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Job satisfaction among public sector physicians in Botswana

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THE UNIVERSITY OF THE WITWATERSRAND

THE SCHOOL OF PUBLIC HEALTH

JOB SATISFACTION AMONG PUBLIC SECTOR PHYSICIANS IN BOTSWANA

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Dissertation submitted in partial fulfilment of the requirements of the degree of Master of Public Health in the Faculty of the Health Sciences University of Witwatersrand School of Public Health Johannesburg South Africa

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December 2010

DECLARATION

I Dr Jack J. Mkubwa declare:

- That the findings made in this submission are the result of my own research, except where it is specified in the text, done at the Princess Marina Hospital in Botswana,
- That no similar work has been submitted for another degree and that this study has not already been accepted for any other degree,
- That it is my moral right to be recognized as the author of this dissertation.

Student: Jack J. Mkubwa

Signed:_____

Date: _____

Supervisor: Dr. Julia Moorman

Signed: _____

Date:_____

DEDICATION

This work is dedicated to the following outstanding people;

My own late father Mr. Mkubwa Wanjala, my wife Rosemary, and my supervisor, Dr. Julia Moorman.

ACKNOWLEDGEMENTS

A life without a dream is like a car without an engine. To achieve this degree in public health has in deed been my dream for more than ten years. However, it has neither come cheap nor without the immense support of many outstanding people along the way. I was humbled by the commitment of professors and other lecturers in the department of public health who incessantly guided me through my studies. Their effort in shaping my life is priceless. I may not be able to name everyone who deserved to but it is not deliberate. I do owe my deepest gratitude to Dr. Julia Moorman without whose constructive criticism this dissertation would not have seen the light of day.

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Last but not least is my wife Rosemary, son, Brian and daughter Fiona for standing by me during this challenging time. I thank you from the very depth of my heart.

ABSTRACT

Introduction: Physician's job satisfaction is a cornerstone for the delivery of quality health care, and its continuity. The objective of this study was to identify the extent of job satisfaction among public sector physicians in Botswana and to explain its main components among physicians.

Methods: Public sector physicians from the Princess Marina Hospital, a referral hospital in southern Botswana, were selected to participate in the study. All participants were asked to complete a self administered questionnaire which included questions pertaining to socio-demographic characteristics and job satisfaction with regard to achievement, career satisfaction, salaries/incentives, as well as working conditions.

Results: Eighty-two physicians participated in the study. Mean and median ages were 37 and 33 years respectively and 73% were males. The major finding of the study was that the most important components of satisfaction were; relation with supervisors (74%), relations with colleagues (73%), job security (71%) and job variety (70%). Physicians tended to be most dissatisfied with their working conditions (69%) and responded on the dissatisfaction scale for the domains as follows: working conditions (69%), hospital administration (58%), Salary (57%), professional development (54%) and promotion (51%). Forty-two (42%) percent of the physicians were, overall, satisfied with their job, but most of them (58%) were not satisfied. Gender, length of service and age were not associated with job satisfaction. Younger physicians were more likely to be dissatisfied than older physicians.

Conclusion: The main recommendation arising out of the study results is a need to address job satisfaction among physicians in Botswana in order to improve the quality of health care and attract them in the public sector. Attention to working conditions, career and professional development, and salary/incentives and the training of local physicians is critical for sustaining the continuity of quality health care in Botswana.

Key words: job satisfaction, Botswana, physicians.

TABLE OF CONTENTS

DECLARATION ii
DEDICATION iii
ACKNOWLEDGEMENTS iv
ABSTRACT v
TABLE OF CONTENTS vi
LIST OF FIGURES viii
LIST OF TABLES ix
LIST OF TABLES ix
ACRONYMS AND DEFINITIONS x
ACRONYMS AND DEFINITIONS x
CHAPTER I 1
1.1 Introduction 1
1.2 Background 2
1.3 Rationale and statement of the problem, purpose and justification 6
1.3.1 Statement of problem 6
1.3.2 Objectives of the study 7
1.3.3 Justification for the study 7
1.4 A conceptual frame-work that underpins job satisfaction-job dissatisfaction 8
CHAPTER 2 10
LITERATURE REVIEW 10
2.0 Introduction 10
2.1 Definition of job satisfaction 11
2.2 The role of physicians in providing health care 11
2.3 Importance of job satisfaction and retention among physicians 12
2.4 Tools utilized in the measurement of job satisfaction-job dissatisfaction 13
2.5 Studies conducted on job satisfaction-job dissatisfaction among physicians 14
2.5.1 Extrinsic factors 15
2.5.2 Intrinsic factors 17
2.6 A general view of job satisfaction studies 17
CHAPTER III 18
METHODOLOGY 18
3.0 Introduction 18
3.1 Study design 18
3.2 Study population 18
3.3 Administration of the data collection instrument 19
3.4 Data Collection instruments 20
3.4.1 Part I of the survey- Satisfaction and dissatisfaction scale 21
3.4.2 Part II of the survey-Motivational survey instrument 21
3.4.3 Validity and reliability of the instrument 22
3.5 Pilot survey 22
3.6 Data collection 23
3.7 Data Analysis 23
3.4 Calculation of satisfaction levels 24
3.8 Ethical considerations 25
CHAPTER IV 26

