilities. The majority of violent outbursts occur in the public sector due to inadequate workforce, high patient load and waiting lists coupled with aging infrastructure (Kapoor, 2017). In China, studies have revealed that increasing the support of township healthcare facilities both financially and through infrastructure directly increased job satisfaction and doctor-patient relationships (Chen, Yang, Feng, & Tighe, 2017).

2.6.5.1 Governance

A high level of dissatisfaction has become apparent with the current state of politics and governance in South Africa. Fear for safety as crime rates soar and the future of

families have become positive push factors for workers wanting to leave. The weaker rand due to slow economic growth has seen financial institutions raising interest rates. The tax policies of the country has resulted in higher taxes being paid by the working class resulting in greater difficulty and greater length of time needed to pay of student and housing loans. To reduce their financial burden, doctors and nurses alike choose to work abroad so as to take advantage of the currency differences between countries thus enabling them to pay of loans in a shorter time frame (Labonté et al., 2015).

KwaZulu-Natal is regarded as a highly contested province during election periods. Strikes, labour unrest and infighting has resulted in patients receiving the raw end of the stick. In some instances CEO's have been threatened with unions implicated in the scourge of accusations resulting in ongoing investigations resulting in the top brass of management from human resources being away on extended leave till matters are resolved (Bateman, 2015). This results in a breakdown of functioning facilities whereby equipment maintenance and the running of hospitals to provide adequate patient care take a back seat so that a political agenda can be achieved (Bateman, 2016c).

In many countries laws that speak to good governance in the eradication of corruption sometimes takes centre stage when corruption is detected as it eats into the fiscal allocations made for health care resulting in a deteriorated service, overspending, tender fraud, poor budget allocations and the freezing of clinical posts so as to curb spending. In countries where governance in institutions is weak, corruption is rampant which inadvertently cripples the functioning of public health facilities (Hope Sr, 2017).

In the Eastern Cape of South Africa, Dr Siva Pillay was appointed as the Superintendent- General of the health department. His appointment was supported by Dr Aaron Motsoaledi of the ANC (African National Congress). During his tenure, he sacked 1284 staff members for involvement in corruption, incapacity and non-performance. It is purported that he saved the department 1.4 billion in fraudulent payments and led the reversal of 1000 irregular promotions. Pillay clashed with the MEC of health, Sicelo Gqobana who was said to be 'union friendly' over tender procedures and was ousted to be replaced by a teacher who served as the chair of the health portfolio (Bateman, 2013a). Politics and good governance is imperative in shaping the landscape of health care in South Africa. Champions of good governance is essential to restore faith of health professionals in the system thus luring them back

to the government sector. Money that would have been lost to fraud and corruption can be widely utilised to support infrastructure, posts and training and development with the focus being service delivery to the ill (Jones, 2017). Health care workers are an important component which is vital to universal health care which can only be achieved with cooperation amongst government officials tasked to bring reform and change such that public health care works (Fairall & Bateman, 2017).

2.6.5.2 Expenditure / Budgets

The expenditure for public health care salaries has ballooned in recent years which eats into the provincial health budget. Recession and poor economic growth have reduced government spending however the disease burden and reliance on public health care facilities has increased. Various hospitals are in a dilapidated state and face structural challenges due to age. The repair of these institutions runs into millions leaving government with limited options to repair or build brand new facilities (Medical Association, 2017). Funding for the national health insurance scheme is still being debated which will see tax payers coughing up billions to fund (Surender, 2017). Litigation costs are said to bankrupt health care eventually leading to its collapse. Lawyers have target specialities such as neurosurgery, orthopaedics, obstetrics and gynaecology which are at higher risk for litigation. Corruption in supply chain systems eat into the budget resulting in stock outs (Cooper, 2016). The procurement and servicing of equipment in some cases has cost government millions which could have been spent on vacant posts and infrastructure. Turnover of employees is directly related to budget availability and expenditure as it impacts on the environment of work, workload, salary increases, quality of life and most importantly service delivery to patients.

A huge slice of the budget has been set aside to absorb senior healthcare administrators at the cost of freezing much needed clinical posts. Research shows that administrations posts swelled by 12% in 3 years versus 3.5% for clinical posts. This has bolstered the appeal by healthcare groups to stop the freezing of clinical posts (Bateman, 2016d).

2.6.5.3 Equipment & Resources

A major driver for internal and external migration of doctors in a study conducted in Iraq was that public hospitals were known to be under resourced yet they served the poorer population in majority (Jadoo et al., 2015). A survey conducted in India among one hundred and eighteen physicians in government hospitals found that together with absenteeism, resource constraints, lack of infrastructure and technology were major contributors to dissatisfaction (Sheikh et al., 2012). A recent study supported the finding that infrastructure was a major contributor to job satisfaction amongst Jordanian health workers (Dieleman & Kleinau, 2017).

A major drawback of an under-resourced health care system is the challenges faced in recruiting and retaining doctors with particular reference to rural areas. Poor remuneration, non-functioning equipment, lack of maintenance of equipment and infrastructure and the AIDS pandemic contribute to the decline in health care services. In the South African context of health care inequality, government and policy makers continue to find ways to improve service delivery to the masses and the retention of medical staff in remote areas. The development of strategies requires a clear understanding of reasons and causes of for the high vacancy rate in South African public hospitals (Ayobami et al., 2016).

A study conducted by Phago (2014), in the Limpopo Province of South Africa found that 81.4% of health care professionals viewed the allocation of equipment as an important component of staff retention. The researcher found that medical equipment or physical resources was an enabling tool allowing professionals to carry out their function to save lives effectively.

The optimal performance of supply chains in developing countries reduces the hindrance of poor resource allocation. Stock outs of medicines can interrupt treatment and force change in drug regimens like in the case of tuberculosis which drive drug resistance and increased mortality. This places health workers at risk of contracting various diseases. Safety and safety equipment such as masks, medication, gloves, and protective wear form the backbone of doctors and other health care workers ability to function and result in increased turnover if their safety is compromised (Bam, McLaren, Coetzee, & von Leipzig, 2017).

2.6.6 Work Processes

Employees that participate in the decision making process identify with the organisation and find it difficult to leave. This may be shared with outside employees who would desire to work for the organisation. Organisations must therefore strive to continuously improve policy and procedures to retain staff members. Job involvement has been described as the manner in which an individual views their work process in relation to the environment they work in. It is a generation of feelings or perceptions that either result in a co-relationship between life and one's job or alienation (Rahiman & Kodikal, 2017).

2.6.7 Dissatisfaction and Work Stress

High absenteeism may be seen as an indicator of job dissatisfaction. Dissatisfaction may lead employees to search for new jobs and compare opportunities with existing employment. Continuous movements of employees into and out of the organisation results in reduced performance as new employees have to be orientated and trained. Therefore employers need to identify factors that contribute to dissatisfaction ultimately resulting in higher turnover (Hayward et al., 2016). Stress in the working environment has become a serious and current issue which weighs heavily on the organisation and other fellow employees. High levels of stress can result in impairment to perform and function optimally resulting in the attitude of dissatisfaction towards work. It can occur when working demands exceed one's personal ability to accomplish the tasks (Panagioti et al., 2017). A study conducted by Tziner, Rabenu, Radomski, and Belkin (2015), examined the relationship between work stress, burnout, work satisfaction and turnover amongst 124 hospital physicians. The investigators hypothesised that a positive relationship would exist between work stress and burnout and that burnout was negatively associated with work satisfaction. A strong positive relationship between work stress and burnout was found (.55, $p < .0001$), a strong negative association between burnout and work satisfaction was established ($-.63$, $p < .0001$). This was also relevant between work satisfaction and turnover intentions ($-.65$, $p < .0001$). The researchers concluded that physicians have to deal with long hours of work in an environment of too many patients with too few hours resulting in a

lack of balance between work and personal life. They receive relatively low pay for the number of years in training. The resultant being that they could abandon their profession moving into biotechnology, pharmaceutical companies, medical research and teaching (Tziner et al., 2015).

Recently a study conducted on 3963 physicians showed that work and family conflict was positively related to turnover intention. Women were most affected and exhibited higher family related stress due to various work characteristics such as late shifts and unpredictable working hours. The investigators found it to be a positive stressor which correlated positively with turnover intention (Lu et al., 2017).

Absenteeism can seriously cripple the health care system if mechanisms are not put into place to understand the reasons for high absentee rates. Managers need to play a role in understanding employee needs so as to increase productivity, change staff morale and decrease hazards whilst satisfying patients. High absentee rates generally point to dissatisfaction amongst employees who have reduced faith in leadership of the organisation (Kisakye et al., 2016). Figure 2.2 shows the factors contributing to work dissatisfaction.



Figure 2.2: Factors contributing to Work Dissatisfaction

2.6.8 Managerial Role

Managers need to continuously interact with employees such that they can establish who are valuable and convince them to remain. Replacing those that have departed is expensive and also demoralizing to co-workers who have to work harder to carry the load especially in the health sector which is plagued by long waiting lists. Turnover can also play a positive role in that those who do not add value leave and make way for replacement with better performing employees as the labour market is improved over time. Creating a reward system can encourage performers to remain. Turnover may be beneficial to the employer when underperforming employees exit the organisation.

Gautam and Tuswa (2016a), conducted a study to examine the relationship between the availability for promotion, training, progression in career, management style and the intention to leave at Springs Parklands Hospital, South Africa. Management style was the strongest predictor of employees wanting to leave. Lack of attention from managers, poor training and standards of administration together with managers being unapproachable have been cited as reasons for employee turnover (Gautam & Tuswa, 2016a). A study conducted on job satisfaction and turnover intention among 576 Iraqi doctors revealed that 55% were actively seeking new employment. Time spent at work, hospital type, unsafe practice leading to negligence and managerial efficiency where some of the factors contributing to doctors wanting to leave. Those that perceived senior managers to be ineffective with an autocratic leadership style had commitment issues or greater intention of turnover. The authors concluded that programmes for supervisor support should be improved together with career ladders, communication and proper training programmes to make the environment more attractive (Jadoo et al., 2015).

Managers in the public sector need to motivate employees by optimising various extrinsic motivational factors. This may result in a reduction in dysfunctional action such as turnover, absenteeism and poor performance by public sector employees (Christensen, Paarlberg, & Perry, 2017). The retention of doctors has become a guide for line managers to retain talent and avoid costs associated with turnover. Retention of doctor's poses and enormous challenge to managers considering the shortage of skilled manpower available in the South African labour market. Managers need to

devise innovative means of retaining high performing employees as a lack of retention strategies results in an adverse health care system. The replacement of employees is costly to government, time consuming and threatens sustainability. Managers need to identify strategies that can be used as a tool to reduce turnover amongst medical staff (Ayobami et al., 2016). Considering long term loyalty of highly skilled employees and increased mobility, management needs to implement an efficient strategy together with a long term plan. The realisation of a changing environment remains the cornerstone of management strategy.

2.6.9 Retention of Staff

Employers need to understand the factors that motivate staff to stay and what causes them to leave. It is imperative to retain skilled employees such that service provided is maintained at a certain standard. Retention refers to the ability of organisations to keep valuable staff through methods of better remuneration, management, leadership and training and development strategies. Efficient organisations must design and implement early warning systems to detect dissatisfied employees. Dissatisfaction with income is a major contributor to doctors leaving the public sector. Improving salaries has been seen as an intervention to retain doctors especially in rural areas. The ability to retain skilled workers should be a priority for the public health sector. The health sector must create an environment which is conducive for workers to want to work in. Workers should co-operate and work with each other. Teamwork can result in better performance, motivation to each other and greater job satisfaction. Cultural understanding must be fostered. Nurses would feel more valuable if they were part of the decision process in their area of work. Creating a culture of responsibility is important in improving the overall morale of workers. The employer must recruit skilled staff and cater for their needs in creating a balanced lifestyle. Companies may employ spouses as a strategy for retaining talent. In this way employees may be lured to remote communities where employment for a spouse is difficult to obtain. Employees may be less susceptible to take up employment by other organisations. Support rather than intimidation during the execution of work activities helps to create a healthy environment and retain staff (Mmamma, Mothiba, & Nancy, 2015).

2.6.9.1 Motivation

Career development is regarded as an intrinsic motivator. If the propensity to learn and assimilate in an organisation is high, then employees tend to stay so they develop and learn new things. According to Kim (2015) turnover intention is reduced when intrinsic motivation is high. The author established that social support from supervisors as a resource to engage positively with employees reduces the likelihood of them wanting to leave their jobs. In a separate study conducted in India on ninety two medical officers employed in the government sector, job security was found to be an important motivation factor followed by respect and recognition (Purohit & Bandyopadhyay, 2014). According to the Herzberg, motivation can be described as the psychological process that energises employees towards their tasks. Individuals are motivated by factors such as career advancement working conditions, policy, security and remuneration. Other individuals are motivated by growth, advancement, recognition and responsibility. According to Purohit and Bandyopadhyay (2014), doctors that continue to work in public service are attracted to benefits such as a lower work load and a pension fund. Similar findings were established by Sheikh et al. (2012). Career satisfaction has also been identified as a contributing factor to doctors wanting to remain (Miryala & Thangella, 2013).

A major contributing factor to motivation is the availability of skilled staff members who have accumulated a wealth of experience over the years. It is vital to younger public sector employees that government nurture human capital in the form of experienced older doctors who impart a wealth of knowledge. This creates an environment which fosters collaboration of ideas and impacts positively on younger junior medical personnel. This is important to build capacity and reduce the mental stress placed on young individuals (Nilsson & Nilsson, 2017).

Motivation can be described as a psychological process which gives purpose and transaction which is the interaction with the work environment. These processes are driven by factors such as incentives and mediated into performance. However motivation cannot be observed directly, hence research has been concentrated around the effects of motivation. Investigations in this area have proposed a bundle of interventions result in job satisfaction which is a motivational outcome. Various facets of job satisfaction include, salary, training and development, work relations with

management, the working environment, supervision and recognition for accomplishment (Mazahir & Khalid, 2017). Figure 2.3 below shows the psychological process resulting in motivation.



Figure 2.3: Psychological process resulting in Motivation

2.6.9.2 Recognition and Accomplishment

Recognition of skill and accomplishment is regarded as an effective retention strategy. Studies suggest that employees look for organisations that encourage and facilitate growth, teamwork, education, recognition, compensation and benefits. Skill recognition serves to motivate positive behaviour, ethics and confidence. Verbal praise and incentives coupled with learning opportunity for growth enhance retention. Currently in KwaZulu-Natal the MASEA awards which is the ministers annual service excellence awards seeks to provide the same platform for outstanding achievement in the public health sector (Ayobami et al., 2016).

2.7 Organisational factors including Culture

Organisational structure, climate and culture have been well developed in terms of theory and empirical links to organisational success (Northouse, 2016). The practice of the organisation is a factor that influences employees to remain. Culture within an organisation is defined as a shared meaning held by staff which distinguishes it from other organisations. Large corporates have a dominant culture with subcultures. Companies strengthen their image through culture. Rendering a quality service may

be how employees perceive the culture of the organisation. Various employees belong to different cultural groups therefore their differences should be an inspiration rather than a division. Understanding and recognising that people are different can allow for employers to respond to individual needs thus retaining staff.

The concept of organisational politics has recently emerged, for which employees must deal with on an on-going basis. Broadly defined, organisational politics refers to the actions that individuals take towards their own self-interest or goals with the consequence being a lack of regard for other individuals around them. This occurs in the new competitive environment for limited resources and the need to gain power or jostling for position (Labrague et al., 2017). It has become a dominant factor fingered in psychological stress of employees (Schindeler & Reynald, 2017). A constant review and standardization of work place policies is pivotal to the prevention of burnout, stress due to organisational politics and the intention to leave (Zhang et al., 2017).

According to Jenkins et al. (2015), culture is related to teamwork. The investigators found culture to be a theme which kept health professionals working in the rural district hospitals of South Africa. The investigators found that employees shared their frustrations over a cup of coffee. The employees viewed feedback from managers as a positive and honest way in developing people. Doctors from various clinical disciplines that visited from referral hospitals were involved in the registrar training program. They gelled with the teams like a social glue making understanding of the team's passion through celebration of success or language. This gave the team an opportunity to debrief from stressful situations. The investigators found that the sense of cohesion and belonging created a culture of teamwork (Jenkins et al., 2015).

2.8 Economic factors

Theoretical explanations are based on the premise that employees react rationally to economic changes. Motor manufacturer Ford experienced a high turnover of between three to four hundred percent annually. A review that was conducted by the company resulted in doubling of basic wage which resulted in turnover reduction. In the public health service incentives such as night shift and rural allowances are given to try and retain staff. Long service bonuses are given but the question remains whether it is adequate. Recognition of added qualification was acknowledged and employees were

remunerated accordingly however with the current economic climate in South Africa this practice has stopped and the freezing of vacant posts as a cost saving measure is ongoing. This is to the detriment of existing employees who carry the load and eventually leave the system.

The nature of employee turnover amongst health care workers does not underscore its importance and the deleterious effects it can have on hospitals in the government sector. Globally turnover is of concern as knowledge which has become a commodity of advantage in the business environment has adverse effects on profitability and productivity. In South Africa employment occurs against a backdrop of inequality and discrimination. Governments aim at redress with the implementation of the employment equity act and black economic empowerment (BEE) outline targets to facilitate the transformation process. The current economic climate in South Africa has seen a large population of previously disadvantaged people that are unemployed. Inequality in the levels of education has resulted in a shortage of highly skilled black professionals which has resulted in the slow rate of transformation (Khoele & Daya, 2014).

2.9 Leadership and Supervision

The absence of support from supervisors reduces an employee's ability to cope with situations resulting in them exiting the organization. It is therefore crucial to develop leadership skills of managers in stressful jobs. Health care professionals entering the system thrive on the supervision of senior staff members. Without proper teaching and guidance they may be left to their own devices which can be to the detriment of patients. The result is higher litigation costs due to poor or no supervision as many senior staff members exit the public arena to take up practice in the private sector. Research has demonstrated that the impact of a manager on the morale of his subordinates is long lasting. Developing appropriate managerial style keeps staff members motivated which increases performance. Hayward and colleagues conducted a study to examine the factors that contributed to turn over of experienced nurses. Twelve nurses with approximately sixteen years of experience were enrolled in the study. A qualitative descriptive approach was used. The authors found that nurses felt the lack of leadership is what made them feel ill equipped to conduct their jobs (Hayward et al., 2016).

Supervision forms the backbone of satisfaction amongst doctors in the public sector. The ability of the supervisor to provide emotional, academic, clinical advice and technical know-how contribute positively to the overall morale of doctors in training. On the other hand the attitude of supervisors can result in complaints therefore supervision can be regarded as a predictor of satisfaction in the work place (Miller Jr, 2017).

Authentic leadership is a trait that has been identified in which employees are directly influenced by the actions of their leader. They identify with leadership style and vision of the organisation. It has been found to have a positive effect on employees intention to remain in the organisation (Fallatah, Laschinger, & Read, 2017). Jacobsen and Bogh Andersen (2017), recently found that reward in the public sector can be used as an important tool by managers in obtaining high levels of performance and self-efficacy.

2.10 Training and Development

It is important to provide opportunities for self-development as it increases the knowledge of employees and keeps people motivated. Currently in South Africa training of specialists begins at a registrar level for various departments (Zweigenthal, London, & Pick, 2016) . The shortage of doctors to serve the population both in rural and urban areas requires that the medical student intake doubles in number each year over a ten year period. Approximately thirty seven thousand five hundred doctors are registered with the Health Professionals council of South Africa resulting in a doctor to patient ratio of 1: 1387. The number of practitioners practising abroad cannot be accounted for as many of them maintain dual registration with the medical council. This leaves a huge gap in the health care system. Due to the freezing of registrar posts across various specialities the number of specialists qualifying has decreased resulting in a huge void especially in the public sector as the existing qualified consultants move into the more lucrative private sector (Naidoo & Singh, 2017). In some instances departments are left to provide a service with junior newly qualified specialists or no consultants at all. According to Bateman (2016a), provinces that have frozen health care posts, include Eastern Cape, KwaZulu-Natal, North West, Mpumalanga and the Free State. Professional bodies have reiterated the need to stop

the wide scale freezing of critical clinical posts which is debilitating to health care in the public sector.

The use of supernumerary registrars who are non-South African registrars has increased over the years. Supernumerary registrars constitute approximately 25% of the total registrar population in training. They are brought in from various African countries who do not offer specialist training programmes to bolster the dwindling number of existing staff such that service delivery is maintained. According to government to government memorandums of understanding, these supernumerary registrars are paid by their governments and leave South Africa once they qualify (Naidoo & Singh, 2017). The training and development of new registrars becomes reliant on existing junior consultants who often leave after becoming despondent. Many of whom look to centres of excellence abroad to bolster their training. Investigators have noted an advantage of having African doctors coming to South Africa is that they migrate here post examinations (Labonté et al., 2015).

Several factors directly influence the decisions of doctors to remain or resign from their posts. A lack of opportunity for postgraduate studies or training can be highlighted as a possible cause coupled with the challenge of retaining doctors in rural and remote areas where the lack of opportunity is rife. This occurs against a backdrop of poor infrastructure, increased work load and declining work environments. The result being an exodus to urban areas or moving abroad (Gaski & Abelsen, 2017). A supportive working environment for training and development is essential so as to garner talented employees. The idea of a conducive working climate is imperative to employee empowerment, work appreciation and development (Ayobami et al., 2016). Career planning as an employee development programme creates the feeling of importance of being invested in with a clear vision of promotion possibility. Career development ensures that employees remain viable in an ever changing job market. Technology is constantly changing in the medical environment, thus practitioners need to be constantly kept abreast with current trends and techniques in individuals skill development in line with the Health Professionals Council on continuous development (Ayobami et al., 2016).

In some countries such as Ethiopia, investigators have identified a huge gap in the shortage of specialists in the area of obstetrics and gynaecology as well as paediatrics.

These gaps highlight the need for ongoing training of specialists in order to sustain a working health care system. This should be coupled to an efficient medical training programme. To cope with the huge skills shortage amongst doctors in South Africa, the various provinces have engaged in the Cuban medical programme which allows students from underprivileged and previously disadvantaged backgrounds to study medicine that is funded by government. The programme seeks to bridge the gap in health care and increase the presence of doctors in rural areas (Assefa, Mariam, Mekonnen, & Derbew, 2017). To reduce the strain placed on doctors, there has been an introduction of skilled health care workers referred to as clinical associates to serve as support to doctors and pharmacists. These associates are specific to South Africa and would less likely be poached by other countries. This mechanism serves to reduce the strain of coping with volumes of patients resulting in burnout (Labonté et al., 2015).

2.11 Job Expectation and Satisfaction

If the expectations of the job are not realised and obtained, it becomes difficult to retain staff. Employees may become overwhelmed with situations that they are not equipped to deal with like in the case of junior specialists without teaching and guidance from seniors. They leave the department to take up training posts in departments that are fully functional. This practice increases turnover at existing units and sometimes renders them inactive. Ultimately it impacts on service delivery and patient care. In the health care sector, satisfaction with supervision is directly related to job satisfaction and retention (Blacklock et al., 2016). Although satisfaction of work plays a role, it alone cannot keep turnover rates low. Factors such as commitment to the organization also play an instrumental role. Job satisfaction as a predictor of turnover in public service must be taken into account to foster better employment relationships between health care professionals and government. Job satisfaction of doctors is vital since their dissatisfaction is related to quality of care and poor health outcomes resulting in a suboptimal service delivery system. Poor job satisfaction is associated with higher turnover rates therefore enhancement of the working environment can potentially drive retention and improve overall quality of patient care. Key attributes related to characteristics of work directly influence job satisfaction (Goetz et al., 2015).

2.12 Reputation of Organisations and prospects of NHI

Companies that contribute in the betterment of society attract and retain employees. Strategies used by many corporates include social responsibility (Khoele. A, 2014). The public health sector has been marred with long waiting cues, poor infrastructure and inadequate service delivery due to staff shortages which creates a negative public image (Sastry et al., 2015). Public employees tend to tolerate work difficulties to serve the public interest however studies have shown that employees with high levels self-sacrifice still intent to leave their organisations (Kim, 2015). Public employees are known to leave their institutions when greater responsibility is imposed on them even though they make the self-sacrifice in the interest of public service. If public servants with high levels of self- sacrifice leave, those who are less altruistic remain resulting in the institution serving their private interest at the expense of the public. This has been cited as a contributor to the failure of government institutions (Kim, 2015).

The growing enthusiasm for universal health care has become the silver bullet for emerging countries such as South Africa. The ANC government is continually reforming the health system through the development and implementation of the national health insurance program (NHI). The mandate on the program is steered by the national development plan (NDP) of the country. The primary aim is to restore confidence in the public health care system and bridging the divide between public and private health care in South Africa (Caldwell & Aldous, 2017). It serves to ensure that health care services does not place financial strain on families irrespective of their socio economic status. The total population under NHI will have access to quality health care and contribute towards poverty eradication. The implementation of NHI and the role of doctors and nursing staff in the private and government sector together with medical aid funders needs to be clearly defined. This will serve to alleviate the tension amongst private doctors and help level the playing field between government and private sector health care works such that opportunities to work in both sectors are available and health care workers obtain job satisfaction irrespective of where they work in South Africa (Fusheini & Eyles, 2016).

2.13 Unionisation

Labour unions in South Africa have actively been able to secure better working conditions for the working class thereby increasing the attractiveness for individuals to remain in their current employment (Hirson, 2017). Annual pay increases, working hours and conditions of work have been set down by the various unions leaving little or no room for exploitation.

2.14 Quality of life

Organisations must implement ways of helping employees to manage work and home commitments. Flexible work schedules have been shown to create a balanced working life that can offset stress. Studies have shown that when it comes to households, men and women divide work traditionally (Terera, 2014). Long hours of work conducted by doctors and nurses prevent this sort of structure putting immense pressure on the spouse. Long overtime hours and on call duties render employees inactive to fulfil family obligations. Hospitals such as Inkosi Albert Luthuli Central Hospital have created a nursery school on site to assist professionals with closer proximity of children going to school and aftercare facilities to cater for parents that work longer hours. A recent study was conducted on Finnish physicians looking at on- call work as a factor for turnover rates. Three thousand three hundred and twenty four participants were enrolled in the study. Females consisted of 61.6 % of the population. The results showed that the greatest turnover intention were among those who had long call duties and a higher level of work strain (Heponiemi, Presseau, & Elovainio, 2016). Working more than 40 hours per week resulted in doctors being strained in and were more likely to leave the organisation. A balance between work and life activities has been regarded as a key ingredient to time management of doctors (Jadoo et al., 2015). The improvement of working conditions such as a safe working environment together with a reduction in work load has been advocated by the authors. The nature of the job entails that doctors experience increase workloads, long working hours, pressurized working conditions and emotional stress resulting in strain and burnout (Roy et al., 2017). Favourable work support in the form of autonomy, organisational and social support can be regarded as a buffer to the high stress demands. Roy et al. (2017) found that burnout was more prevalent in the public sector as opposed to the private

sector. Research has fingered the three elements of burnout as a contributor to reduced quality of life (Panagioti et al., 2017). Emotional exhaustion, personal achievement and depersonalisation represent these elements. Emotional exhaustion refers to depletion of psychological and emotional resources resulting in harm to the employee's mental and physical health. Depersonalization results from dehumanized perceptions of others which is associated with poor treatment of others, callous behaviour resulting in emotional drain. Personal accomplishment impacts on a person's mental standing resulting in dissatisfaction within their work environment. Employees suffering from burnout feel a low level solidarity with others in the organisation and become emotionally exhausted resulting in them wanting to leave. Doctors, teachers and police officers tend to leave based on high levels of emotional exhaustion (Kim, 2015).

Research has indicated that female doctors are at greater risk of experiencing burnout and stress which is directly linked to professional morale and overall quality of patient care (Bateman, 2014). The influx of women into previously male dominated professions such as accounting, law and medicine underlines the balance required between family and working obligations. Work dissatisfaction and burnout are tragic endpoints for professionals who enter the working arena with enthusiasm and dedication. Long work hours and non- uniformity of calls serve as a barrier to quality of life. It is for this reason that female doctors have been attracted to specialities that provide predictable working hours resulting in a harmonious integration of work and life activity (Au, Elizondo, & Roth, 2017). Studies in recent years suggest a greater emphasis and mounting pressure from both male and female doctors for a balanced work plan with a greater degree of flexibility. The shortfall in the number of individuals entering the profession, the rate of turnover and the number of professionals taking early retirement due to stress related factors are of concern (Whitebird et al., 2017). Flexibility in work scheduling that accommodate individual work times and responsibility empower employees to obtain a balanced lifestyle and meet personal obligations (Ayobami et al., 2016).

It is estimated that almost 46% of the population of South Africa, live in rural areas. Twelve percent of doctors provide a service to these areas resulting in disparities in access between rural and urban communities. To improve health outcomes, rural communities must have access to skilled doctors and health professionals. Many

doctors have reported living away from families and in poor accommodation facilities resulting in dismembered family life which affects their overall quality of life (Haskins, Phakathi, Grant, & Horwood, 2017).

Flexibility of time to allow for more family time is a requirement in rural areas as employees live as they work. They make transitions into different worlds of family and work at the same time shaping their boundaries and environment (Jenkins et al., 2015).

In developing countries like South Africa, the shortage of health care professionals cannot only be attributed to the production of health care workers but also due to instability in health care facilities. Employees will always be in search of better living conditions, improved remuneration and opportunity for development (Debela, Salgado, & Tsehay, 2017). The figure below illustrates the various factors that contribute to a better quality of life.



Figure 2.4: Factors affecting Quality of Life

2.15 Retention Strategy

Doctors together with other health care workers form the backbone of the South African health care system. Intervention strategies need to be put into place to attract healthcare workers into the government sector. Understanding of the various factors that result in high turnover amongst doctors need to be investigated such that interventions to drive policy can be formulated.

The public sector is currently experiencing shortages in doctors, pharmacists and allied health care workers. They render an essential service which is critical. Vacant posts need to be prioritised in order to retain staff and prevent work overload resulting in burnout and stress that may result in depression. The costs related with absence from work has a number of effects which result in existing staff members carrying the load, financial costs for rehabilitation and decreased service to patients (Dieleman & Kleinau, 2017).

Evidence indicates that it is a critical and crucial factor for personal and professional development. Research points to training methods being the driving force which engages workers with challenges, advancement and competitive wage opportunity. Evidence supports the idea that training programmes enhances growth, confidence to meet challenges and consistency resulting in greater competency and overall productivity (Ayobami et al., 2016). Provision of better managerial skills to help cope with workloads and incentive pay that matches the private sector must be considered (Sojane, Klopper, & Coetzee, 2016). The effectiveness of the public service correlates to the resources provided. Employees become frustrated with a lack of working and functional infrastructure including equipment. Retention strategies centred around conducive working environments must be considered (Ayobami et al., 2016). Currently there is little evidence to measure the impact of turnover amongst doctors in the South African public sector as the majority of studies involve nursing staff. Rigorous evaluation of strategies to retain doctors must be maintained to determine its effectiveness.

2.16 Conclusion

2.16.1 Summary of Major Contributions of significant studies

It is very important for government and organisations to have a clear understanding of why people would choose to leave and identify factors that attract people to organisations. Job satisfaction has the greatest effect on turnover intent. Employees make up the backbone of organisations therefore they need to be well motivated so as to increase productivity and be globally competitive. The importance of retention strategies cannot be understated. Examining factors that result in turnover in the public health sector can provide a general view to government as to the mechanisms that need to be put into place. Hospital managers, administrators and policy makers that advise government need to pay special attention to dissatisfaction amongst health care workers. Burnout, stress and social support must be investigated to get an overall picture of the situation (Bekker, Coetzee, Klopper, & Ellis, 2015). Training and development of intellectual capacity is paramount in the service delivery of an efficient health care system for all South Africans.

2.16.2 Major flaws and gaps

Currently there is little evidence to measure the impact of turnover amongst medical specialists in the South African public sector as the majority of studies involve nursing staff. Rigorous evaluation of strategies to retain doctors must be maintained to determine its effectiveness. The current gap that needs to be explored is the development of an appropriate framework that can be used to determine employee satisfaction such that turnover can be minimized and employees retained. Doctors and other health care workers play an equally important role in the delivery of service. Very little research has been conducted to understand the factors that result in turnover of these professionals.

2.16.3 Need for more research

There is a need to understand and highlight factors that contribute to turnover of medical practitioners in South Africa. Investigations into the root cause of the problem must be established as it can potentially cripple the public health care system.

2.16.4 Contribution to or extended knowledge in the area

This may lead to health care facilities becoming more supportive in the promotion of employee satisfaction and ultimately result in greater employee retention. Provide recommendations that can be used to develop a retention strategy which government may use in developing policy. Recommendations and strategies from research can be used to avert a failing health care system.

Chapter 3

Research Methodology

3.1 Introduction

This study measured the factors that result in turnover amongst medical practitioners at a specialised tertiary institution in South Africa. The chapter encompasses details of the research design and represents an overall overview of the research problems and how the research problems were formulated. Details of research design, targeted population, sample size of the population, techniques used for sampling, instruments to collect raw data, reliability and validity testing, methods and statistical packages used to analyse data and ethical considerations have been described in the chapter. Finally methods of data storage post analysis together with how informed consent, anonymity and confidentiality were guaranteed have been explained. Methods in the prevention of deception have been explained.

3.1.1 Research aim and objectives

The main objective of the study is to determine the factors affecting high turnover of medical practitioners within the departments of Cardiothoracic Surgery and Anaesthesiology at IALCH.

The following were objectives of the study:

- To identify if medical practitioners leave because of remuneration.
- To identify if quality of life is affected in the government sector.
- To identify if leadership is a cause of turnover.
- To determine the quality of specialists training within the departments of Cardiothoracic Surgery and Anaesthesiology.
- To identify if practitioners view governance, budgets and supply of equipment and consumables to the departments as a reason for turnover.
- To identify medical specialists that intend on leaving the government sector.

- To provide the KZN department of health with findings and possible recommendations to reduce the exodus of medical practitioners from government health care facilities.

3.2 Research Paradigm

A research design forms a blueprint of ways in which data is collectively measured and analysed based on research questions related to the area of study (Creswell & Poth, 2017).

A quantitative study involves systematic empirical investigations of phenomena using statistical, mathematical and computational techniques (Sekaran & Bougie, 2016).

To gather data, a cross-sectional study was conducted among all 60 medical practitioners that belong to the departments of Cardiothoracic Surgery and Aneesthesiology using a self-administered questionnaire. The 60 medical practitioners representing consultants, heads of departments, clinical unit heads, registrars and medical officers were recruited to eliminate any element of bias. The recruitment of respondents were conducted in person, requesting them to complete the survey, explaining to them that their input is invaluable as it will be taken into account to improve service delivery in the public health care sector. The results of the survey were analysed and used to conclude on the findings.

An exploratory research design was chosen. Various variables were measured quantitatively using a questionnaire on a Likert scale. An exploratory study design is valuable where relationships between variables are unknown and quantitative measuring instruments must be utilized (Khanna, 2016).

3.3 Study Area

The study was conducted at Inkosi Albert Luthuli Central Hospital (IALCH) in KwaZulu-Natal. Medical practitioners from the departments of Cardiothoracic and Aneesthesiology were recruited in the study population. The choice of departments is based on the researcher being employed within the department of Cardiothoracic Surgery hence easy access to participants was available due to direct day to day contact. Furthermore the departments have curtailed surgical lists due to turnover rates thus necessitating the need for the study in this setting. Determining factors for

turnover in this specialized area will assist in the formulation of mechanisms to curb further resignations within the departments.

3.4 Target Population

The population included all 60 medical practitioners from the departments of Cardiothoracic and Anaesthesiology at Inkosi Albert Luthuli Central Hospital using a self-administered questionnaire. This was the total target population for the study. The 60 medical practitioners represented: consultants, heads of departments, clinical unit heads, registrars and medical officers that were recruited to eliminate any element of bias.

3.5 Sampling Techniques

Since the participants included all the 60 medical practitioners using a self-administered questionnaire, the entire population from both departments was tested and hence there is no sampling that is being done. Based on this, sampling techniques are irrelevant.

3.6 Sample Size

The sample size included all 60 medical practitioners from both the departments of Cardiothoracic Surgery and Anaesthesiology from Inkosi Albert Luthuli Central Hospital. The entire population was tested therefore there was no sampling that was being done with any relevance to a sample size.

3.7 Research Instruments

The questionnaire was the primary instrument tool utilised. The questionnaire was self-complete and designed to address the investigative questions pertaining to the research area. The research questions were in the form of a Likert-type scale (respondents' either in agreement or disagreement) by constructing questions with a five point scale where the lowest scale represented 'strongly agree' and the highest scale represented 'strongly disagree' (Likert, 1931). The questionnaire consisted of demographic data and questions under various sub -themes used to solicit responses from the target population. The demographic data included gender,

age, years of experience in the public health care sector, current position and highest level of education. The second part of the questionnaire was broken down into sub-themes with questions directly related to each theme. A total of 38 questions was asked in part 2 of the questionnaire. Research construct 1 was centered on remuneration in the public health care sector and comprised of eight questions. These questions were asked to establish if remuneration was a factor that resulted in turnover. Construct 2 centered on quality of life in the government sector. Questions related to social life, hours of work, stress, work schedules and appreciation of work were covered in 7 questions in this research area. Construct 3 was related to leadership within departments and the overall views or perceptions of practitioners on leadership style. Six questions related to leadership were covered. Construct 4 was centered on training and development within the departments. Questions on supervision, investment in training and development, case allocations, study periods and growth were asked in this area to establish it was a contributing factor to employee turnover. Construct 5 was centered on governance, expenditure and equipment to establish if practitioners were satisfied with commitment to good governance, patient waiting lists, budgets and provision of equipment within departments. Five questions related to the theme were covered in this research area. The final part of the questionnaire centered on intent to leave the government sector. Five questions related to working for government, importance of remaining within the department, future plans and feelings about remaining were asked to establish future trends.

3.8 Instrument Pre-testing

The questionnaire was administered to six medical practitioners in different departments aside from those in Anaesthetics and Cardiothoracic to determine the appropriateness and relevance of the questionnaire. The questionnaire was found to be relevant based on feedback.

3.9 Reliability and Validity

Validity refers to the degree to which the study measures what it intends to find. It consists of internal and external validity, where internal refers to the test and external refers to the ability to generalize findings to the targeted population (Sekaran & Bougie, 2016).

To maintain reliability of the research, documented steps of procedures have been recorded in detail. A database and case study protocol has been established. The coefficient alpha or Cronbach alpha is widely used in statistics for testing a score of reliability in life sciences research and has been used in this study. It is used to determine the internal consistency or average correlation of items in a survey instrument to gauge its reliability (Morera & Stokes, 2016).

3.10 Data Collection Methods

The technique employed in collecting data was a decisive selection of individuals for this study undertaken, i.e. individuals which assisted in greatest understanding of the problem and answering the identified research questions. It is for this reason that medical practitioners from the departments of Cardiothoracic Surgery and Anaesthesiology were selected. A manual questionnaire was issued and results computed after completion by participants.

3.11 Data Analysis

Data was captured on an excel spread sheet and analysed once all the data was collected. Computer software package SPSS was utilised to analyse the raw data. Data analysis has been done on different levels, i.e. the general and detailed levels. The detailed level covered each step. Common areas were identified with respect to the central theme. Spearman's rank correlation analysis was employed to determine inferential statistics.

3.12 Ethical Issues

Consideration of ethics at various stages of the research has been undertaken, i.e. preceding the commencement of the study, at the initial start, during collecting of data, during analysis and reporting, storing of data. The process included various approvals from the Provincial head of ethics, Department of Health KZN, Medical Manager (IALCH) and Departmental Heads (Cardiothoracic Surgery and Anaesthesiology). A proposal was furnished to the ethics clearance office of UKZN together with supporting documentation which received full ethical approval. The UKZN plagiarism policy according to the ethics committee has been abided too.

3.13 Conceptual Framework and Measurement of Variables

Employee turnover is the dependent variable. The independent variables are remuneration, quality of life, leadership, training and development, governance, equipment, hours of work, work satisfaction, working environment, benefits and managerial role. The relationship between remuneration, quality of life, leadership, governance, budgets, equipment and training and the intention to leave the public health care sector was analysed using the questionnaire to deduce factors that determine turnover of medical practitioners. The conceptual framework has been diagrammatically illustrated in the figure 3.1 below.