RESULTS 26
4.0 Introduction 26
4.1 Socio-demographic characteristics of respondents 26
4.2 Satisfaction levels of physicians for various domains of job satisfaction 27
4.3 Overall satisfaction level 31
4.4 Significant associations between selected individual domains and socio-demographic variables 36
4.4.1 Working conditions and socio-demographic variables 36
4.4.2 Satisfaction with hospital administration and working conditions 36
4.4.3 Salary 37
4.5 Motivation Outcomes 38
4.5.1 General Motivation Outcomes 38
4.5.1.1 Motivation 39
4.5.1.2 Job satisfaction 39
4.5.1.3 Organizational commitment 40
4.5.1.4 Attitudes to patients 40
4.5.1.5 Burnout 40
4.5.1.6 Work ethic/environment 41
4.5.1.7 Self efficacy and locus of control 41
4.5.1.8 Job satisfaction 41
4.5.1.9 Workload 42
4.5.1.10 Extrinsic job characteristics 42
4.5.1.11 Management and support 42
4.5.1.12 Policy environment 43
4.5.2 Further analysis of motivational responses 47
4.5.2.1 Perceived contextual factors 47
Extrinsic job characteristics 49
CHAPTER V 50
DISCUSSION, CONCLUSION AND RECOMMENDATIONS 50
5.0 INTRODUCTION 50
5.1 DISCUSSION 50
5.1 CONCLUSION 57
5.2 RECOMMENDATION 57
5.3 LIMITATIONS OF THE STUDY 58
APPENDIX A: Ethical Approvals and Permissions 66
APPENDIX A1: Approval from the Health and Research Unit 66
APPENDIX A2: Approvals from the University 68
APPENDIX A3: Approval from the Princess Marina Hospital 70
APPENDIX A4: Letter of Permission Request 71
APPENDIX A5: Invitation to participate in the study 72
APPENDIX A6: Confidentiality Agreement 73
APPENDIX A7: Consent to Participate In Research 74
APPENDIX B: Questionnaires 75
APPENDIX B1: Questionnaire Part 1 75
APPENDIX B2: Questionnaire part 2 77
APPENDIX C: Questions used according to the conceptual framework 81

LIST OF FIGURES

Figure 4.1: Frequency distribution of satisfaction and dissatisfaction rating by physicians for various domains of job satisfaction..... 28
Figure 4.3: Distribution of the overall job satisfaction by age 33
Figure 4.4: Distribution of the overall job satisfaction by gender 33
Figure 4.5: Distribution of the overall job satisfaction by length of service 34
Figure 4.6: Distribution of the overall job satisfaction by employment terms and immigration status 35
Figure 4.7: Distribution of the overall job satisfaction by current position. 36
Figure 4.9: Distribution of the salary satisfaction by immigration status 38

LIST OF TABLES

Table 4.1: Distribution of the characteristics of the study population 27
Table 4.2: Rating of factors affecting Job satisfaction - Satisfaction scale 30
Table 4.3: Rating of factors affecting Job satisfaction - dissatisfaction scale 31
Table 4.4: Responses of physicians at Princess Marina Hospital-Extrinsic factors 44
Table 4.5: Responses of physicians Princess Marina Hospital-job related 46

ACRONYMS AND DEFINITIONS

ANC: Ante-Natal Clinic

ART: Anti-Retroviral Therapy

ARV: Anti-Retroviral Drugs are used in the management of HIV infection

CSO: Central Statistics Office

CD4: CD4+ count/ percentage (%): the CD4+ lymphocyte count is the product of the White Blood Cell (WBC) count, the percentage of lymphocytes in the WBCs and the percentage of lymphocytes that bear the CD4+ marker.
The CD4 count helps to evaluate and track progression of HIV infection and disease.