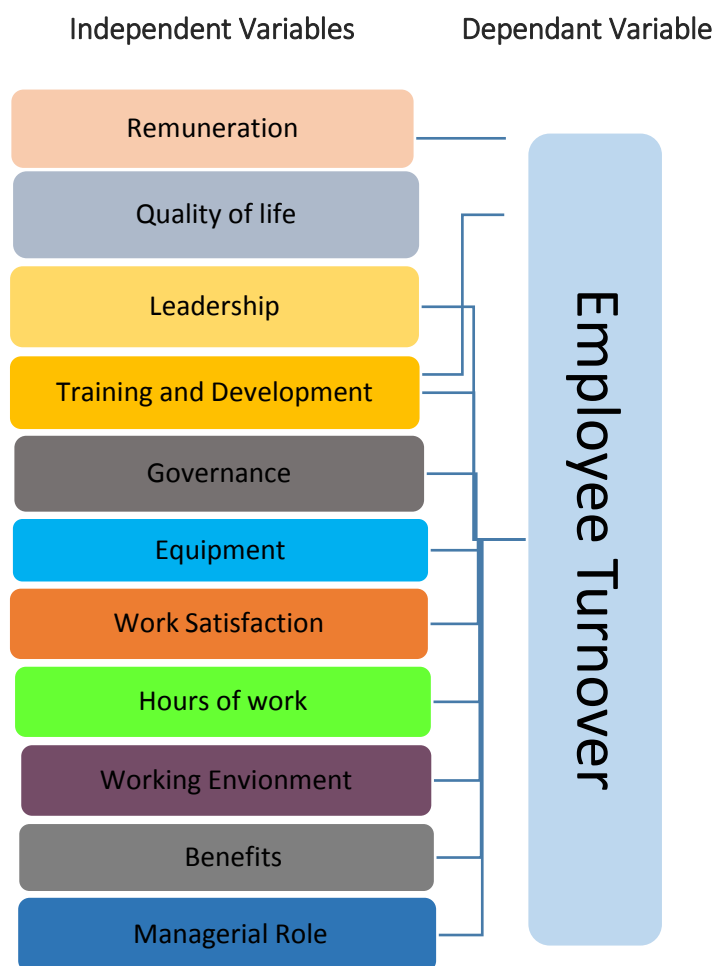


Figure 3.1: Conceptual framework showing relationship between the independent and dependent variables

3.14 Conclusion

The research method employed in obtaining the results has been described in this chapter. The research design, sampling methods and data collection together with statistical techniques used for the analysis of results have been explained. This quantitative exploratory study attempted to establish and understand the various factors that result in high turnover of medical professionals.

Chapter 4

Research Analysis & Findings

4.1 Introduction

The chapter deals with the analysis of the data collected. The entire population consisted of 60 medical practitioners. The research population included 60 participants that were surveyed utilizing a self-administered questionnaire. This represented the entire target population. Data analysis in this section is split into descriptive and inferential statistics. To gather data, a quantitative study was conducted using a Likert scale questionnaire which was issued to all participants that consented to being enrolled in the study. The results of the survey are analysed according to the following research constructs: a) Remuneration, b) Quality of Life, c) Leadership, d) Training and development, e) Governance / expenditure and equipment, f) Intention to leave. Questions under the various constructs form the building blocks in understanding which factors contribute to turnover amongst medical practitioners.

4.2 Descriptive Statistics

4.2.1 Demographics

The demographic analysis presented below is representative of gender, age, years of experience or service in the government sector, current position and highest education level obtained.

Figure 4.1 below shows the number of males versus females that were enrolled as the study population. There graph shows an almost equal number in male and female medical practitioners enrolled in the study.

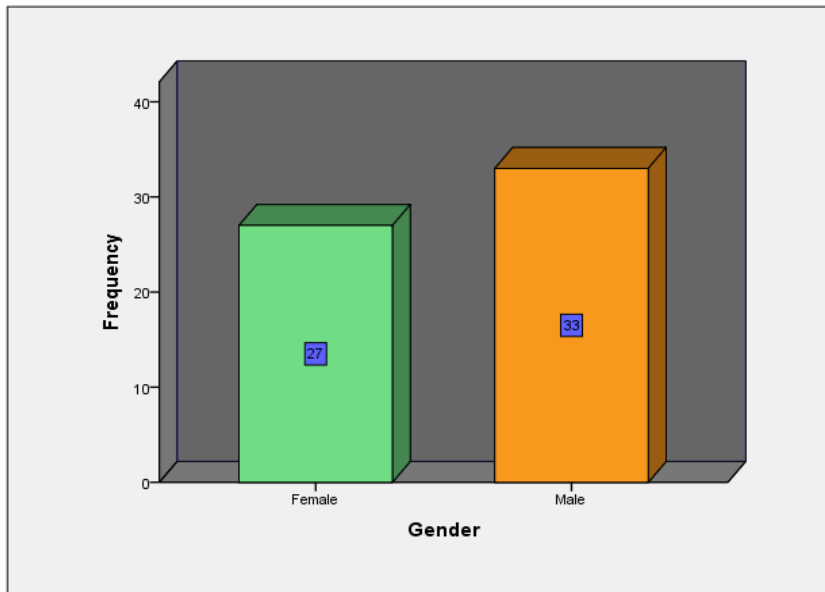


Figure 4.1: Males vs Females

Figure 4.2 represents the various age groups. Majority of participants were over thirty years of age with the most significant portion being between 31-40 years of age.

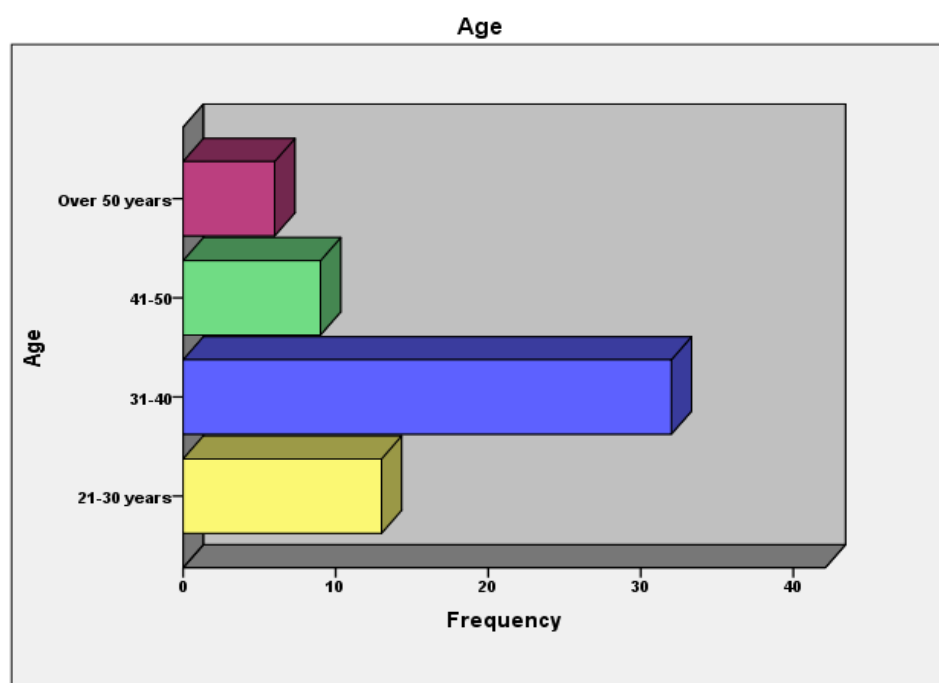


Figure 4.2: Age Groups

Figure 4.3 below illustrates the years of experience spent by practitioners in a government facility. Although the majority had between 6-10 years of experience making up half of the study population, a fairly large percentage had more than 10 years' experience showing that there was still a wealth of knowledge retained in the government sector.

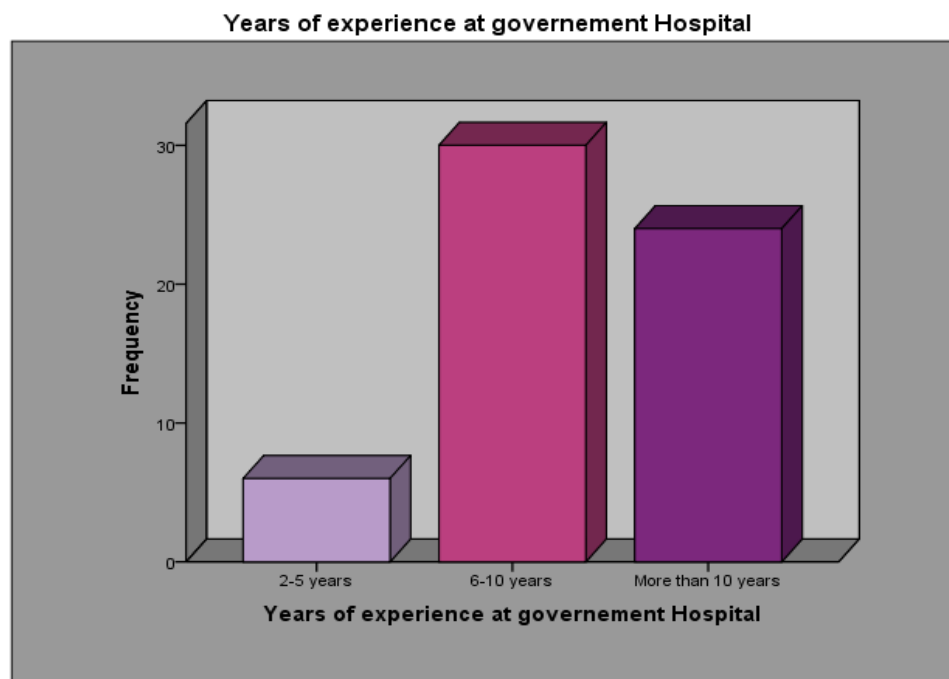


Figure 4.3: Showing the number of years practitioners spent in government facilities

Figure 4.4 below shows the current employment positions of participants. Registrars made up the majority of the population (45%). This was followed by Consultants (21.7%), Senior registrars (18.3%), Clinical heads of units (6.7%), Medical officers (6.7%) and Heads of departments (1.7%).

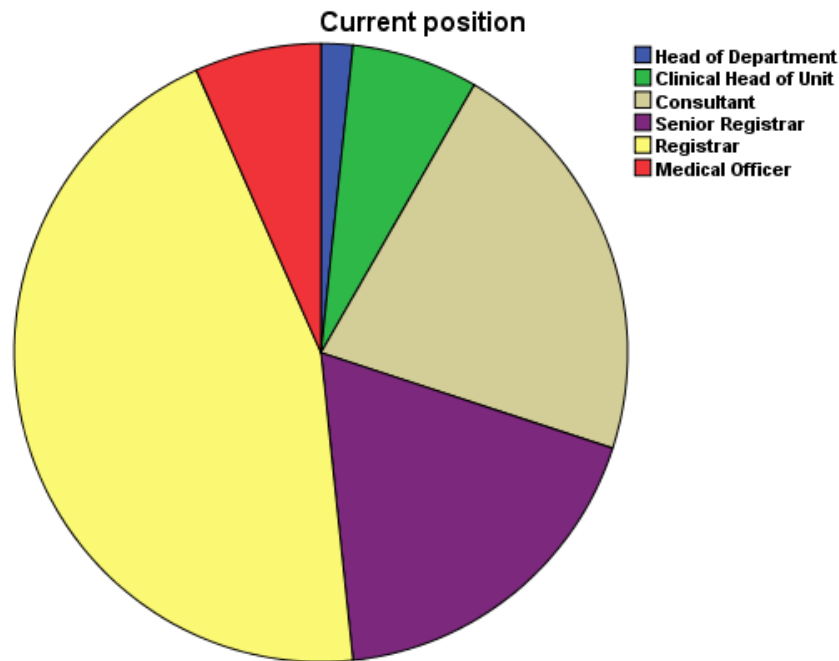


Figure 4.4: Represents current employment positions held by participants

The figure below illustrates the level of education amongst the participants. Medical graduates constituted the majority of participants making up 65% of the study population. 18.3% of the participants had a Master's degree in medicine and 16.7% were graduates with a fellowship.

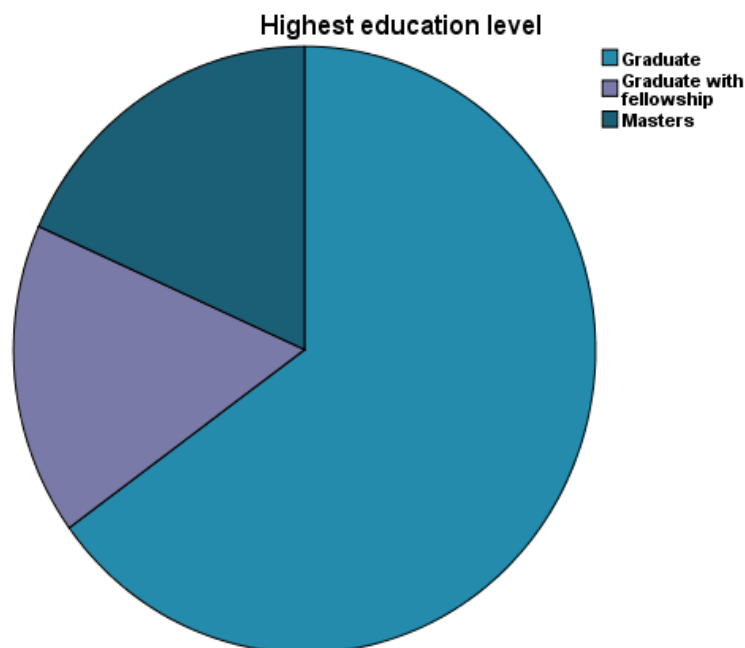


Figure 4.5: Represents the level of education amongst participants

4.2.2 Research Construct 1- Remuneration

Questions related to remuneration were covered to establish if remuneration was a factor that affected turnover rates. The figure below shows that an overwhelming majority agreed that salaries earned in government was not comparable to revenue earned in the private sector (90%). A small population remained neutral on the subject (1.7%).

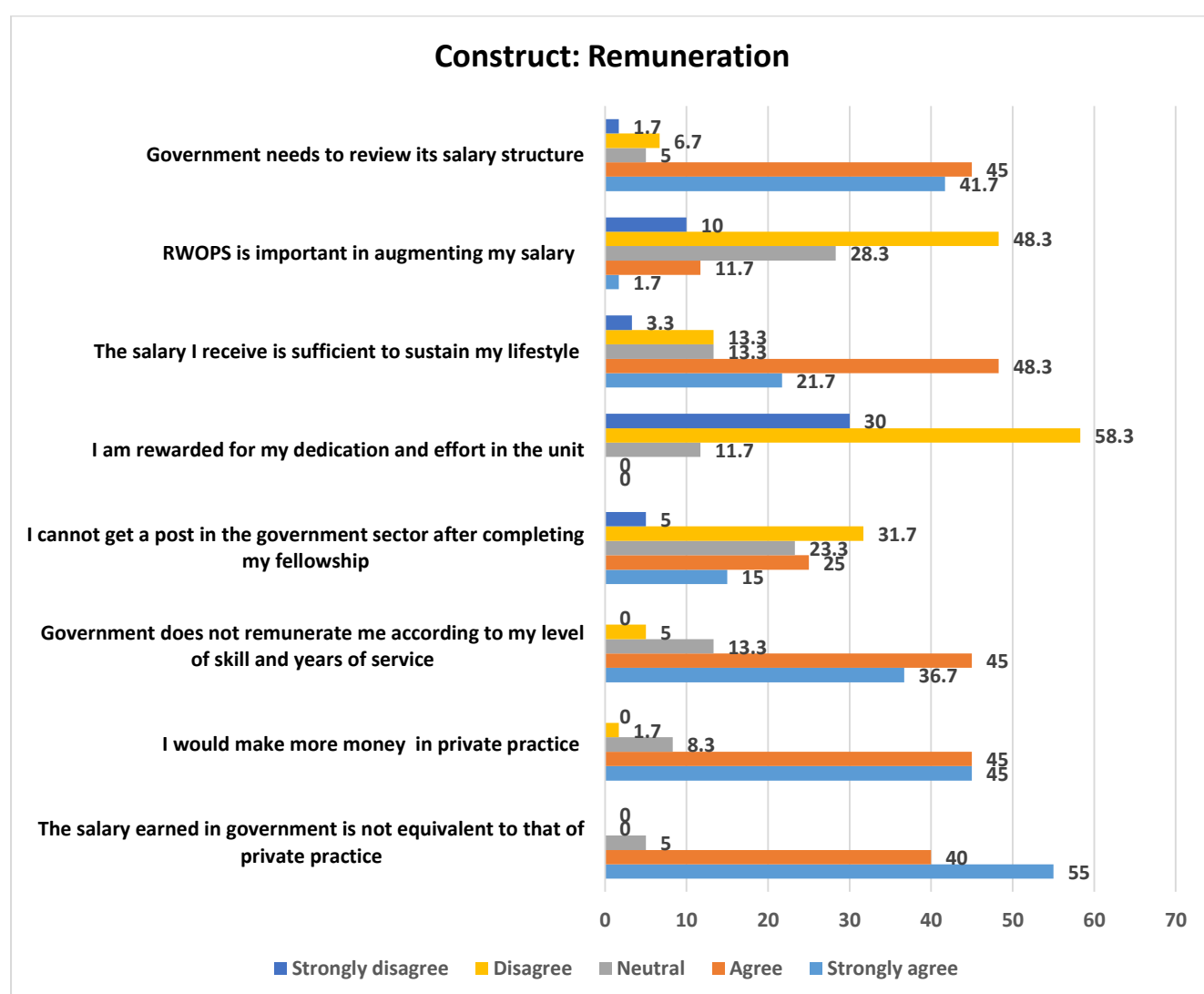


Figure 4.6: Showing questions related to construct 1 – Remuneration

The graph also shows responses to earning more money in private practice. Majority of participants agreed to earning more money in the private sector as opposed to a small percentage (1.7%) who disagreed. A small number of participants (8.3%) chose to remain neutral on the subject. Majority of participants agreed and strongly agreed with the statement that government does not remunerate practitioners according to skill and years of service (81.7%). A small percentage disagreed which could be representative of those in managerial posts. The majority of practitioners disagreed that posts cannot be obtained indicating that once practitioners qualified, posts were created or opened. Figure 4.6 also shows that a large number of practitioners felt that they are not rewarded for dedication in their units. No respondents agreed with the statement as is evident in the responses received for disagree and strongly disagree which represented the largest numbers. Furthermore the majority of practitioners agreed and strongly agreed to being able to sustain their lifestyle on the salary they received (70%). This is in keeping with government's implementation of better salary structures for health care professionals.

The graph indicates that remunerative work outside the province (ORWOPS) is not an important factor that contributes to the augmentation of the salaries of practitioners. The majority have disagreed and strongly disagreed with the statement indicating that practitioners do not consider doing part time work in the private sector as an important factor. However overall, the majority of practitioners indicated a need for government to review its salary structure (86.7%). ORWOPS was implemented to augment salaries of practitioners in the government sector thus reducing the gap in remuneration between government and private practice practitioners resulting in more practitioners remaining within state facilities (Kwinda, 2016).

Table 4.1 below depicts the frequency distribution for the remuneration construct. The cut-of value of 21 and below being returned as a valid percentage from participants equates to 80% of participants agreeing that remuneration has a bearing on turnover of medical practitioners. There were eight questions in this construct. 1 and 2 on the Likert scale represented agree and strongly agree therefore an overall score of 21 and below yielded a positive majority of participants agreeing that remuneration has an effect on turnover.

Table 4:1 Frequency distribution for remuneration

Overall Score	Frequency	Percent	Cumulative Percent
16.00	4	6.7	6.7
17.00	6	10.0	16.7
18.00	7	11.7	28.3
19.00	11	18.3	46.7
20.00	12	20.0	66.7
21.00	8	13.3	80.0
22.00	7	11.7	91.7
23.00	3	5.0	96.7
25.00	1	1.7	98.3
26.00	1	1.7	100.0
Total	60	100.0	

4.2.3 Research Construct 2- Quality of Life

Questions related to quality of life were covered to establish if it was a factor that affected turnover rates. A large majority disagreed and strongly disagreed that they enjoy enough family and social time whilst working for government which is indicative of a reduction in quality of life. Figure 4.7 below shows the views expressed by respondents.