CDC: Centres for Disease Control and Prevention (of the United States Public Health Service)

Contract: Contract or contract employment involves a legally binding agreement in which a physician agrees to certain terms and conditions by which he is bound to serve in the Botswana public service for two to three years**.**

Dissatisfiers: These are aspects of a job situation that can, when present and adequate, fulfil employees' pain-avoidance needs. They tend to be extrinsic to the work itself and they pertain to the context in which the work is performed.
When absent, inadequate or negative in a job situation, they cause feelings of dissatisfaction; but when present, ample and positive, they do not generally cause feelings of satisfaction (Silver, 1983).

GP: GP or General practitioner is a physician who has completed the mandatory basic training but has no specialist training

HIV/AIDS: Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome

HRM Tools: Human Resource Management tools. HRM is the management of people in an organization. HRM tools comprise the policies, practices and activities at the

disposal of managers to obtain, develop, use, evaluate, maintain and retain the appropriate number, skill mix and motivation of employees to meet organizational objectives (Mathauer, 2006).

H/Workers: Health workers are all people engaged in the promotion, protection or improvement of the health of the population (WHO, 2006).

Incentives: "All rewards and punishments that providers face as a consequence of the organizations in which they work the institutions under which they operate and the specific interventions they provide (WHO, 2000 p.61)".

I-TECH: The International Training and Education Centre for Health.

Local: or local employment usually involves citizens of Botswana who serve in the public sector and are bound by certain terms and conditions of service. This is usually a permanent arrangement between the employer and employee the centre of which is a pension scheme at the end of service.

MDGs: Millennium Development Goals

MOH: Ministry of Health

Motivation: The willingness to exert and to maintain an effort towards organizational goals (Mathauer, 2006).

NGOs: Non-Governmental Organizations

Satisfiers: These are aspects of a job situation that can, when present and adequate, fulfill employees' needs for psychological growth. They tend to be intrinsic to the job and pertain to the content of the job. When present, adequate and positive in a job situation they cause feelings of satisfaction in employees; when absent,

inadequate or negative, they do not, generally cause feelings of dissatisfaction (Silver, 1993).

Specialist: This is a physician who has undertaken a one to three year post-graduate raining in any specialized field of medicine or surgery.

UNAIDS: Joint United Nations Programme on HIV/AIDS

USAID: United States Agency for International Development

WHO: World Health Organization

WHOSIS: World Health Organization Statistical Information Systems

CHAPTER I

1.1 Introduction

The delivery of quality health care services in sub-Saharan Africa requires an adequate supply of health workers who are equipped and empowered to meet the demands of their clients (USAID, 2006). However, there are primarily three challenges which affect the health workforce and consequently the provision of quality health services. The HIV/AIDS crisis places a burden on the workforce which already faces severe shortage. Globally, 32% of the people living with HIV/AIDS reside in Southern Africa and 34% of AIDS-related deaths occur in this sub-region (UNAIDS, 2006). Botswana is one of the hardest hit countries in sub-Saharan Africa with a national prevalence of 17.6% and an antenatal care based prevalence of 33% (Ministry of Health, 2009; CSO, 2009).

Health workers, more than any other workforce, are uniquely affected by HIV/AIDS, as they are constantly confronted by death and illnesses on both a professional and personal level. Anecdotally, Botswana health workers report that they are overstretched as they deal with higher patient loads and increasingly complex cases. The HIV/AIDS epidemic has created a particularly challenging environment for managing attrition, absenteeism, workload, training, deployment, and retention particularly for physicians and nurses.

Labour migration due to low pay, poor working conditions and weak human resource management systems has depleted the supply of health workers in this region (USAID, 2006). The same report further indicates that chronic underinvestment in human resources over decades has led to a constant shortage of human resources (USAID, 2006). The World Health Organization (WHO) reports that 36 countries in sub-Saharan Africa are suffering from a severe shortage of healthcare workers, estimated to be more than 300 000 healthcare workers (WHO, 2006). As a result of these challenges, Sub-Saharan Africa which is home to 11% of the world's population and carries 25% of the global burden of disease only accounts for 3% of the world's health workers and less than 1% of global health expenditure (WHO, 2006).