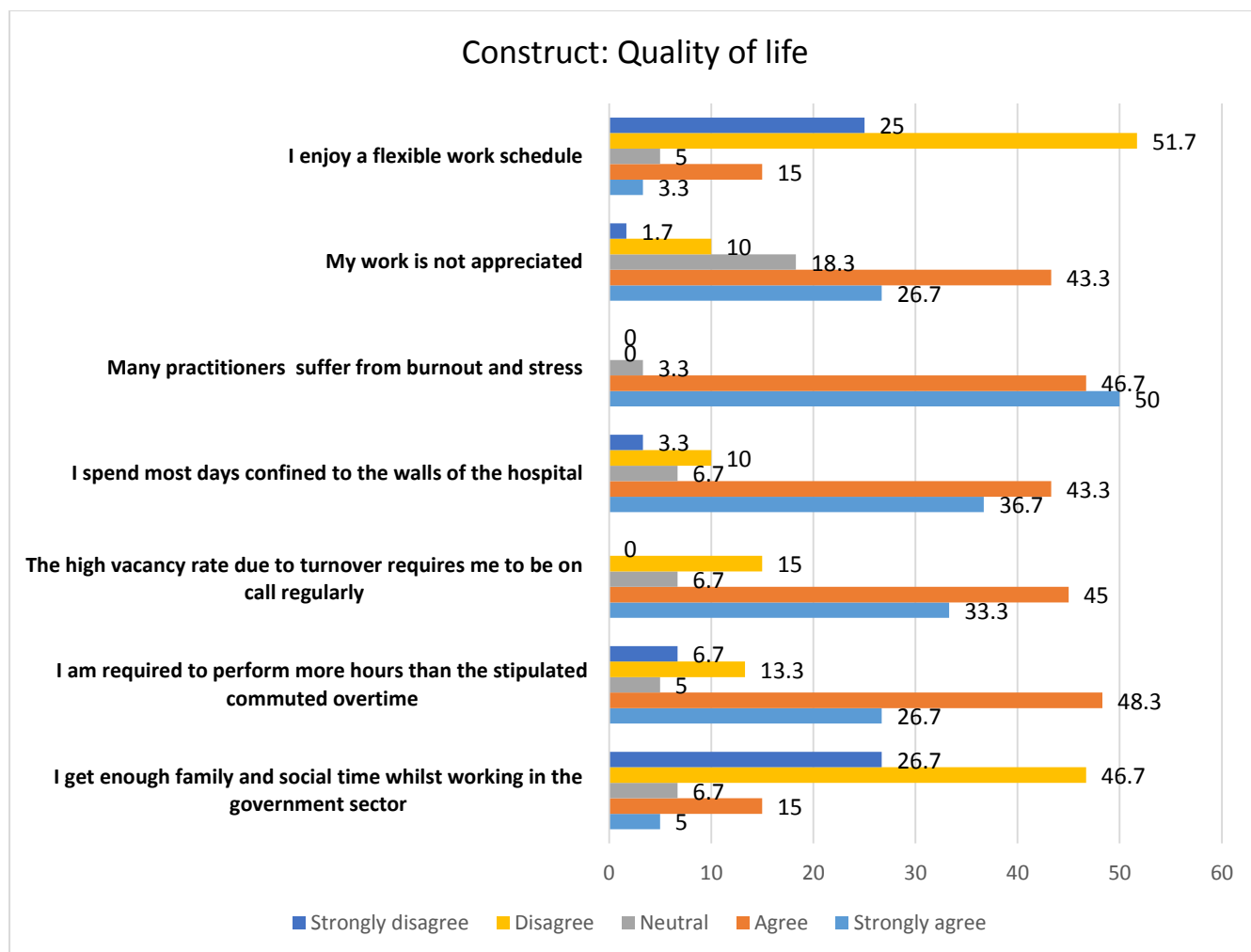


Figure 4.7: Construct 2- Quality of Life

Figure shows that a large percentage (75%) of practitioners agreed to performing more hours above and beyond the stipulated commuted overtime that they receive. This exacerbates the amount of time spent at hospitals resulting in fatigue, stress and being disillusioned. The effect can result in a negative or poor quality of life (Heponiemi et al., 2016). It can be observed by the number of practitioners agreeing with the statement that high turnover results in higher vacancy rates. These posts have to be advertised and filled by new candidates. In many instances, posts remain vacant due to non-availability of candidates as it takes a number of years for practitioners to train and qualify. The resultant is that existing staff members have to perform more calls and weekend duties. Performing consecutive calls daily can result in burnout and

stress (Au et al., 2017). When working situations fail to normalize, existing staff members resign.

The response of practitioners further cements and confirms views on spending most days confined to the walls of a hospital. Majority of the respondents positively supported the question which shows a negative impact on their time which ultimately affects quality of life. An overwhelming majority of respondents agreed that practitioners suffer from burnout and stress which negatively affects family life, stability and overall mental health. A lack of appreciation often results in practitioner's inability to perform optimally (Ayobami et al., 2016). Recognition of achievement is an important building block in career development of individuals. As demonstrated in figure 4.7 above, many respondents felt unappreciated resulting in a system of silo mentality where institutional barriers prevent creativity. Practitioners carry this burden of not being appreciated or accepted resulting in their overall quality of life being affected.

To conclude on the construct related to quality of life, many of the practitioners disagreed with enjoyment of a flexible work schedule. The graph below shows a polarity towards disagreement. The phenomenon of a limited or inflexible work schedule results in practitioners not being able to meet family demands such as their children's schooling events, failure to attend to family emergencies and in most cases non-attendance of family gatherings due to on call duties as a result of lack of staff to cover the work load in their absence. This affects overall quality of life.

Table 4.2 below depicts the frequency distribution for the quality of life construct. The cut-off value of 19 and below being returned as a valid percentage from participants equates to 77% of participants agreeing that quality of life has a bearing on turnover of medical practitioners. There were seven questions in this construct. 1 and 2 on the Likert scale represented agree and strongly agree therefore an overall score of 19 and below yielded a positive majority of participants agreeing that quality of life has an effect on turnover.

Table 4.2 Frequency distribution for quality of life

Overall Score	Frequency	Percent	Cumulative Percent
13.00	1	1.7	1.7
14.00	6	10.0	11.7
15.00	10	16.7	28.3
16.00	6	10.0	38.3
17.00	11	18.3	56.7
18.00	3	5.0	61.7
19.00	9	15.0	76.7
20.00	4	6.7	83.3
21.00	6	10.0	93.3
22.00	2	3.3	96.7
23.00	1	1.7	98.3
24.00	1	1.7	100.0
Total	60	100.0	

4.2.4 Research Construct 3- Leadership within Departments

Questions related to leadership within the departments were conducted to establish if leadership was a factor that affected turnover of practitioners. The figure below demonstrates that a large percentage of the study population believed that leadership did not drive them to remain in the government sector.

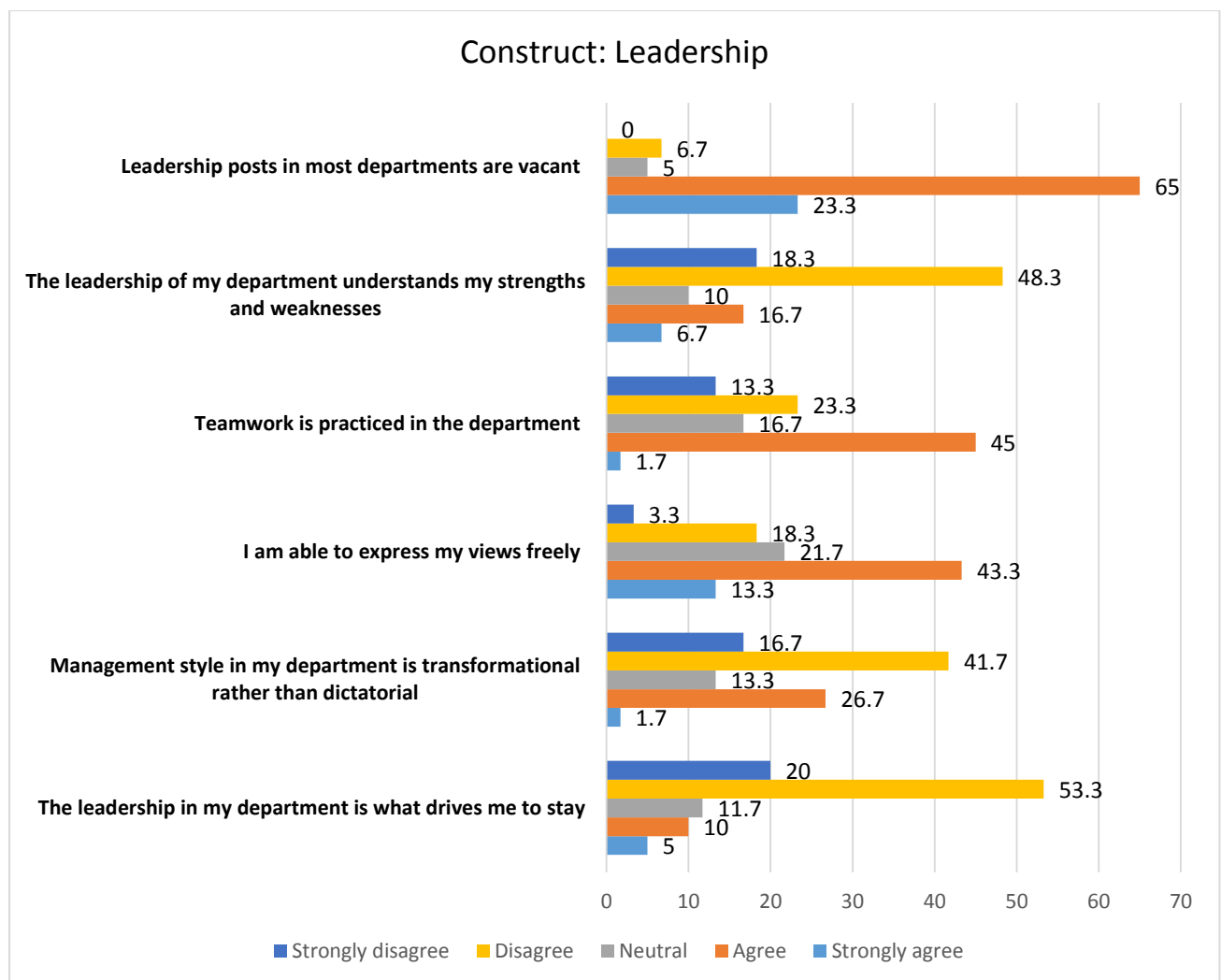


Figure 4.8: Showing leadership within the departments

The figure on leadership shows that over half the practitioners recruited in the study disagreed with a transformational leadership style being practised within departments (58.4%). A sizable balance chose to remain neutral on the subject (13.3%). This is a strong indicator of the lack of leadership skills within departments. Many of the departmental heads are clinicians rather than managers hence a need for development of managerial skills is necessary. Furthermore, just over half the study population felt that they were able to express their views freely (56.6%). There was a balance between those that remained neutral and those who disagreed. Many junior staff members choose not to express their views freely when engaging with more senior practitioners as they may come across as being over confident. The figure also shows that there was not much of a difference between those that agreed with

teamwork being practiced in the department and those that disagreed (45% agreed vs 23.3% who disagreed plus 13.3% who strongly disagreed). There is a near balance between the views. Many practitioners view teamwork as an important factor that facilitates understanding of patients surgical requirements which is borne out of a consultative decision making progress (Jenkins et al., 2015). It is important in ensuring that the right decision is being made. Very often with issues of short staffing, junior practitioners are left without assistance of senior team members.

Majority of practitioners felt that leadership did not understand their strengths and weaknesses. Often leaders of departments are faced with an overwhelming patient load, long working hours, administrative duties to ensure running of departments and regular meetings with management to facilitate the filling of vacant posts. This results in little or no time spent on understanding the needs of existing staff members. Figure 4.8 above also shows that an overwhelming majority of participants (88.3%) felt that leadership posts within departments are vacant. Increased workloads, lack of staff, high turnover rates, non-availability of resources such as equipment and consumables result in leaders not being able to perform their function optimally (Denis & van Gestel, 2016). Furthermore they are at the frontline of accountability for long patient waiting lists and poor services to government patients. It is for these reasons that many leadership positions remain vacant. In some instances the process to advertise leadership posts takes a long period of time leaving departments with leaders that are in an acting capacity.

Table 4.3 below depicts the frequency distribution for the leadership construct. The cut-off value of 21 and below being returned as a valid percentage from participants equates to 77% of participants agreeing that leadership has a bearing on turnover of medical practitioners. There were six questions in this construct. 1 and 2 on the Likert scale represented agree and strongly agree therefore an overall score of 21 and below yielded a positive majority of participants agreeing that leadership has an effect on turnover.

Table 4.3 Frequency distribution for leadership

Overall Score	Frequency	Percent	Cumulative Percent
9.00	1	1.7	1.7
11.00	1	1.7	3.3
12.00	4	6.7	10.0
13.00	3	5.0	15.0
14.00	3	5.0	20.0
15.00	4	6.7	26.7
16.00	3	5.0	31.7
17.00	5	8.3	40.0
18.00	7	11.7	51.7
19.00	3	5.0	56.7
20.00	6	10.0	66.7
21.00	6	10.0	76.7
22.00	7	11.7	88.3
23.00	2	3.3	91.7
24.00	2	3.3	95.0
25.00	2	3.3	98.3
26.00	1	1.7	100.0
Total	60	100.0	

4.2.5 Research Construct 4- Training and Development

Training and development is an important theme that was reviewed as it plays an integral part in the training of specialists. The movement of practitioners to more well established unit's results in higher turnover rates. To determine if this was a predictor of turnover, various questions related to training and development was asked. The figure below represents practitioners view on whether the departments invested in training and development. Just over half the study population (58.3%) agreed and strongly agreed whilst the remaining remained neutral or disagreed. This suggests that there is no overwhelming consensus on training and development.

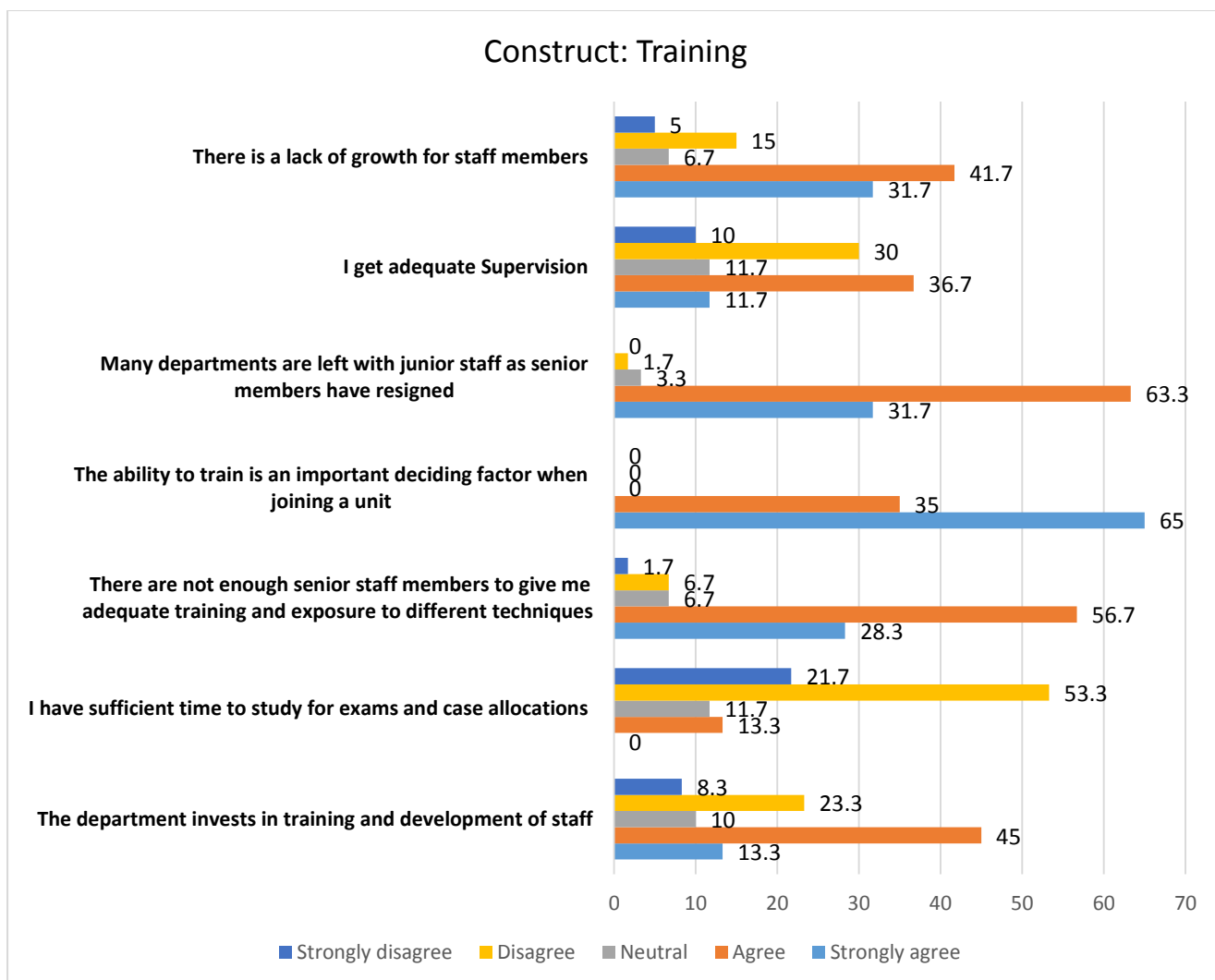


Figure 4.9: Construct 4 – Training and Development

The data shows that an overwhelming majority of practitioners (80%) disagreed or strongly disagreed with having adequate time to study. The results show that no time allocation is made for studying. Often practitioners have to work long hours, work extra commuted overtime, and remain on call without a dedicated time to study for college exams. Many become despondent after failure and in many cases have to attempt their primary exams again due to failure of the part 2 and oral examination. Many practitioners burnout after their first attempt. Depression is also a consequence of failure.

The graph also illustrates that practitioners felt strongly about not having enough senior staff members to facilitate training. The majority of practitioners (85%) agreed or strongly agreed that there wasn't adequate senior staff members available. This is

regarded as an important component of training and development as senior members guide junior practitioners through their learning. In this way years of experience is passed on. Without senior members, junior practitioners are left to their own devices which open the flood gates for medical negligence and litigation (Bateman, 2016b). This is a contributing factor to why government is burdened with law suits. The entire study population agreed to the department's ability to train as being an important factor when deciding to remain in a department. Without adequate exposure, practitioners do not acquire the skill to perform specialised procedures which hampers their overall ability to practice independently (Zweigenthal et al., 2016). Recently the college of Cardiothoracic Surgery and Anaesthesia have requested that practitioners maintain a certain case number before being legible to write the college exams. It is for this reason that many practitioners polarize to well established training units in the country.

The data further suggests that an overwhelming majority of practitioners felt that junior staff members are left to function on their own as many senior staff members have resigned. This does not aid in the learning process as junior staff members perform procedures without the guidance and expertise of senior experienced staff members. The overall mortality and morbidity rates of patients increases. However the graph shows that there is an almost even split between those practitioners that felt they had adequate supervision and those that disagreed. Majority of responses from practitioners (73.4%) indicate that they agreed and strongly agreed to having a lack of growth within their departments. Practitioners spend a large percentage of their lives training within government institutions, post exams many wish to see the fruits of their labour culminate into higher positions. Currently there is a freeze on government posts which only becomes unfrozen in critical cases and extensive motivation is required. This occurs due to an ever increasing health budget and ballooning wage bill (Bateman, 2016a). Practitioners therefore become frustrated and resign for the lucrative private sector.

Table 4.4 below depicts the frequency distribution for the training and development construct. The cut-off value of 19 and below being returned as a valid percentage from participants equates to 80% of participants agreeing that training and development has a bearing on turnover of medical practitioners. There were seven questions in this construct. 1 and 2 on the Likert scale represented agree and strongly agree therefore

an overall score of 19 and below yielded a positive majority of participants agreeing that training and development has an effect on turnover.

Table 4.4 Frequency distribution for training and development

Overall Score	Frequency	Percent	Cumulative Percent
11.00	1	1.7	1.7
13.00	4	6.7	8.3
14.00	13	21.7	30.0
15.00	6	10.0	40.0
16.00	8	13.3	53.3
17.00	7	11.7	65.0
18.00	4	6.7	71.7
19.00	5	8.3	80.0
20.00	6	10.0	90.0
21.00	2	3.3	93.3
22.00	2	3.3	96.7
23.00	2	3.3	100.0
Total	60	100.0	

4.2.6 Research Construct 5- Governance/ Expenditure and Equipment

Questions related to governance within the department of health together with the provision of consumables and equipment were asked to determine the view of medical practitioners on government's commitment to providing the departments with the necessary tools to ensure an efficient service. Figure 4.10 below shows that almost all practitioners (91.7%) disagreed or strongly disagreed that government was committed to good corporate governance. This is probably due to the perception that there is a lack of accountability with regards to proper contracts being in place for the maintenance of equipment and supply of consumables.

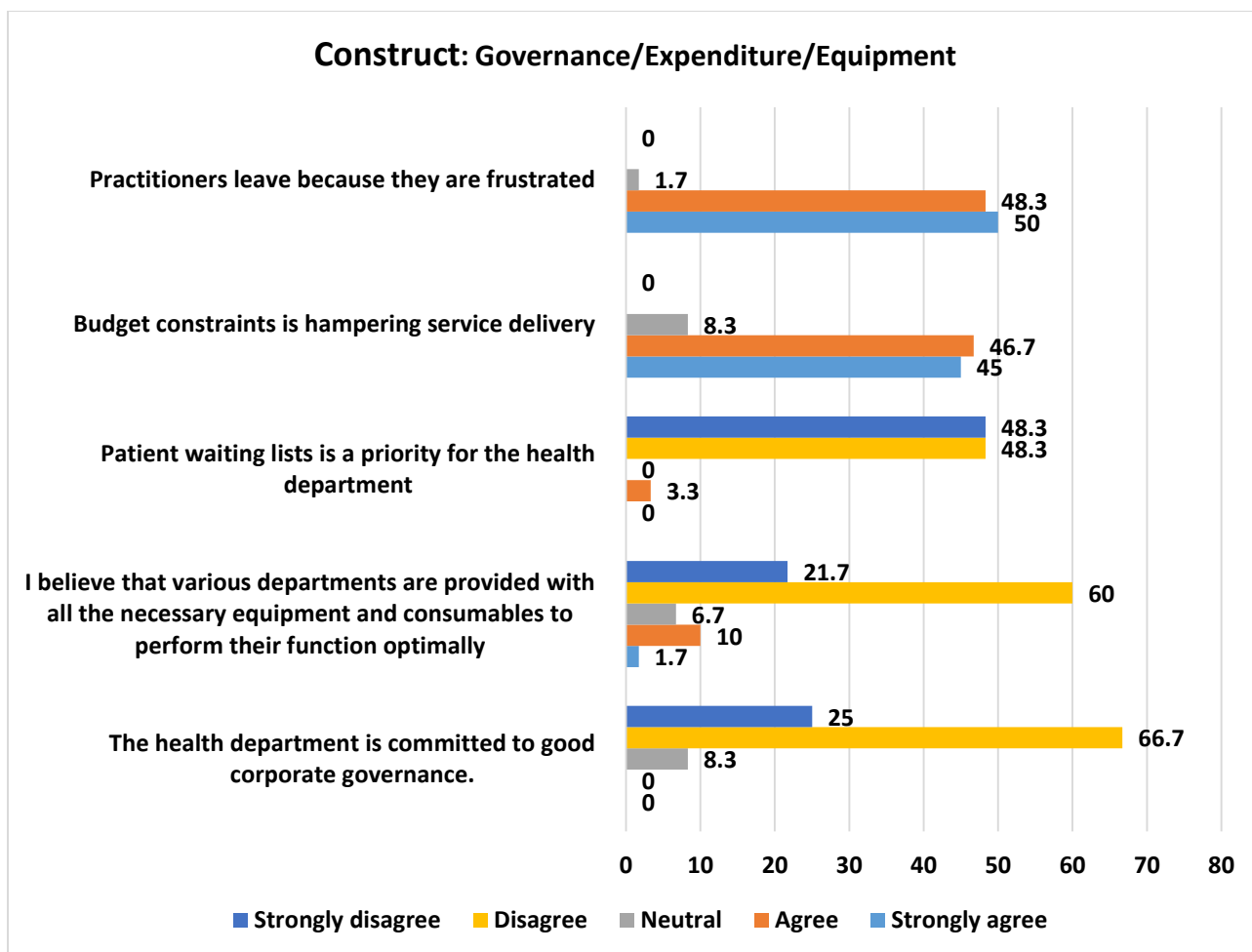


Figure 4.10: Results related to construct 5 – Governance/Expenditure and Equipment

Figure 4.10 shows that the majority of practitioners (81.7%) disagreed that the departments are provided with essential equipment and consumables to function optimally. This may be as a result of budget constraints due to the ever increasing wage bill, increased dependence on state health care facilities by the majority of the population and continuous litigation which eats into the budget. Almost all medical practitioners viewed patient waiting lists as a non-priority for government. Currently many departments are overwhelmed with the number of patients being seen at the various clinics. The results in long waiting lists for surgery. This may occur as a result of a lack of specialised hospitals in the province to cater for the needs of all patients (Caldwell & Aldous, 2017). There is a strong view from practitioners that budget constraints is hampering service delivery. A reduction in budgets results in less money

made available to fill vacant posts which results in few practitioners carrying the workload that may result in burnout (Bateman, 2016a). Less resources are available to purchase specialised equipment. Budget constraints also impacts on the upkeep of existing infrastructure. Data from the graph (98.3%) shows an overwhelming consensus that medical practitioners leave because of frustration. All participants except one who remained neutral felt strongly that this was a factor resulting in turnover of practitioners. Frustration may occur as a result of the various factors listed under the themes above, which ultimately result in resignations.

Table 4.5 below depicts the frequency distribution for the governance/expenditure and equipment construct. The cut-off value of 17 and below being returned as a valid percentage from participants equates to 95% of participants agreeing that governance/expenditure and equipment has a bearing on turnover of medical practitioners. There were five questions in this construct. 1 and 2 on the Likert scale represented agree and strongly agree therefore an overall score of 17 and below yielded a positive majority of participants agreeing that governance/expenditure and equipment has an effect on turnover.

Table 4.5 Frequency distribution for governance/ expenditure and equipment

Overall Score	Frequency	Percent	Cumulative Percent
10.00	1	1.7	1.7
13.00	4	6.7	8.3
14.00	7	11.7	20.0
15.00	11	18.3	38.3
16.00	21	35.0	73.3
17.00	13	21.7	95.0
18.00	2	3.3	98.3
20.00	1	1.7	100.0
Total	60	100.0	

4.2.7 Research Construct 6- Intention to Leave

The final research area revolved around how medical practitioners view their future within the department of health. Questions related to intention to remain or leave was posed to participants to establish a future trend. Figure 4.11 below shows that greater than half the study population thought about leaving in the department.

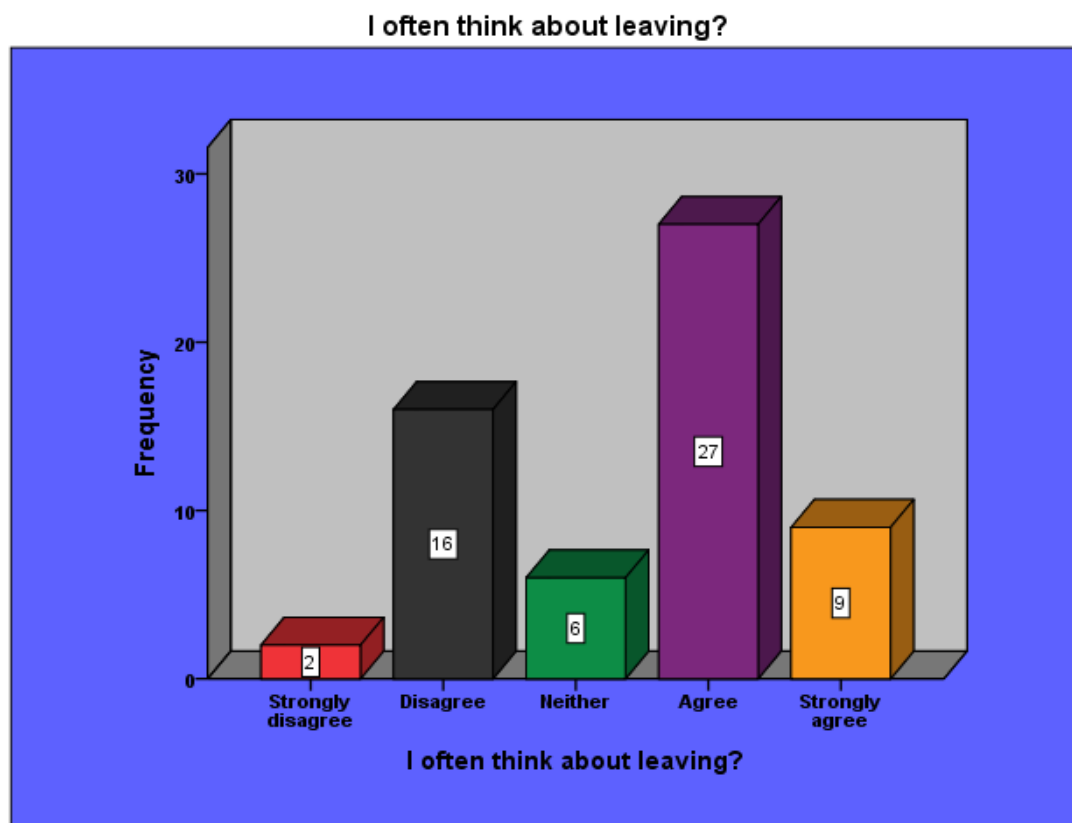


Figure 4.11: Results showing practitioners view on leaving

The figure 4.12 below clearly supports the previous question as to where practitioners viewed themselves in the future. The majority of respondents indicated that they would leave in the near future. This is concerning as the government sector is viewed as an arena for training from which essential skill is then lost to the private sector resulting in a void being created.

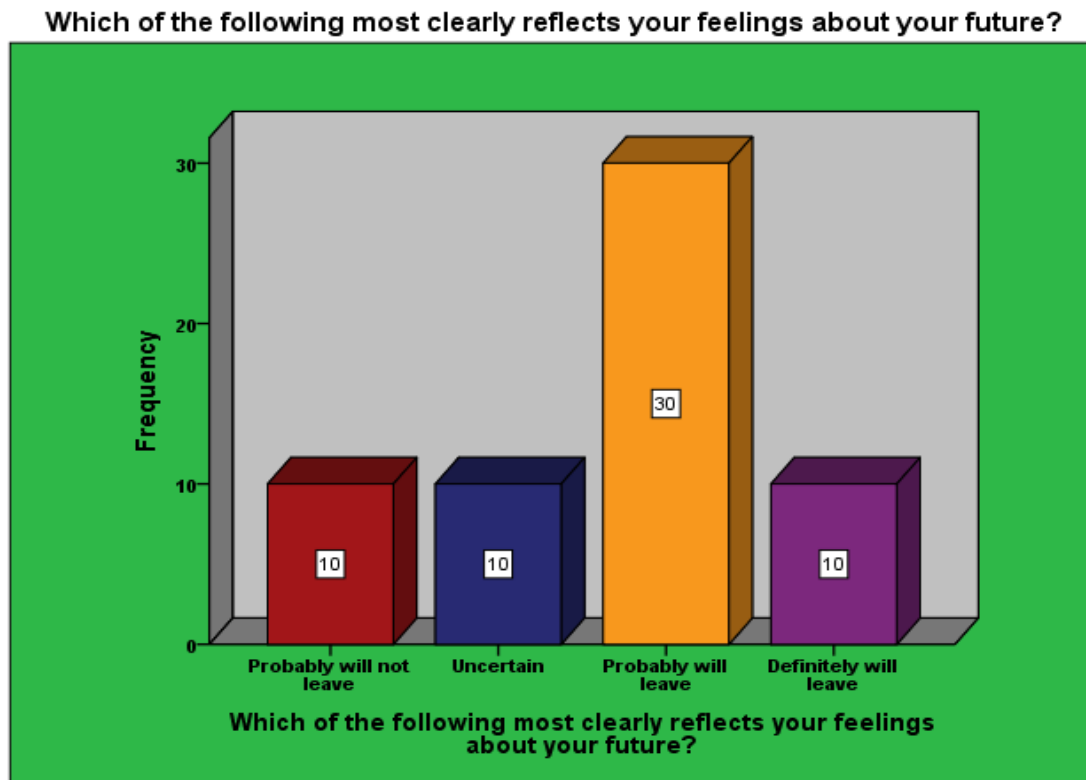


Figure 4.12: Practitioners feelings about the future

Figure 4.13 below shows that there is a close balance between those that wish to remain within their departments and those that intend to leave. This can be explained by the number of registrars and senior registrars enrolled in the study. These medical practitioners are currently completing their training time and examinations within the department therefore their current focus would be to remain within the department.

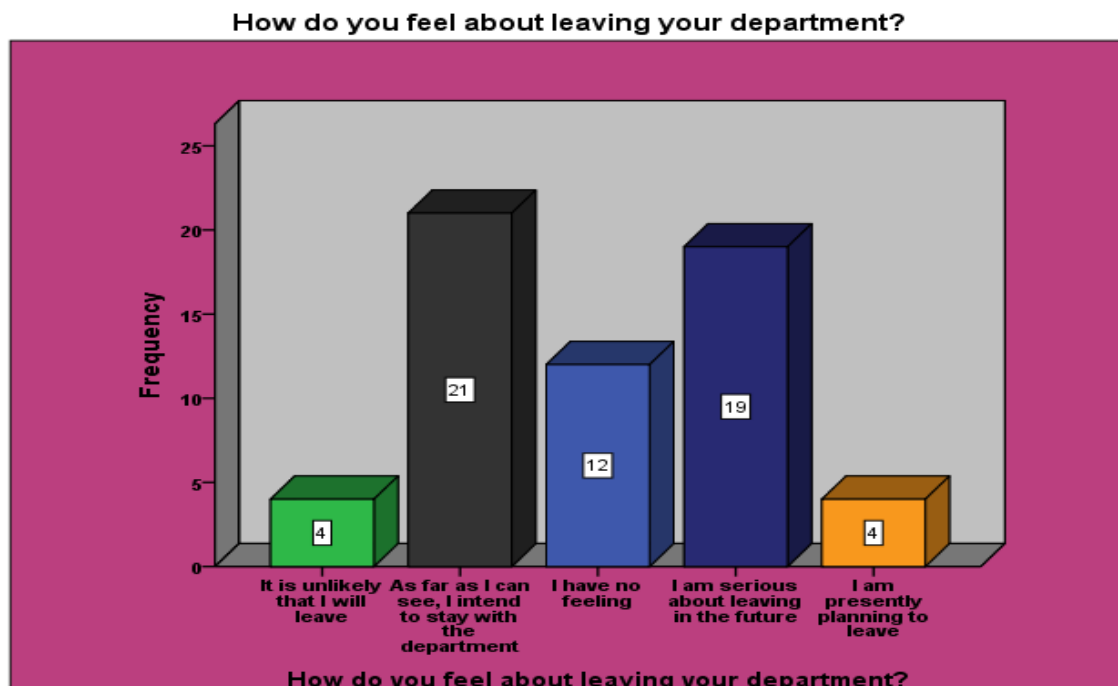


Figure 4.13: Views on leaving the department of health

Figure 4.14 below indicates practitioner's views on preferring to work for government. More than half the participants preferred not to stay and work in the government sector.



Figure 4.14: Results showing preference to remain or leave the department

The figure below indicates that the majority of practitioners viewed continuing their careers within the department as important. This further supports the view that many of the participants being registrars would prefer to complete their area of specialisation within the departments.

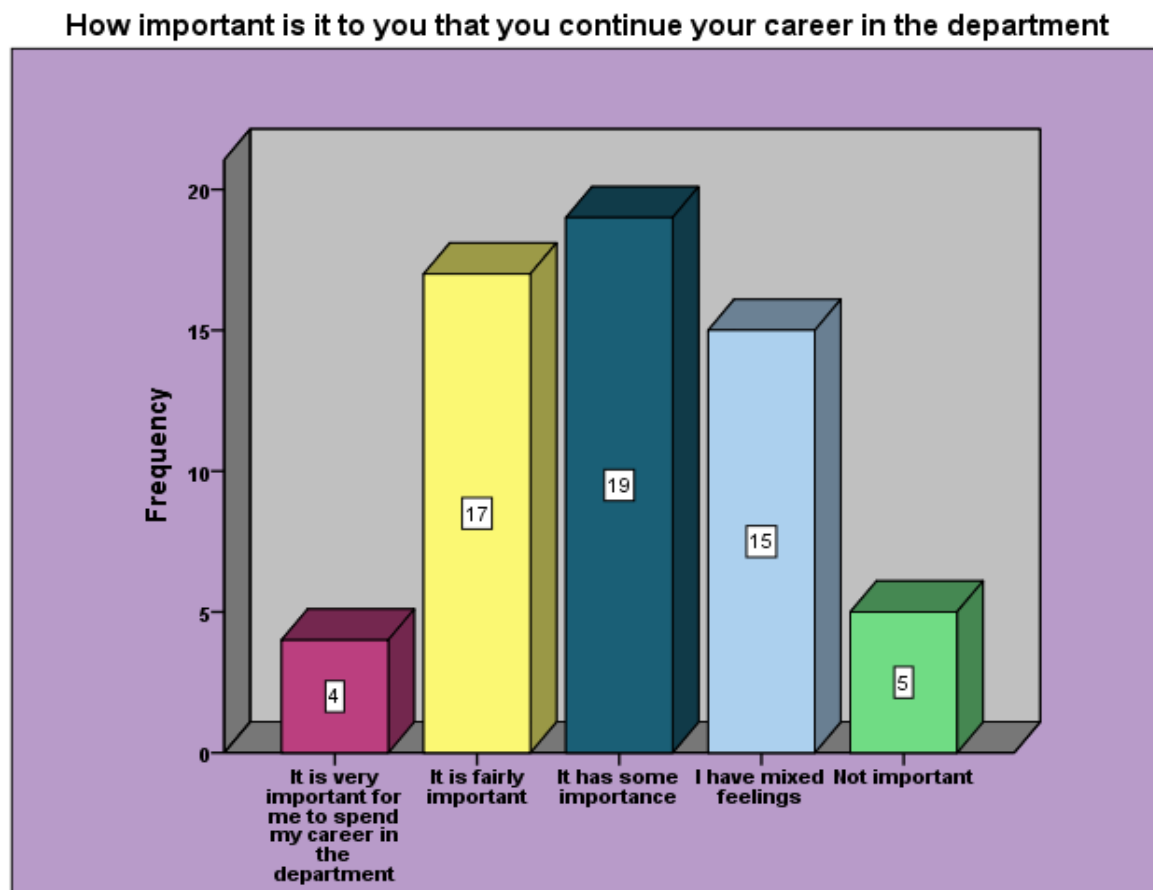


Figure 4.15: Practitioners view on the importance of continuing a career within the department

Table 4.6 below depicts the frequency distribution for the turnover construct. The cut-off value of 19 and below being returned as a valid percentage from participants equates to 87% of participants agreeing that turnover is a future result.

Table 4.6 Frequency distribution for turnover

Overall Score	Frequency	Percent	Cumulative Percent
8.00	1	1.7	1.7
9.00	4	6.7	8.3
10.00	4	6.7	15.0
12.00	2	3.3	18.3
13.00	2	3.3	21.7
14.00	4	6.7	28.3
15.00	4	6.7	35.0
16.00	5	8.3	43.3
17.00	4	6.7	50.0
18.00	15	25.0	75.0
19.00	7	11.7	86.7
20.00	7	11.7	98.3
21.00	1	1.7	100.0
Total	60	100.0	

4.3 Inferential Statistics

4.3.1 Correlation

Correlation is a bivariate analysis technique that tests the strength of relation or association between variables. Spearman's rank correlation utilised in the study is a nonparametric version of the Pearson's product-moment correlation. It is represented by the value of ρ known as the Spearman's correlation coefficient. A pre-requisite to using Spearman's rank correlation is that there must exist two variables that are interval, ratio or ordinal which applies to the study. A monotonic relationship is said to exist when the value of one variable increases as the value of the other variable increases or vice versa. Therefore a monotonic relationship is significant when utilising Spearman's rank correlation. Pearson's correlation analysis would be more appropriate for linear relationships. A p value < 0.05 is indicative of a strong correlation between variables.

The Spearman's rank-order correlation analysis was employed to establish links between the various themes of the study. These included remuneration, quality of life, leadership, training and development, governance/expenditure/equipment and intention to leave the government sector. Table 4.1 below shows a strong positive correlation between quality of life and intention to leave or turnover ($p=.006$). A strong positive correlation also existed between leadership and turnover. This is indicative that medical practitioners value quality of life and leadership as important deciding factors.