With the current pressure on the health system in Africa, job satisfaction among physicians is critical for sustaining quality and continuity of health care. There are several pull and push factors in the public sector service. The private sector has different driving forces and most often strives to create a market base by attracting the best health personnel and then pushing up salaries and costs of the services. The present study evaluates the level of job satisfaction in the public service in Botswana and examines the factors associated with it.

1.2 Background

The Republic of Botswana is a land-locked country in Southern Africa with an estimated population of 1.9 million people and an annual population growth rate of 1.2% (WHO, 2006). It is a middle income country with a life expectancy at birth of 52 years (UNAIDS, 2008). The general government expenditure on health as a proportion of the total government expenditure is 18.3 %, which is exceptionally high for the African region whose average is 8.2% (WHOSIS, 2009).

This country delivers public health services through a network of hospitals, clinics, health posts and mobile stops for citizens in remote regions (WHO, 2005). Approximately 90% of all health services are provided by the government and state-subsidized mission health facilities. There are two referral, six district and seventeen primary hospitals countrywide (Ministry of Health, 2002). The total number of physicians in the public sector in the whole country is five hundred and twenty six (CSO, 2006).

Botswana is one of the hardest hit countries in Africa, with a national HIV prevalence of 17.6% and a very high HIV incidence of 2.9% per annum (CSO, 2009). The prevalence among pregnant women attending Ante-Natal Clinics (ANC) has been tracked since 1992. In the past few years the country has experience a decline in ANC HIV prevalence estimates from 37% in 2003 to 33.6% in 2007 (MOH, 2008). The WHO estimates that that the mortality due to HIV/AIDS is 1,020 per 100, 000 of population per annum (WHO, 2008).

There is generally a shortage of physicians in the public sector in Botswana. The physician density is 4 per 10,000 of population which translates to 40 physicians per 100,000 of population. The nursing and midwifery personnel density (per 10,000 population) is 27 while the density for other health service providers is 5. The pharmaceutical personnel density is 2 (WHO, 2008). Although this exceeds the minimum WHO requirement of 20 physicians, 100 nurses and 228 health care providers per 100,000 people, the current pressure on the public health system amplifies the need for more physicians to offer essential services. Furthermore, Botswana's population density is approximately 3.4 people per square kilometre spread over an estimated area of 581,730km^2 (WHO, 2006). The population is roughly split between urban and rural areas. With an increase in the burden that HIV treatment and care has imposed on the health

system, these minimum WHO estimates are by far lower than the required to meet the current needs in Africa, especially in the sub-Saharan Africa, which is the epicentre of HIV and TB.

In addition to that, changes, especially increases, in remuneration packages in the private sector have negatively impacted upon the capacity of government to recruit, attract, motivate and retain physicians in the public sector. Other parallel health services setup in Botswana, such as PEPFAR projects and research initiatives led to an exodus of staff from the public sector. On average the retention rate of physicians in the public sector is three to five years of service (Molelekwa, 2006). New interventions to mitigate and prevent the spread of HIV/AIDS have worsened the physician workload (WHO, 2005). For instance, the Antiretroviral (ARV) national treatment program has been expanding at a higher rate than the current capacity of available physicians. This has been due to changes in the treatment guidelines from the entry point of CD4 < 200 cells per micro-litre to CD4 <250cells per micro-litre and the current strategy of routine opt out testing strategy in all health facilities, thus increasing the need for Anti-Retroviral Therapy (ART) services.

In order to alleviate this acute shortage, donors and international organizations such as the WHO, International Training and Education Centre for health (I-TEC), Centres for Disease Control (CDC) and other Non-Governmental Organizations (NGOs) have been supporting the government with training and recruitment of physicians. While this is intended to improve service provision and reduce current workloads, these organizations also offer better remuneration packages than the government and hence retaining physicians on the public service payroll will continue to be a challenge.

The government has also entered into public private partnerships with regard to the rapid scaling up of the ART programme and this means many physicians are now lured into private practice (Dreesch, 2007). This may, to some extent, help to alleviate the workload in public hospitals, and if resources permit, to keep the ARV programme running for some time in order to realize meaningful gains in access to ART and support services.

The Botswana government has recently reviewed its policy on retention of physicians in the public sector by introducing a new financial incentive. In April 2008, the government introduced a scarce skills incentive giving all physicians currently working in the public sector a salary increment of 40% of their basic pay. This was a laudable move in view of austere global economic conditions at the time. The government committed itself to reviewing the human resource situation with regard to this incentive on a regular basis (Botswana Government Gazette, 2008).