Table: 4.7 Spearman's rank order correlation analysis between variables

Correlations								
			Remuneration	Quality of life	Leadership	TD	Governance	Turnover
Spearman's rho	Remuneration	Correlation Coefficient	1.000	-.020	.200	.030	.136	-.168
		Sig. (2-tailed)	.	.878	.126	.819	.299	.200
		N	60	60	60	60	60	60
	Quality of life	Correlation Coefficient	-.020	1.000	-.136	.005	-.112	-.354**
		Sig. (2-tailed)	.878	.	.301	.970	.393	.006
		N	60	60	60	60	60	60
	Leadership	Correlation Coefficient	.200	-.136	1.000	.203	.133	.425**
		Sig. (2-tailed)	.126	.301	.	.119	.310	.001
		N	60	60	60	60	60	60
	TD	Correlation Coefficient	.030	.005	.203	1.000	-.148	-.005
		Sig. (2-tailed)	.819	.970	.119	.	.258	.971
		N	60	60	60	60	60	60
	Governance	Correlation Coefficient	.136	-.112	.133	-.148	1.000	.039
		Sig. (2-tailed)	.299	.393	.310	.258	.	.766
		N	60	60	60	60	60	60
	Turnover	Correlation Coefficient	-.168	-.354**	.425**	-.005	.039	1.000
		Sig. (2-tailed)	.200	.006	.001	.971	.766	.
		N	60	60	60	60	60	60

** . Correlation is significant at the 0.01 level (2-tailed).

Table 4.2 Age did not impact on turnover. Different age groups had a similar mean rank ($p > 0.05$).

Table 4.8 Comparing mean rank of turnover with regards to age of the participants

Ranks				
	Age	N	Mean Rank	<i>p value</i>
Turnover	21-30 years	13	33.85	.589
	31-40	32	30.77	
	41-50	9	30.33	
	Over 50 years	6	22.08	
	Total	60		

Table 4.3 Gender did not impact on turnover. Both males and females had a similar mean rank. ($p > 0.05$).

Table 4.9 Comparing mean rank of turnover with regards to gender of the participants

Ranks					
	Gender	N	Mean Rank	Sum of Ranks	<i>p value</i>
Turnover	Female	27	29.56	798.00	.702
	Male	33	31.27	1032.00	
	Total	60			

Chapter 5

Discussion, Conclusions & Recommendations

5.1 Introduction

To recap on the issue, high turnover and vacancy rates in the public health sector cannot go unnoticed. The current gap that needed to be explored relates to understanding of the root cause of the problem and the development of an appropriate framework that can be used to ensure employee satisfaction such that turnover can be minimized and medical practitioners retained. The goal of the research was to explore and unpack the various factors that contribute to the turnover within the departments of Cardiothoracic and Anaesthetics. Research was merited in this area as concrete evidence was required to establish the reasons for the exodus of medical practitioners within the departments. Many of the research studies in this area have focused predominantly on nursing turnover in in different parts of South Africa and greater emphasis needs to be placed on medical doctors who provide an essential service to the government health care system. The objectives of the study were to:

- To identify if medical practitioners leave because of remuneration.
- To identify if quality of life is affected in the government sector.
- To identify if leadership is a cause of turnover.
- To determine the quality of specialists training within the departments of Cardiothoracic Surgery and Anaesthesiology.
- To identify if practitioners view governance, budgets and supply of equipment and consumables to the departments as a reason for turnover.
- To identify medical specialists that intend on leaving the government sector.
- To provide the KZN department of Health with findings and possible recommendations to reduce the exodus of medical practitioners from government health care facilities.

The various hypotheses postulated included whether:

- H₀ Remuneration has no effect on turnover amongst medical practitioners
- H₁ Remuneration positively affects turnover amongst medical practitioners
- H₀ Quality of life is negatively affected in the government sector
- H₁ Quality of life is positively in the government sector
- H₀ Leadership within the department has no effect on turnover amongst medical practitioners
- H₁ Leadership within the department directly affects turnover amongst medical practitioners
- H₀ Departments training does not affect turnover amongst medical practitioners
- H₁ Departments ability to train positively affects the rate of turnover amongst practitioners
- H₀ Governance/ Equipment and Expenditure has no impact on turnover amongst medical practitioners
- H₁ Governance/ Equipment and Expenditure directly affects turnover amongst medical practitioners

Chapter 4 covered analysis and representation of the results. Data obtained from the self-administered questionnaire was reviewed. Demographic information and data from questions relating to each theme was extrapolated. Chapter 5 now deals with discussion of these results which is aligned with the objectives, hypothesis, theoretical framework, critical analyses of literature of the study.

The inferential analysis performed helped to establish pertinent key findings. A Spearman's rank order correlation was conducted to determine the correlation amongst the various themes. These included remuneration, quality of life, training and development, governance/expenditure/equipment and intention to leave. A strong positive correlation ($p = .006$) existed between quality of life and turnover. This finding shows that medical practitioners viewed their quality of life as an important factor when deciding to exit the government sector. Long working hours coupled with increased calls results in practitioners having to spend more time within health care facilities. The

high vacancy rates further increases the need for practitioners to cover the work load resulting in stress and burnout. This negatively affects overall quality of life (Au et al., 2017).

The second crucial finding related to the strong correlation between leadership and turnover. A *p value* of .001 confirmed that practitioners viewed leadership and leadership styles within the departments as push factors resulting in them wanting to leave the government sector. Many departments are run by medical doctors who are heads of departments and heads of clinical units. Their primary profession is that of clinical practice. Leadership skills are an important resource which is essential in the management of staff (Fallatah et al., 2017). Leaders need to be educated and groomed for these position so as to deal with clinical, personal and social problems that staff may face.

Further inferential analysis was conducted to establish if a relationship existed between age and turnover. Age did not impact on turnover. Different age groups had a similar mean rank ($p > 0.05$). The study went on to examine if a relationship existed between gender and turnover. The mean rank was similar between males and females. Therefore no relationship was established between gender and turnover ($p = .702$). Literature suggests that women are at a greater risk of experiencing burnout and stress resulting in higher turnover rates. Long working hours and non-uniformity of calls remain a barrier to quality of life for women (Bateman, 2014).

5.1.1 Demographic Data

The study population included 33 males and 27 females. The majority of participants fell between the 31-40 year age group. A large number of participants had between 6-10 years of working experience which was followed by those with more than 10 years of working experience. Registrars (practitioners in specialist training) made up the bulk of the study population (63.3%). Medical graduates constituted the majority of participants making up 65% of the study population. 18.3% of the participants had a Master's degree in medicine and 16.7% were graduates with a fellowship.

5.2 Constructs

5.2.1 Objective 1 – The objective was to determine if remuneration positively affected or had no effect on practitioner's intent to leave.

The theme of this section was to establish if a relationship existed between remuneration and the intention to leave the government sector. In terms of the theoretical framework, the two factor theory developed by psychologist Frederick Herzberg was employed. According to the theory, factors in the working environment cause job satisfaction and dissatisfaction. Herzberg theorized that job satisfaction and dissatisfaction act independently of each other. According to Herzberg, Mausner and Snyderman (2011), individuals are not satisfied with low work order requirements such as minimum wage, safety and pleasant working conditions. According to empirical review, various academics have argued about the influence of money as a motivating factor. It is believed that once a person has accumulated enough money then they may not be attracted to remain within an organization purely based on monetary value.

The following findings were established from questions related to remuneration as a possible factor that influenced turnover. An overwhelming majority agreed that salaries earned in government was not comparable to revenue earned in the private sector. A small population remained neutral on the subject. The literature indicated that in order to bridge the gap between the private and government sector in South Africa, government implemented a phased OSD (occupation specific dispensation) programme to increase the level of salaries among health care professionals (Labonté et al., 2015). Government has recently introduced the application process for ORWOPS (Other remunerative work outside province) to allow practitioners to practice both in government and private practice. These are incentives used to increase the remuneration of medical personnel (Kwinda, 2016). These incentives tie in with the literature review that shows a decline in the migration of rural workers due to the implementation of OSD.

The majority of participants agreed and strongly agreed that government does not remunerate practitioners according to skill and years of service. A small percentage disagreed which could be representative of those in managerial posts. Currently salary notches are revised based on yearly increments pegged to CPI. The number of years

needed to progress to the next grade within the salary scale ranges between 5-10 years. The skill level of practitioners is not a factor used to determine levels of remuneration. Literature supports the findings that recognition of skill and accomplishment is regarded as an effective retention strategy. Studies suggest that employees look for organisations that encourage and facilitate growth, teamwork, education, recognition, compensation and benefits (Ayobami et al., 2016). A large number of practitioners felt that they are not rewarded for dedication in their units.

An overwhelming majority of practitioners agreed and strongly agreed to being able to sustain their lifestyle on the salary they received. However practitioners strongly felt that government needs to review its salary structure. This is in keeping with the number of years it takes for grade progression. When practitioners obtain higher posts, they have to remain in the post for more than five years before moving to the next grade. Remunerative work outside province was not an important factor as the majority of practitioners felt that it played no role in augmenting their salary. According to the literature, government introduced the ORWOPS approval process to augment the salaries of health care professionals working in the government sector. However due to the time spent covering daily duties, calls, overtime and training in the department ORWOPS may not suit junior medical practitioners.

5.2.1.1 Conclusions related to objective 1

The findings show that remuneration is not a push factor that results in turnover of medical practitioners within the departments of Cardiothoracic and Anaesthetics. Academics have previously found that once individuals obtain a certain monetary value, it does not become a retaining factor for individuals. Government's implementation of the occupation specific dispensation (OSD) has increased the salary of medical professionals across the country. Furthermore salary structures have been standardized country wide to prevent poaching of staff to other provinces. The majority of practitioners felt that there was a discrepancy between salaries in government versus private practice. In general there is an awareness that individuals in private practice belong to a higher tax bracket, have to pay for the operational costs of their consultation rooms, incur high medico legal insurance cost to protect against malpractice and need to arrange locum cover for their practice when on leave or sick leave. Government's contribution towards pension and medical aid adds to the

remuneration package of state employees. Recognition of skill is a grey area as many practitioners have to wait to upgrade salary levels or for higher posts to become vacant. This is evident from the practitioner's response to government reviewing its salary structure.

5.2.1.2 Recommendations related to objective 1

Based on the conclusions above, the following recommendations dealing with remuneration should be considered by national government.

- Revision and revamp of the salary grading system.
- Decreasing the number of years required for grade progression.
- The number of years spent in a government facility should be used to increase salary levels without having to apply for higher posts.
- Salary levels to increase, based on further training and skill obtained through accredited training facilities for all medical personnel.
- Incentive bonuses to be awarded for every 10years of service.

5.2.2 Objective 2 – was to identify whether quality of life was affected when working for the government sector.

The theme of this section was to identify whether a relationship existed between quality of life experienced by medical practitioners in the government sector and the intention to leave. A widely acknowledged theory that addresses the direct relationship between satisfaction at work and quality of life of life satisfaction is Chacko's (1983) spill over model. The model suggests that being satisfied in one area of life automatically extends to other areas thus a positive relationship can be established between job satisfaction and quality of life. Invariably dissatisfaction with life can manifest itself as dissatisfaction with work (Chacko, 1983). According to the empirical review a balance between work and life activities has been regarded as a key ingredient to time management of doctors (Jadoo et al., 2015). The improvement of working conditions such as a safe working environment together with a reduction in work load has been advocated by the authors. The nature of the job entails that doctors

experience increase workloads, long working hours, pressurized working conditions and emotional stress resulting in strain and burnout.

The following findings were established from the analysis of data. The inferential analysis performed using Spearman's rank order correlation found that a strong positive correlation ($p = .006$) existed between quality of life and turnover. This finding shows that medical practitioners viewed their quality of life as an important factor when deciding to exit the government sector. The literature suggests that long working hours coupled with increased calls results in practitioners having to spend more time within health care facilities. The high vacancy rates further increases the need for practitioners to cover the work load resulting in stress and burnout (Roy et al., 2017). This negatively affects overall quality of life. Findings from questions related to quality of life showed that a large majority disagreed and strongly disagreed that they enjoy enough family and social time whilst working for government which is indicative of a reduction in quality of life. Practitioners agreed to performing more hours above and beyond the stipulated commuted overtime that they receive. According to literature this exacerbates the amount of time spent at hospitals resulting in fatigue, stress and being disillusioned. Majority of practitioners agreed with the statement that high turnover results in higher vacancy rates. These posts have to be advertised and filled by new candidates. In many instances, posts remain vacant due to non-availability of candidates as it takes a number of years for practitioners to train and qualify. The resultant is that existing staff members have to perform more calls and weekend duties. Performing consecutive calls daily can result in burnout and stress (Roy et al., 2017). When working situations fail to normalize, existing staff members resign. Long hours of work conducted by doctors and nurses prevent this sort of structure putting immense pressure on the spouse. Long overtime hours and on call duties render employees inactive to fulfil family obligations (Haskins et al., 2017). Majority of respondents once again agreed that practitioners suffer from burnout and stress which negatively affects family life, stability and overall mental health. The phenomenon of a limited or inflexible work schedule results in practitioners not being able to meet family demands such as their children's schooling events, failure to attend to family emergencies and in most cases non- attendance of family gatherings due to on call duties as a result of lack of staff to cover the work load in their absence. This affects overall quality of life. A lack of appreciation often results in practitioner's inability to

perform optimally (Ayobami et al., 2016). Recognition of achievement is an important building block in career development of individuals as per Herzberg's two factor theory. Many respondents felt unappreciated resulting in a system of silo mentality where institutional barriers prevent creativity. According to the empirical review, a balance between work and life activities has been regarded as a key ingredient to time management of doctors. Favourable work support in the form of autonomy, organisational and social support can be regarded as a buffer to the high stress demands. Roy et al. (2017) found that burnout was more prevalent in the public sector as opposed to the private sector. Research has fingered the three elements of burnout as a contributor to reduced quality of life. Emotional exhaustion, personal achievement and depersonalisation represent these elements.

5.2.2.1 Conclusions related to objective 2

The findings show that quality of life is a determining and push factor for medical practitioners wanting to exit the departments. The positive correlation coefficient is indicative of the relationship between quality of life and turnover. Questions related to practitioner's quality of life shows that the majority of respondents feel strongly that they do not enjoy a good quality of life coupled with adequate family and social life. The resultant is a phenomenon related to burnout, stress and disillusionment with the system. The gap left when staff members resign results in increased workloads and added on call duties. The time frame taken for departments to recover from appointment of adequately trained staff to optimal function increases the burden of the workload on existing staff members resulting in an overall poor quality of life.

5.2.2.2 Recommendations related to objective 2

Based on the conclusions above, the following recommendations dealing with the quality of life of medical practitioners should be considered by national government.

- Vacated posts must be advertised once practitioners submit their intent to leave.
- The time frame to fill posts must be reduced.
- Ensure that departments are fully staffed.

- Provide mother-child facilities at work to reduce the pressure on working mums eg. Schooling facilities and after care.
- Departmental managers must ensure fair and even distribution of calls to prevent burnout or stress.
- Managers to be trained on dealing with social issues related to staff.
- Policy implementation to prevent excessive long work hours for doctors that result in medical negligence and litigation against the state.
- Greater efforts to be placed on achievements of individuals to foster creativity.
- Breaking down the silo mentality of hierarchy, allowing for practitioners to communicate their issues freely.

5.2.3 Objective 3 – was to identify whether leadership within the departments had any influence on the turnover of medical practitioners

The theme of this section was to determine if leadership within the department had a direct influence on the intention of medical practitioners wanting to leave the government sector. Lewin's theory of institutional change forms the foundation of the concept of turnover. The theory can be used to explain the various forces and factors that result in turnover, with job dissatisfaction being a major factor (Lewin & Dorwin, 1963). The resultant is push factors that drive employees to voluntarily leave work. Leadership, selection of candidates, unclear work expectations, no upward movement in the organisation, management issues amongst others have been identified as push factors (Matlala.D, 2012). According to empirical review the absence of support from supervisors reduces an employee's ability to cope with situations resulting in them exiting the organization. It is therefore crucial to develop leadership skills of managers in stressful jobs. Health care professionals entering the system thrive on the supervision of senior staff members (Miller Jr, 2017). Without proper teaching and guidance they may be left to their own devices which can be to the detriment of patients.

The following findings were established from the analysis of data. The inferential analysis performed using Spearman's rank order correlation found that a strong positive correlation ($p = .001$) existed between leadership and turnover. This finding

shows that medical practitioners viewed leadership as an important factor when deciding to exit the government sector.

To support this view further findings from the questions revealed that a large percentage of the study population believed that leadership did not drive them to remain in the government sector and just over half the practitioners recruited in the study disagreed with a transformational leadership style being practised within departments. A sizable balance chose to remain neutral on the subject. This is a strong indicator of the lack of leadership skills within departments. Many of the departmental heads are clinicians rather than managers hence a need for development of managerial skills is necessary. Results show that there was not much of a difference between those that agreed with teamwork being practiced in the department and those that disagreed. There is a near balance between the views. Literature shows that teamwork is an important factor that facilitates understanding of patients surgical requirements which is borne out of a consultative decision making progress (Miller Jr, 2017). It is important in ensuring that the right decision is being made. Very often with issues of short staffing, junior practitioners are left without assistance of senior team members. The majority of practitioners felt that leadership did not understand their strengths and weaknesses. Often leaders of departments are faced with an overwhelming patient load, long working hours, administrative duties to ensure running of departments and regular meetings with management to facilitate the filling of vacant posts. This results in little or no time spent on understanding the needs of existing staff members. An overwhelming majority of participants felt that leadership posts within departments are vacant. In some instances the process to advertise leadership posts takes a long period of time leaving departments with leaders that are in an acting capacity. Literature suggests that developing appropriate managerial style keeps staff members motivated which increases performance. Authentic leadership is a trait that has been identified in which employees are directly influenced by the actions of their leader. They identify with leadership style and vision of the organisation. It has been found to have a positive effect on employee's intention to remain (Fallatah et al., 2017).

5.2.3.1 Conclusions related to objective 3

The findings show that poor leadership or a lack thereof is a push factor for medical practitioners wanting to exit the departments. The positive correlation coefficient is

indicative of the relationship between leadership and turnover. Questions related to leadership also takes the form of guidance and supervision. The lack of supervision is detrimental in the health care sector as it compromises patient care. Many departmental heads are trained clinicians rather than managers equipped with managerial skills. Leadership style is an important issue that facilitates the motivation of staff.

5.2.3.2 Recommendations related to objective 3

Based on the conclusions above, the following recommendations dealing with leadership within departments should be considered by national government.

- Heads of departments and managers should be subjected to an intense training programme to facilitate the correct running of departments.
- Leaders must be taught the Kings Code of good governance as it will impact on proper management at the ground level.
- Appointments to heads of department posts should require a managerial course being done as a pre-requisite.
- Managers already in the system should be provided with bursaries or other incentives to peruse management courses at institutes of higher learning.
- Engagement with staff to better understand individual problems must be harnessed.
- Constant feedback mechanisms to rate leadership must be conducted to provide a benchmark.
- Leadership posts should be rotated over a term period rather than retaining managers or heads of departments till retirement.

5.2.4 Objective 4- To determine the quality of specialists training within the departments of Cardiothoracic Surgery and Anaesthesiology

The theme of this section was to determine if training and development within the department had a direct influence on the intention of medical practitioners wanting to leave. The two factor theory states that factors in the working environment cause job satisfaction. The two factor theory distinguishes the motivators and hygiene factors. Motivators arising from intrinsic factors which include challenging work, recognition of

accomplishment and responsibility are the drivers of positive job satisfaction. Training is a key component to the development of skill for medical practitioners. Poor training results in dissatisfaction and movement to centres of excellence. Empirical review suggests that a supportive working environment for training and development is essential so as to garner talented employees (Ayobami et al., 2016). The idea of a conducive working climate is imperative to employee empowerment, work appreciation and development. Career planning as an employee development programme creates the feeling of importance of being invested in with a clear vision of promotion possibility.

Findings from the questions suggests that there is no overwhelming consensus on training and development. Just over half the study population agreed and strongly agreed to getting adequate training whilst the remaining remained neutral or disagreed. However an overwhelming majority of practitioners disagreed or strongly disagreed with having adequate time for studying for exams. The results show that no time allocation is made for studying. Often practitioners have to work long hours, work extra commuted overtime, and remain on call without a dedicated time to study for college exams. Many become despondent after failure and in many cases have to attempt their primary exams again due to failure of the part 2 and oral examination. Many practitioners burnout after their first attempt. Depression is also a consequence of failure (Schindeler & Reynald, 2017). Practitioners felt strongly about not having enough senior staff members to facilitate training. The majority of practitioners agreed or strongly agreed that there wasn't adequate senior staff members available. This is regarded as an important component of training and development as senior members guide junior practitioners through their learning. In this way years of experience is passed on. Without senior members, junior practitioners are left to their own devices which open the flood gates for medical negligence and litigation. This is a contributing factor to why government is burdened with law suits. The majority of practitioners also felt that junior staff members are left to function on their own as many senior staff members have resigned. This does not aid in the learning process as junior staff members perform procedures without the guidance and expertise of senior experienced staff members therefore the overall mortality and morbidity rates of patients increases.

The majority of responses from practitioners indicate that they agreed and strongly agreed to having a lack of growth within their departments. Practitioners spend a large percentage of their lives training within government institutions, post exams many wish to see the fruits of their labour culminate into higher positions. Currently there is a freeze on government posts which only becomes unfrozen in critical cases and extensive motivation is required. This occurs due to an ever increasing health budget and ballooning wage bill. Practitioners therefore become frustrated and resign for the lucrative private sector.

5.2.4.1 Conclusions related to objective 4

Although there was a balance between those that felt they received adequate training within the departments and those that didn't or remain neutral, it can be regarded as a fundamental retaining factor. Obtaining adequate study time for exams is a burning issue which needs to be addressed. This contributes largely to practitioners not being ready for examinations, failure and in some cases movement out of the department. The lack of supervision from senior members of staff result in poor confidence levels of junior practitioners who struggle to train and develop essential skills. A lack of growth post examination further exacerbates the problem resulting in frustration.

5.2.4.2 Recommendations related to objective 4

- Greater emphasis must be placed on training to ensure that practitioners obtain the necessary skill required to perform their function.
- Departments must have a mix of senior and junior staff members to ensure adequate training and supervision.
- Training programmes must be structure according to outcomes needed.
- Adequate leave time should be granted prior to written and oral examinations.
- Feedback on progress made must be reported.
- Departments must be equipped with the essential tools to provide training.
- Departments must be evaluated more regularly by the health professional's council (HPCSA) to determine whether they can maintain their training status.
- Collaboration between various units around the country must be encouraged.

5.2.5 Objective 5- to identify if practitioners view governance, budgets and supply of equipment and consumables to the departments as a reason for turnover.

The theme of this section was to determine if governance, budgets and the supply of equipment and consumables to the departments had a direct influence on the intention of medical practitioners wanting to leave. Lewin's theory of institutional change forms the foundation of the concept of turnover. The theory can be used to explain the various forces and factors that result in turnover, with job dissatisfaction being a major factor. The resultant is push factors that drive employees to voluntarily leave work. Job dissatisfaction due to the lack of the necessary tools to perform tasks can result in practitioners becoming frustrated and ultimately leaving the system. According to empirical review, a major driver for internal and external migration of doctors is under resourced hospitals. Literature suggest that major drawback of an under-resourced health care system is the challenges faced in recruiting and retaining doctors with particular reference to rural areas (Dieleman & Kleinau, 2017) . Poor remuneration, non-functioning equipment, lack of maintenance of equipment and infrastructure and the AIDS pandemic contribute to the decline in health care services.

Questions related to governance within the department of health together with the provision of consumables and equipment were asked to determine the view of medical practitioners on government's commitment to providing the departments with the necessary tools to ensure an efficient service. Almost all practitioners disagreed or strongly disagreed that government was committed to good corporate governance. This is probably due to the perception that there is a lack of accountability with regards to proper contracts being in place for the maintenance of equipment and supply of consumables. The majority of practitioners disagreed that the departments are provided with essential equipment and consumables to function optimally. This may be as a result of budget constraints due to the ever increasing wage bill, increased dependence on state health care facilities by the majority of the population and continuous litigation which eats into the budget (Bateman, 2016b). Once again analysis of data showed that almost all medical practitioners viewed patient waiting lists as a non-priority for government. Currently many departments are overwhelmed with the number of patients being seen at the various clinics. The results in long waiting lists for surgery. This may occur as a result of a lack of specialised hospitals in the

province to cater for the needs of all patients. There is a strong view that budget constraints is hampering service delivery. A reduction in budgets results in less money made available to fill vacant posts which results in few practitioners carrying the workload that may result in burnout (Bateman, 2016a). Less resources are available to purchase specialised equipment. Budget constraints also impacts on the upkeep of existing infrastructure. An overwhelming consensus from practitioners suggest that medical practitioners leave because of frustration. All participants except one who remained neutral felt strongly that this was a factor resulting in turnover of practitioners. Frustration may occur as a result of the various factors listed under the themes above, which ultimately result in resignations. Literature shows that the expenditure for public health care salaries has ballooned in recent years which eats into the provincial health budget (Bateman, 2016d). Recession and poor economic growth have reduced government spending however the disease burden and reliance on public health care facilities has increased. Various hospitals are in a dilapidated state and face structural challenges due to age. The repair of these institutions runs into millions leaving government with limited options to repair or build brand new facilities. Funding for the national health insurance scheme is still being debated which will see tax payers coughing up billions to fund. Litigation costs are said to bankrupt health care eventually leading to its collapse. Lawyers have target specialities such as neurosurgery, orthopaedics, obstetrics and gynaecology which are at higher risk for litigation. Corruption in supply chain systems eat into the budget resulting in stock outs. The procurement and servicing of equipment in some cases has cost government millions which could have been spent on vacant posts and infrastructure. Turnover of employees is directly related to budget availability and expenditure as it impacts on the environment of work, workload, salary increases, quality of life and most importantly service delivery to patients (Bam et al., 2017). The optimal performance of supply chains in developing countries reduces the hindrance of poor resource allocation (Cooper, 2016). Stock outs of medicines can interrupt treatment and force change in drug regimens like in the case of Tuberculosis which drive drug resistance and increased mortality. This places health workers at risk of contracting various diseases. Safety and safety equipment such as masks, medication, gloves, and protective wear form the backbone of doctors and other health care workers ability to function and result in increased turnover if their safety is compromised (Bam et al., 2017).

5.2.5.1 Conclusions related to objective 5

Turnover of employees is directly related to budget availability and expenditure as it impacts on the environment of work, workload, salary increases, quality of life and most importantly service delivery to patients. The issue of good corporate governance features predominantly as almost all practitioners disagreed or strongly disagreed that government was committed to good corporate governance. The provision of necessary tools to function is an area of concern as the majority of practitioners disagreed that the departments are provided with essential equipment and consumables to function optimally. The burning issue is that analysis of data showed that almost all medical practitioners viewed patient waiting lists as a non-priority for government. This is also supported by a strong view that budget constraints is hampering service delivery. The resultant being frustration which results in turnover.

5.2.5.2 Recommendations related to objective 5

- Greater accountability by government on budgets and expenditure.
- Adherence to good corporate governance practice (Kings Code).
- Greater transparency and reporting of financials.
- More engagement with all stakeholders.
- Streamline the supply chain process coupled with a transparent tender process system.
- Ensure quality and timeous delivery of essential equipment and consumables to departments.
- Engage end users on the appropriateness of equipment and consumables before purchase.
- Audit expenditure of each hospital department regularly to curb fruitless spending.
- Prioritise patient waiting lists. Engage the private sector to reduce reliance on state infrastructure and facilities.

5.2.6 Objective 6- To identify medical practitioners that intend on leaving the government sector.

The final research area revolved around how medical practitioners view their future within the department of health. Questions related to intention to remain or leave was posed to participants to establish a future trend. The theoretical framework that can be used to explain turnover of medical practitioners can be a culmination of Herzberg's two factor theory of hygiene and motivation factors, Lewin's theory of institutional change and Chacko's spill over theory regarding quality of life. Questions related to intention to leave suggest that greater than half the study population thought about leaving the department. The majority of respondents indicated that they would leave in the near future. This is concerning as the government sector is viewed as an arena for training from which essential skill is then lost to the private sector resulting in a void being created. A close balance was found between those that wish to remain within their departments and those that intend to leave. This can be explained by the number of registrars and senior registrars enrolled in the study. These medical practitioners are currently completing their training time and examinations within the department therefore their current focus would be to remain within the department. More than half the participants preferred not to stay and work in the government sector. However the majority of practitioners viewed continuing their careers within the department as important. This further supports the view that many of the participants being registrars would prefer to complete their area of specialisation within the departments. Empirical review suggests that job satisfaction has the greatest effect on turnover intent (Kim, 2015). Doctors and health care workers together make up the backbone of the health care system. They need to be well motivated so as to increase productivity and be retained. Thus importance of retention strategies cannot be understated.

5.2.6.1 Conclusions related to objective 6

The future trends based on the analysis of data indicate that a larger percentage of medical practitioners intend on leaving the government sector. The skill gained in the government sector will not be harnessed for the development of future employees. The greatest loss however is that the mass populace of the country will not benefit

from the training and skill of practitioners that leave. The cycle of training and leaving does not play a positive role in retention. Furthermore government has invested years in training and development of individuals who are lost to the private sector and global arena.

5.2.6.1 Recommendations related to objective 6

- Retention strategies to curb turnover must be implemented.
- Engagement and exit interviews with employees to better understand trends for leaving must be conducted.
- Constant feedback from staff within departments must be requested to establish problems faced.
- Regular meetings within departments must be mandatory. This will create clarity on efficient functioning of the department.
- Departments must monitor weekly work hours performed to ensure that staff members receive a balanced quality lifestyle.
- Vacant posts to be filled timeously thus preventing burnout of existing practitioners.
- Leadership of departments to engage, counsel and support staff with examinations and social issues.
- Acknowledgement of staff achievements and provisions made to remunerate staff that add value in terms of skill and further qualifications in the field.

5.3 Limitations of the study

The scope of the research is limited to the South African context with emphasis on the departments of Cardiothoracic Surgery and Anaesthetics. It is not representative of the entire health care sector of the country. The research is also limited to the province of KwaZulu-Natal therefore it is valid for the above mentioned departments.

The research results and findings should be duplicated and extended to various other health departments within the province and country. The sample size is representative of a small population of the medical practitioners in the health care sector as it was

conducted within two departments. Larger trials are merited so as to prevent generalization of findings.

The research involved medical practitioners, however the workforce of the health care sector includes doctors, nurses, pharmacists and other allied health care workers. Greater research is merited involving health care workers across all spectrums. The research covered six main themes to deduce findings. Further investigations into areas such as psychological and mental wellbeing of employees may be warranted. The extension of the study to various other departments will allow for a greater response from those in leadership positions. Due to the small number of departments involved, the percentage response from heads of departments are limited.

The research instrument was administered in English. Nine official languages exist in South Africa encompassing various ethnic backgrounds. English speaking participants may have had an advantage in understanding the questions better than non-English participants.

Finally, due to limited time and resource constraints, the depth of the study and research findings may touch the surface of the subject and further investigations are merited.

5.4 Recommendations for further Research

The study reviewed, remuneration, quality of life, training and development, leadership, governance, budgets, equipment, consumables and intent to leave in order to determine factors affecting turnover of medical practitioners within the departments. Further studies into other areas is recommended. There is an opportunity to repeat the study in various other departments across the country with a much larger sample size. Turnover is a phenomenon that not only affects the health care sector therefore it can be extended to other state owned enterprises and government departments.

5.5 Summary of Chapter

In order for government to realise its strategic objective of providing an efficient health care system for all South Africans, it needs to ensure that the rate of turnover amongst health care professionals is reduced. The objectives of the study have been realised and are meaningful and valid. The limitations posed no direct bearing on the outcomes

of the research. Therefore valid and practical recommendations were made based on the findings. The study has helped unlock challenges faced by medical practitioners with a view that strategies to drive change can be recommended. Recommendations based on the findings of each objective have been presented and it is perceived that if they are implemented then this would contribute to the overall reduction in turnover rates amongst medical practitioners.

Bibliography

- Akgunduz, Y., & Sanli, S. C. (2017). The effect of employee advocacy and perceived organizational support on job embeddedness and turnover intention in hotels. *Journal of Hospitality and Tourism Management*, 31, 118-125.
- Almaaitah, M. F., Harada, Y., Sakdan, M., & Almaaitah, A. M. (2017). Integrating Herzberg and Social Exchange Theories to Underpinned Human Resource Practices, Leadership Style and Employee Retention in Health Sector. *World Journal of Business and Management*, 3(1), 16-34.
- Arokiasamy, A. R. A. (2013). A Qualitative Study on Causes and Effects of Employee Turnover in the Private Sector in Malaysia. *Middle-East Journal of Scientific Research*, 16(11), 1532-1541.
- Ashmore, J., & Gilson, L. (2015). Conceptualizing the impacts of dual practice on the retention of public sector specialists: evidence from South Africa. *Human resources for health*, 13(3), 1-9.
- Assefa, T., Mariam, D. H., Mekonnen, W., & Derbew, M. (2017). Survival analysis to measure turnover of the medical education workforce in Ethiopia. *Human resources for health*, 15(1), 23-33.
- Au, J., Elizondo, R. A., & Roth, D. R. (2017). Surgeon Burnout among American Pediatric Urologists. *Urology Practice*, 4(3), 264-268.
- Ayobami, R. B. T., Wallis, M., & Karodia, A. M. (2016). Exploring the factors that affect retention of medical doctors: a case study of Jane Furse Hospital, Limpopo Province, South Africa. *European Journal of Economic and Business*, 1(02), 1-23.
- Bam, L., McLaren, Z., Coetzee, E., & von Leipzig, K. (2017). Reducing stock-outs of essential tuberculosis medicines: a system dynamics modelling approach to supply chain management. *Health Policy and Planning*, 32(8), 1127-1134.
- Bateman, C. (2013a). Eastern Cape's corruption-busting DG finally ousted. *South African Medical Journal*, 103(4), 215-217.
- Bateman, C. (2013b). RWOPS clamp down-a crisis in the offing. *South African Medical Journal*, 103(6), 361-364.
- Bateman, C. (2014). Women doctors have a rougher time-new association born. *South African Medical Journal*, 104(7), 463-464.

- Bateman, C. (2015). 'Changing sides'-SAMA unionist now Limpopo's Health MEC. *South African Medical Journal*, 105(8), 620-621.
- Bateman, C. (2016a). Budget squeeze: Cutting clinicians hurts patients. *South African Medical Journal*, 106(4), 321-321.
- Bateman, C. (2016b). Counting the public healthcare litigation bill. *South African Medical Journal*, 106(11), 1063-1064.
- Bateman, C. (2016c). Election politics ride roughshod over clinicians, patients. *South African Medical Journal*, 106(10), 956-958.
- Bateman, C. (2016d). Managing the fiscal beast-admin-to-clinician ratio now 3: 1: izindaba. *South African Medical Journal*, 106(2), 131-132.
- Bekker, M., Coetzee, S. K., Klopper, H. C., & Ellis, S. M. (2015). Non-nursing tasks, nursing tasks left undone and job satisfaction among professional nurses in South African hospitals. *Journal of nursing management*, 23(8), 1115-1125.
- Blacklock, C., Bradley, D. C. G., Mickan, S., Willcox, M., Roberts, N., Bergström, A., & Mant, D. (2016). Impact of Contextual Factors on the Effect of Interventions to Improve Health Worker Performance in Sub-Saharan Africa: Review of Randomised Clinical Trials. *Plos One*, 11(1), 1-21.
- Bonenberger, M., Aikins, M., Akweongo, P., & Wyss, K. (2014). The effects of health worker motivation and job satisfaction on turnover intention in Ghana: a cross-sectional study. *Human resources for health*, 12(1), 43-54.
- Caldwell, R., & Aldous, C. (2017). The National Health Insurance, the decentralised clinical training platform, and specialist outreach. *South African Medical Journal*, 107(1), 39-40.
- Chacko, T. I. (1983). Job and life satisfactions: A causal analysis of their relationships. *Academy of Management Journal*, 26(1), 163-169.
- Chen, Q., Yang, L., Feng, Q., & Tighe, S. S. (2017). Job Satisfaction Analysis in Rural China: A Qualitative Study of Doctors in a Township Hospital. *Hindawi Scientifica*, 2017, 1-6.
- Christensen, R. K., Paarlberg, L., & Perry, J. L. (2017). Public Service Motivation Research: Lessons for Practice. *Public Administration Review*, 77(4), 529-542.
- Cocker, F., Sanderson, K., & LaMontagne, A. D. (2017). Estimating the Economic Benefits of Eliminating Job Strain as a Risk Factor for Depression. *Journal of occupational and environmental medicine*, 59(1), 12-17.

- Cooper, D. (2016). *Supply chain management in a public hospital in Gauteng*. (Master of Management), University of Witwatersrand Johannesburg. Retrieved from <http://hdl.handle.net/10539/21767>
- Creswell, J. W., & Poth, C. N. (2017). *Qualitative inquiry and research design: Choosing among five approaches*. California: Sage publications.
- Debela, T. F., Salgado, W. B., & Tsehay, Y. E. (2017). Predictors of Intention-to-Leave the Current Job and Staff Turnover among Selected Health Professionals in Ethiopia. *Global Journal of Management And Business Research*, 17(2), 55-63.
- Denis, J.-L., & van Gestel, N. (2016). Medical doctors in healthcare leadership: theoretical and practical challenges. *BMC Health Services Research*, 16(2), 158 -169.
- Dieleman, M., & Kleinau, E. (2017). Factors Influencing Retention, Job Satisfaction, and Motivation among Jordanian Health Workers. *Annals of Global Health*, 83(1), 51-52.
- Djukic, M., Jun, J., Kovner, C., Brewer, C., & Fletcher, J. (2017). Determinants of job satisfaction for novice nurse managers employed in hospitals. *Health care management review*, 42(2), 172-183.
- Fairall, L., & Bateman, E. (2017). Health workers are vital to sustainable development goals and universal health coverage. *British Medical Journal*, 356, 1357- 1369
- Fallatah, F., Laschinger, H. K., & Read, E. A. (2017). The effects of authentic leadership, organizational identification, and occupational coping self-efficacy on new graduate nurses' job turnover intentions in Canada. *Nursing Outlook*, 65(2), 172-183.
- Fang, P., Liu, X., Huang, L., Zhang, X., & Fang, Z. (2014). Factors that influence the turnover intention of Chinese village doctors based on the investigation results of Xiangyang City in Hubei Province. *International journal for equity in health*, 13(1), 84-92.
- Fusheini, A., & Eyles, J. (2016). Achieving universal health coverage in South Africa through a district health system approach: conflicting ideologies of health care provision. *BMC Health Services Research*, 16(1), 558-568.
- Gaski, M., & Abelsen, B. (2017). Designing medical internships to improve recruitment and retention of doctors in rural areas. *International journal of circumpolar health*, 76(1), 1-7.

- Gautam, A., & Tuswa, I. (2016a). Factors Affecting Voluntary Staff Turnover: A Case Study Of Springs Parklands Hospital, South Africa. *European Scientific Journal*, 12(10), 197-210.
- Gautam, A., & Tuswa, I. (2016b). Factors Affecting Voluntary Staff Turnover: A Case Study Of Springs Parklands Hospital, South Africa. *European Scientific Journal*, 12(10), 197-210.
- George, G., Gow, J., & Bachoo, S. (2013). Understanding the factors influencing health-worker employment decisions in South Africa. *Human resources for health*, 11(1), 15-21.
- Goetz, K., Marx, M., Marx, I., Brodowski, M., Nafula, M., Prytherch, H., Omogi, A., Irene, KE, & Szecsenyi, J. (2015). Working atmosphere and job satisfaction of health care staff in Kenya: An exploratory study. *BioMed research international*, 2015, 1-7.
- Govan, P. (2017). A patient suggests fraudulent behaviour. *South African Dental Journal*, 72, 40-40.
- Haskins, J. L., Phakathi, S. A., Grant, M., & Horwood, C. M. (2017). Factors influencing recruitment and retention of professional nurses, doctors and allied health professionals in rural hospitals in KwaZulu Natal. *health sa gesondheid*, 22, 174-183.
- Hayward, D., Bungay, V., Wolff, A. C., & MacDonald, V. (2016). A qualitative study of experienced nurses' voluntary turnover: learning from their perspectives. *Journal of Clinical Nursing*, 25(9-10), 1336-1345.
- Heponiemi, T., Presseau, J., & Elovainio, M. (2016). On-call work and physicians' turnover intention: the moderating effect of job strain. *Psychology, health & medicine*, 21(1), 74-80.
- Herzberg, F., Mausner, B., & Snyderman, B. (2011). *The motivation to work* (12 ed.). New Jersey: Transaction publishers.
- Hirson, B. (2017). *Yours for the union: Class and community struggles in South Africa*. London: Zed Books Ltd.
- Hope Sr, K. R. (2017). *Corruption and Governance in Africa: Swaziland, Kenya, Nigeria*. Cham: Springer International Publication.
- Jacobsen, C. B., & Bogh Andersen, L. (2017). Leading public service organizations: how to obtain high employee self-efficacy and organizational performance. *Public Management Review*, 19(2), 253-273.