The challenge is that the private sector often reviews its salary structures to ensure that they remain more attractive to health care workers. The solution may therefore lie in ensuring that overall working conditions are adequately attractive to retain physicians by offering packages rather than individual incentives. This approach will address directly the broader issues affecting job satisfaction. Indeed, job satisfaction is associated with several factors which include but are not limited to workload, remuneration, working conditions and professional development (Bovier and Perneger, 2003).

1.3 Rationale and statement of the problem, purpose and justification

1.3.1 Statement of problem

Physician's job satisfaction is a cornerstone for improving the quality of health care, and its continuity. Botswana continues to face health systems challenges in the face of the HIV/AIDS epidemic. With the increase in the burden of patient care that this epidemic has imposed on the health care system in Botswana, a system wide physician shortage has been created notwithstanding the recent changes in guidelines lowering the CD4 cell count threshold for access to antiretroviral therapy and therefore creating more demand for treatment. In the face of this increased demand, the actual need for physicians is higher and made worse by the exodus of physicians to the private sector and other countries (Dugger, 2003).

There is limited data on the extent of job satisfaction in the public sector. In fact, there is no study that has examined factors associated with job satisfaction among physicians in Botswana. A local survey on job satisfaction conducted among nurses revealed some factors associated with job satisfaction but no follow up studies have been conducted (Fako, 2000).

Many other studies have been conducted on job satisfaction elsewhere in Africa and indeed around the world but their findings may not all be extrapolated to Botswana (Brondt, 2007). Exit interviews for physicians leaving the public sector show that they are dissatisfied with inadequate training opportunities, poor progression, poor remuneration and a high workload as well as poor human resource management. These were cited as some of the reasons for leaving the public sector (Molelekwa, 2006). Therefore this study seeks to explore factors underlying physicians' job satisfaction and dissatisfaction because of the physicians' pivotal role in health

care delivery. This exploration may ultimately lead to the planning and implementation of the relevant interventions.

1.3.2 Objectives of the study

The broad objective of this study was to examine job satisfaction among physicians in public service in Botswana. Specifically, the study sought to;

(i) examine the extent or level of job satisfaction and dissatisfaction and

(ii) examine the factors associated with job satisfaction/dissatisfaction among physicians at Princess Mariana Hospital Gaborone

1.3.3 Justification for the study

Some studies have documented that job satisfaction is critical for the retention of physicians (Chen, 2004; Sibbald *et al*., 2000). Since intrinsic and extrinsic factors play a significant role in job satisfaction, addressing both of them will lead to satisfaction and retention of physicians. For example, training has been shown to elevate self esteem and self confidence among physicians thus contributing to job satisfaction and retention (Dormael *et al.*, 2008). Furthermore, lack of organizational commitment and job satisfaction has been shown to impact negatively on physician turnover (Samad *et al.*, 2006). Therefore physicians who demonstrate commitment to their organizations and are satisfied with their jobs are less likely to quit.

Therefore, an evaluation of job satisfaction and its associated factors is critical for strategic planning with regard to managing health service quality. Furthermore, the findings will be invaluable to the human resources department of the Ministry of Health because this will strengthen decisions on planning and deployment of human resources. Finally, it is anticipated

that the findings of this study will contribute to the body of knowledge relating to job satisfaction and dissatisfaction among physicians in sub-Saharan Africa in general.

1.4 A conceptual frame-work that underpins job satisfaction-job dissatisfaction

Herzberg's Job Satisfaction-Job Dissatisfaction theory was the theoretical framework selected for use in this study. This framework has been the subject of extensive literature. This framework was validated by Bailey, (1997b). According to this theory, the factors (satisfiers) that contribute to job satisfaction are separate and distinct from the factors (dissatisfiers) that lead to job dissatisfaction.

The satisfiers are intrinsic to the job and are geared towards self-actualization. They include achievement, recognition, actual work, responsibility, advancement and growth. On the other hand, dissatisfiers are extrinsic to the job and are aimed at preventing pain and discomfort. They include; supervision, organizational policy and administration, working conditions, interpersonal relations (with peers, subordinates and superiors), job security, salary, and effects one's personal life (Bailey, 1997c).