- Jadoo, S. A. A., Aljunid, S. M., Dastan, I., Tawfeeq, R. S., Mustafa, M. A., Ganasegeran, K., & AlDubai, S. A. R. (2015). Job satisfaction and turnover intention among Iraqi doctors-a descriptive cross-sectional multicentre study. *Human resources for health*, 13(1), 21- 32.
- Jenkins, L. S., Gunst, C., Blitz, J., & Coetzee, J. F. (2015). What keeps health professionals working in rural district hospitals in South Africa? *African journal of primary health care & family medicine*, 7(1), 1-5.
- Jones, C. (2017). Global focus: South Africa: Human rights in South Africa, two decades after democracy. *LSJ: Law Society of NSW Journal*(32), 24-25.
- Kapoor, M. C. (2017). Violence against the medical profession. *Journal of Anaesthesiology, Clinical Pharmacology*, 33(2), 145-147.
- Khanna, P. (2016). A concise introduction to mixed methods research *Evaluation Journal of Australasia*, 16(2), 36-37.
- Khoele, A., & Daya, P. (2014). Investigating the turnover of middle and senior managers in the pharmaceutical industry in South Africa. *SA Journal of Human Resource Management*, 12(1), 1-10.
- Kilpatrick, M., Blizzard, L., Sanderson, K., Teale, B., Jose, K., & Venn, A. (2016). Investigating Employee-Reported Benefits of Participation in a Comprehensive Australian Workplace Health Promotion Program. *Journal of occupational and environmental medicine*, 58(5), 505-513.
- Kim, J. (2015). What Increases Public Employees' Turnover Intention? *Public Personnel Management*, 44(4), 496-519.
- Kisakye, A. N., Tweheyo, R., Ssengooba, F., Pariyo, G. W., Rutebemberwa, E., & Kiwanuka, S. N. (2016). Regulatory mechanisms for absenteeism in the health sector: a systematic review of strategies and their implementation. *Journal of Healthcare Leadership*, 8, 81-94.
- Kramer, A., & Son, J. (2016). Who Cares about the Health of Health Care Professionals? An 18-Year Longitudinal Study of Working Time, Health, and Occupational Turnover. *ILR Review*, 69(4), 939-960.
- Kwinda, M. A. (2016). *The ethical and legal considerations on abuse of remunerative work outside public service (RWOPS) by state-employed doctors*. (Master of Science), University of Witwatersrand, Johannesburg. Retrieved from <http://hdl.handle.net/10539/22456>

- KZN Dept Of Health. (2015). Annual report 2014-2015. Retrieved from <http://www.kznhealth.gov.za/2014-2015-Annual-Report.pdf> [Accessed 20-09-2017]
- Labonté, R., Sanders, D., Mathole, T., Crush, J., Chikanda, A., Dambisya, Y., Runnels, V., Packer, C., MacKenzie, A., & Murphy, G. T. (2015). Health worker migration from South Africa: causes, consequences and policy responses. *Human resources for health*, 13(1), 92-107.
- Labrague, L., McEnroe-Petitte, D., Gloe, D., Tsaras, K., Arteché, D., & Maldia, F. (2017). Organizational politics, nurses' stress, burnout levels, turnover intention and job satisfaction. *International nursing review*, 64(1), 109-116.
- Lambert, J. R., Basuil, D. A., Bell, M. P., & Marquardt, D. J. (2017). Coming to America: work visas, international diversity, and organizational attractiveness among highly skilled Asian immigrants. *The International Journal of Human Resource Management*, 1-27.
- Lewin, K., & Dorwin, C. (1963). *Field theory in social science : selected theoretical papers*. London: Tavistock Publications.
- Likert, R. (1931). *A technique for the measurement of attitudes Archives of Psychology*. New York: Columbia University Press.
- Lu, Y., Hu, X.-M., Huang, X.-L., Zhuang, X.-D., Guo, P., Feng, L.-F., Hu, W., Chen, L., Zou, H., & Hao, Y.-T. (2017). The relationship between job satisfaction, work stress, work-family conflict, and turnover intention among physicians in Guangdong, China: a cross-sectional study. *BMJ*, 7(5), 1-12.
- Mafini, C., & Dlodlo, N. (2014). The linkage between work-related factors, employee satisfaction and organisational commitment: Insights from public health professionals. *SA Journal of Human Resource Management*, 12(1), 1-12
- Matlala, D. (2012). Factors causing nursing turnover at four public hospitals within the limpopo sekhukhune District *Administratio Publica* 20(3), 9-25.
- Mazahir, S., & Khalid, S. (2017). Work Environment and Situational Motivation of Doctors in Public Sector Hospitals. *Annals of King Edward Medical University*, 23(1), 40-44.
- Medical Association, S. A. (2017). Doctors protest poor health services in KZN. *SAMA Insider*(June), 5-6.
- Miller Jr, O. (2017). *Employee turnover in the public sector* (1 Ed. Vol. 32). New York: Garland Publishing.

- Miryala, R. K., & Thangella, S. (2013). Job satisfaction among government doctors: An exploratory study. *Journal of organisational behavior*, 12, 41-74.
- Mmamma, M. L., Mothiba, T. M., & Nancy, M. R. (2015). Turnover of professional nurses at Mokopane Hospital in the Limpopo Province, South Africa: Experiences of nursing unit managers. *Curationis*, 38(2), 1-6.
- Moghri, J., Rashidian, A., Mohammad, A., & Sari, A. A. (2017). Implications of Dual Practice among Health Workers: A Systematic Review. *Iranian journal of public health*, 46(2), 153-164.
- Morera, O. F., & Stokes, S. M. (2016). Coefficient α as a measure of test score reliability: Review of 3 popular misconceptions. *American journal of public health*, 106(3), 458-461.
- Mutula, S. M. (2016). Factors Influencing Nurses' Perceptions Towards the Use of ICT in Patient Care in KwaZulu Natal Province, South Africa. *African Journal of Information Systems*, 8(1), 1-14.
- Naidoo, R., & Singh, B. (2017). Supernumerary registrars: are we helping them or are they helping us? *South African Journal of Surgery*, 55(2), 38-39.
- Nicholson-Crotty, S., Nicholson-Crotty, J., & Fernandez, S. (2017). Performance and management in the public sector: Testing a model of relative risk aversion. *Public Administration Review*, 77(4), 603-614.
- Nilsson, E., & Nilsson, K. (2017). The Transfer of Knowledge between Younger and Older Employees in the Health and Medical Care: An Intervention Study. *Open Journal of Social Sciences*, 5(07), 71-96.
- Northouse, P. G. (2016). *Leadership: Theory and practice*. London: Sage publications.
- Panagioti, M., Panagopoulou, E., Bower, P., Lewith, G., Kontopantelis, E., Graham, C., & Esmail, A. (2017). Controlled interventions to reduce burnout in physicians: a systematic review and meta-analysis. *Jama internal medicine*, 177(2), 195-205.
- Phago, K. (2014). Turnover of health care professionals: a focus on the Limpopo province. *Journal of Public Administration*, 49(1), 330-348.
- Purl, J., Hall, K. E., & Griffeth, R. W. (2016). *A diagnostic methodology for discovering the reasons for employee turnover using shocks and events*. Massachusetts: Edward Elgar Publishing.

- Purohit, B., & Bandyopadhyay, T. (2014). Beyond job security and money: driving factors of motivation for government doctors in India. *Human resources for health*, 12(1), 1-13.
- Purohit, B., & Martineau, T. (2016). Issues and challenges in recruitment for government doctors in Gujarat, India. *Human resources for health*, 14(1), 1-14.
- Rahiman, M. H. U., & Kodikal, R. (2017). Impact of Employee Work Related Attitudes on Job Performance. *British Journal of Economics, Finance and Management Sciences*, 13(2), 93-105.
- Roy, A., van der Weijden, T., & de Vries, N. (2017). Relationships of work characteristics to job satisfaction, turnover intention, and burnout among doctors in the district public-private mixed health system of Bangladesh. *BMC Health Services Research*, 17(1), 421-431.
- Sastry, A., Long, K., de Sa, A., Salie, H., Topp, S., Sanghvi, S., & van Niekerk, L. (2015). Collaborative action research to reduce persistently long patient wait times in two public clinics in Western Cape, South Africa. *The Lancet Global Health*, 3, 18-28.
- Schindeler, E., & Reynald, D. M. (2017). What is the evidence? Preventing psychological violence in the workplace. *Aggression and Violent Behavior*, 36, 25-33.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach* (7 ed.). Chichester: John Wiley & Sons.
- Shanafelt, T. D., Dyrbye, L. N., & West, C. P. (2017). Addressing physician burnout: The way forward. *JAMA*, 317(9), 901-902.
- Sheikh, K., Rajkumari, B., Jain, K., Rao, K., Patanwar, P., Gupta, G., Antony, K., & Sundararaman, T. (2012). Location and vocation: why some government doctors stay on in rural Chhattisgarh, India. *International health*, 4(3), 192-199.
- Sojane, J. S., Klopper, H. C., & Coetzee, S. K. (2016). Leadership, job satisfaction and intention to leave among registered nurses in the North West and Free State provinces of South Africa. *Curationis*, 39(1), 1-10.
- Surender, R. (2017). *The Drivers of Universal Health Care in South Africa: The Role of Ideas, Actors and Institutions*. Oxford: Springer international publishing
- Taylor, A., & Kahn, D. (2014). The RWOPS debate-yes we can! *SAMJ: South African Medical Journal*, 104(7), 475-477.

- Terera, S. (2014). The Impact of Rewards on Job Satisfaction and Employee Retention *Mediterranean Journal of Social Sciences* 5(1), 481-487.
- Tondini, A., Ardington, C., & Woolard, I. (2017). Public pensions and elderly informal employment: Evidence from a change in retirement age in South Africa. *South african labour & development research unit*, 1-29.
- Tshitangano, T. (2013). Factors that contribute to public sector nurses' turnover in Limpopo province of South Africa. *Afr J Prm Health Care Fam Med*, 5(1), 479 - 485.
- Tziner, A., Rabenu, E., Radomski, R., & Belkin, A. (2015). Work stress and turnover intentions among hospital physicians: the mediating role of burnout and work satisfaction. *Revista de Psicología del Trabajo y de las Organizaciones*, 31(3), 207-213.
- Unanue, W., Gómez, M. E., Cortez, D., Oyanedel, J. C., & Mendiburo-Seguel, A. (2017). Revisiting the Link between Job Satisfaction and Life Satisfaction: The Role of Basic Psychological Needs. *Frontiers in Psychology*, 8, 1-17.
- Vasan, A., Mabey, D. C., Chaudhri, S., Brown Epstein, H.-A., & Lawn, S. D. (2017). Support and performance improvement for primary health care workers in low- and middle-income countries: a scoping review of intervention design and methods. *Health Policy and Planning*, 32(3), 437-452.
- Wendsche, J., Hacker, W., & Wegge, J. (2017). Understaffing and registered nurses' turnover: The moderating role of regular rest breaks. *German Journal of Human Resource Management*, 31(3), 238-259.
- Whitebird, R. R., Solberg, L. I., Crain, A. L., Rossom, R. C., Beck, A., Neely, C., Dreskin, M., & Coleman, K. J. (2017). Clinician burnout and satisfaction with resources in caring for complex patients. *General hospital psychiatry*, 44, 91-95.
- Yeun, Y., & Han, J. (2016). Effect of nurses organisational culture, workplace bullying and work burnout on turnover intention *Nursing Research*, 8 (1), 372-380.
- Zhang, F., Luo, Z., Chen, T., Min, R., & Fang, P. (2017). Factors affecting turnover intentions among public hospital doctors in a middle-level city in central China. *Australian Health Review*, 41(2), 214-221.

Zweigenthal, V., London, L., & Pick, W. (2016). The contribution of specialist training programmes to the development of a public health workforce in South Africa. *South African Health Review*, 2016(1), 45-59.

Appendix A



21 August 2017

Dr Yakeen Harilali (216073452)
Graduate School of Business & Leadership
Westville Campus

Dear Dr Harilali

Protocol reference number: HSS/1049/017M

Project title: Reducing the Brain Drain: Determining factors for turnover of medical practitioners at a specialized tertiary institution in South Africa

Full Approval – Expedited Application

In response to your application received 3 July 2017, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

Dr Shamila Naidoo (Deputy Chair)
Humanities & Social Sciences Research Ethics Committee

/pm

cc Supervisor: Dr Muhammad Hoque
cc Academic Leader Research: Dr Emmanuel Mutambara
cc School Administrator: Ms Zarina Bullyraj

Humanities & Social Sciences Research Ethics Committee

Dr Shenuka Singh (Chair)

Westville Campus, Govan Mbeki Building

Postal Address: Private Bag X54001, Durban 4000

Telephone: +27 (0) 31 260 3587/8350/4557 Facsimile: +27 (0) 31 260 4609 Email: ximbap@ukzn.ac.za / snymanm@ukzn.ac.za / mohunip@ukzn.ac.za

Website: www.ukzn.ac.za



Founding Campuses: Edgewood Howland College Medical School Pietermaritzburg Westville

Appendix B

QUESTIONNAIRE

The following questionnaire is designed to analyse and measure factors influencing turnover of medical practitioners at Inkosi Albert Luthuli Central Hospital. The information gathered through this questionnaire will be kept confidential and will only be used for research purposes. Please give answers in the spaces provided and tick () the box that matches your response to the questions where applicable.

Section one: Demographic Data

1. Gender (Tick as applicable)

- a) Female () b) Male ()

2. What is your age bracket? (Tick as applicable)

- a) 21-30 years ()
b) 31-40 years ()
c) 41-50 years ()
d) Over 50 years ()

3. How many years have you served in a government hospital?

- a) Less than 2 years ()
b) 2-5 years ()
c) 6-10 years ()
d) More than 10 years ()

4. Current Position:

- a) Head of Department ()
b) Clinical Head of unit ()
c) Principal Specialist ()
d) Senior Consultant ()
e) Consultant ()
f) Senior Registrar ()
g) Registrar ()
h) Medical officer ()
i) Medical Specialist/ Private Practice ()

5. What is your highest education level?

- a) Graduate ()
- b) Graduate with fellowship ()
- c) Masters ()
- d) PhD ()

SECTION TWO: What are the factors that influence medical practitioners to leave government institutions?

Rate the extent to which the following state correctly:

- 1- Strongly disagree
- 2- Disagree
- 3- Neither agrees nor disagrees
- 4- Agree
- 5- Strongly agree

Research Questions – Remuneration	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1. The salary earned in government is not equivalent to that of private practice					
2. I would make more money in private practice					
3. Government does not remunerate me according to my level of skill and years of service					
4. I cannot get a post in the government sector after completing my fellowship					
5. I am rewarded for my dedication and effort in the unit					
6. The salary I receive is sufficient to sustain my lifestyle					
7. RWOPS is important in augmenting my salary					
8. Government needs to review its salary structure					
Research Questions – Quality of Life					
1. I get enough family and social time whilst working in the government sector					
2. I am required to perform more hours than the stipulated commuted overtime					
3. The high vacancy rate due to turnover requires me to be on call regularly					
4. I spend most days confined to the walls of the hospital					
5. Many practitioners suffer from burnout and stress					
6. My work is not appreciated					
7. I enjoy a flexible work schedule					

Research Questions – Leadership	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1. The leadership in my department is what drives me to stay					
2. Management style in my department is transformational rather than dictatorial					
3. I am able to express my views freely					
4. Teamwork is practiced in the department					
5. The leadership of my department understands my strengths and weaknesses					
6. Leadership posts in most departments are vacant					
Research Questions – Training					
1. The department invests in training and development of staff					
2. I have sufficient time to study for exams and case allocations					
3. There are not enough senior staff members to give me adequate training and exposure to different techniques					
4. The ability to train is an important deciding factor when joining a unit					
5. Many departments are left with junior staff as senior members have resigned					
6. I get adequate Supervision					
7. There is a lack of growth for staff members					
Research Questions – Governance/ Expenditure/ Equipment					
1. The health department is committed to good corporate governance.					
2. I believe that various departments are provided with all the necessary equipment and consumables to perform their function optimally					
3. Patient waiting lists is a priority for the health department					
4. Budget constraints is hampering service delivery					
5. Practitioners leave because they are frustrated					

Section 3: Intention to leave

Question 1: I often think about leaving?

1=Strongly disagree

2=Disagree

3=Neither

4=Agree

5=Strongly agree

Question 2: Which of the following most clearly reflects your feelings about your future?

- 1= I definitely will not leave
- 2= Probably will not leave
- 3=Uncertain
- 4=Probably will leave
- 5=Definitely will leave

Question3: How do you feel about leaving your department?

- 1= It is unlikely that I will leave
- 2= As far as I can see, I intend to stay with the department
- 3=I have no feeling
- 4=I am serious about leaving in the future
- 5=I am presently planning to leave

Question4: If you were free to choose, would you prefer or not prefer to stay with the department

- 1= I prefer very much to stay with the department
- 2=I prefer to work for government
- 3=I don't care
- 4=I prefer not to work for government
- 5=I prefer very much not to continue with the department

Question 5: How important is it to you that you continue your career in the department

- 1=It is very important for me to spend my career in the department
- 2=It is fairly important
- 3=It has some importance
- 4=I have mixed feelings
- 5=Not important

Appendix C



health

Department:
Health
PROVINCE OF KWAZULU-NATAL

DIRECTORATE:

Health Research & Knowledge
Management

Physical Address: 330 Langabalele Street, Pietermaritzburg
Postal Address: Private Bag X9051
Tel: 033 395 2805/ 3159/ 3123 Fax: 033 394 3782
Email: hrkm@kznhealth.gov.za
www.kznhealth.gov.za

HRKM Ref: 304/17
NHRD Ref: KZ_2017RP31_506

Date: 8 August 2017
Dear Dr Y. Harillal
UKZN

Approval of research

1. The research proposal titled '**Reducing the Brain Drain: Determining factors for turnover of medical practitioners at a specialized tertiary institution in South Africa**' was reviewed by the KwaZulu-Natal Department of Health.

The proposal is hereby **approved** for research to be undertaken at Inkosi Albert Luthuli Central Hospital.

2. You are requested to take note of the following:
 - a. Make the necessary arrangement with the identified facility before commencing with your research project.
 - b. Provide an interim progress report and final report (electronic and hard copies) when your research is complete.
3. Your final report must be posted to **HEALTH RESEARCH AND KNOWLEDGE MANAGEMENT, 10-102, PRIVATE BAG X9051, PIETERMARITZBURG, 3200** and e-mail an electronic copy to hrkm@kznhealth.gov.za

For any additional information please contact Mr X. Xaba on 033-395 2805.

Yours Sincerely

Dr E Lutge

Chairperson, Health Research Committee

Date: 14/08/17

Fighting Disease. Fighting Poverty. Giving Hope

Appendix D



Digital Receipt

This receipt acknowledges that Turnitin received your paper. Below you will find the receipt information regarding your submission.

The first page of your submissions is displayed below.

Submission author:	Yakeen Harilall
Assignment title:	Dissertation for turnitin 2017
Submission title:	Dissertation
File name:	Turnit_in_copy.docx
File size:	4.22M
Page count:	93
Word count:	25,596
Character count:	148,083
Submission date:	22-Nov-2017 05:16PM (UTC+0200)
Submission ID:	874489426

Abstract

Medical practitioners form backbone of the health care system in South Africa. The skill of trained medical specialists is imperative for service delivery and the ongoing teaching of registrars at government training facilities. Against a backdrop of inequality, history dictates that a large population of disadvantaged South Africans remain reliant on government health care institutions for medical treatment. Many departments within the KZN health system have seen an exodus of medical practitioners resulting in the brain drain phenomenon. To address the problem the purpose of the study was to determine the factors affecting high turnover of medical practitioners within the departments of Cardiothoracic Surgery and Anaesthesiology at Inkosi Albert Luthuli Central Hospital which is a specialised tertiary institution in South Africa. This was a cross sectional study conducted among 98 medical practitioners from the departments of Cardiothoracic and Anaesthesiology at Inkosi Albert Luthuli Central Hospital using a self-administered questionnaire. The entire population from both departments were selected therefore there was no sampling that was being done with any relevance to a sample size. To gather data, a quantitative study was conducted to deduce findings. Results found that remuneration within the public health care sector, quality of the opportunities for training and development, governance in the public health care sector of the KZN and leadership were the main reasons for medical practitioners wanting to leave. The findings can be used to devise further interventions to reduce turnover rates and guide the formulation of policies.

Copyright 2017 Turnitin. All rights reserved.

Dissertation

ORIGINALITY REPORT

0%

SIMILARITY INDEX

0%

INTERNET SOURCES

0%

PUBLICATIONS

0%

STUDENT PAPERS

PRIMARY SOURCES

Exclude quotes

On

Exclude matches

< 1%

Exclude bibliography

On