Herzberg's theory also postulates that job satisfaction and job dissatisfaction are not the opposite of each other. Hence the opposite of job satisfaction would not be job dissatisfaction but rather no job satisfaction and vice versa. Furthermore, satisfiers deal with factors involved in doing the job, i.e., job content whereas job dissatisfiers are concerned with factors that define the job context (Bailey, 1997d).

The distinction between the closely related concepts of motivation and job satisfaction has not been clearly made in the literature. However various writers have used the terms interchangeably. For the purpose of consistency, job satisfaction is used in this study.

Motivation is a direct cause of behaviour but satisfaction is not. This implies that rewards that fill important needs satisfy people but do not necessarily motivate them. Rewards motivate people only if their behaviour is necessary in getting the rewards (Bailey, 1997a).

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

This chapter reviews pertinent literature on the issue of job satisfaction among physicians. Due to the need to provide an in-depth support and a relevant context for this study an extensive literature review was done. Certain selection criteria were developed by the researcher to decide on which studies to discuss in detail. The selection criteria were identified to narrow the focus of the review, complement the purpose of this study, to maintain conceptual consistency and aid in identifying the appropriate material for critical analysis. In order to be included in this section studies had to meet the following three criteria:

a. Addressed job satisfaction as a concept

b. Focus on health workers and in particular physicians working in the public sector,

c. Conducted anywhere in the world but with special preference given to Africa

The following sections in this chapter therefore provide an outline for this review:

a. Definition of job satisfaction.

b. The role of physicians in providing health care

c. Tools utilized in the measurement of job satisfaction-job dissatisfaction

d. Studies conducted on job satisfaction-job dissatisfaction among physicians

e. Satisfaction leads to intention – this is critical

2.1 Definition of job satisfaction

Job satisfaction is a complex function of many variables. Job satisfaction may be defined as any combination of psychological, physiological, and environmental circumstances that causes a person to truthfully say "*I am satisfied with my job*" (Bailey, 1997). Different writers have described job satisfaction in similar ways. Locke (1976) describes job satisfaction as a positive emotional state emanating from an individual's job experience. Similarly, Weiss (2002) regards it as an affective reaction and attitude towards a person's job. A person may be satisfied with one or more aspects of his/her job but at the same time may be unhappy with other things related to the job.

2.2 The role of physicians in providing health care

Physicians have a major role in the provision of healthcare; from health promotion to therapeutic interventions. They provide a cornerstone for most therapeutic medical interventions. The Millennium Development Goals (MDGs) have a strong health component and achieving these targets requires a strong health system. Health workers, among them physicians, form a major input as building blocks of a strong health system (WHO, 2007). They may command up to two thirds of the health budget and therefore health workers in general and physicians in particular are required to lead the quest for health service delivery (Chen *et al*., 2004). Studies conducted in developing countries indicate that there is a quantitative association between physicians and nurses with coverage of essential health services that underpins the achievement of MDGs (Kruk *et al.,* 2009). For instance, presences of nurses were significantly associated with utilization of skilled birth attendants and physicians with measles immunization rates (Kruk *et al.,* 2009).

One of the effective interventions that reduce maternal mortality is the utilization of skilled birth attendants who are either physicians or nurses. Likewise the under-five mortality may be reduced by improving the immunization coverage through vaccination (Kruk *et al.*, 2009). Although health workers such as clinical officers do provide a substantial portion of health services in sub-Saharan Africa, physicians often take on managerial responsibilities as well as their professional responsibilities (Mullan *et al.,* 2007). They oversee the use of resources both fiscal and human further impacting on health service delivery (USAID, 2003).

2.3 Importance of job satisfaction and retention among physicians

Understanding physicians' work satisfaction is crucial to understanding the dynamics of the physician workforce. Job satisfaction has been shown to be important in the retention of physicians in a given community, as low job satisfaction has been associated with an intention to relocate (Thommasen *et al*., 2002). As stated previously physicians have a crucial role in health service delivery and therefore their job satisfaction may lead to improved quality in patient care and may cut down costs of care by reducing patient stay in the hospital (Bovier and Perneger, 2003). Bovier *et al*. (2003) also concluded that physician job satisfaction is multidimensional and implicit in this is the importance of both extrinsic and intrinsic factors, a view partially supported by Shah *et al.* (2001).

Since satisfiers do not necessarily motivate health workers, physicians included, but can minimize dissatisfaction with the work environment, they are important in attracting and retaining health workers. If satisfiers are sufficient, then health workers are likely to get motivated. Motivated health workers are more productive, innovative in the work place and committed to their work. Such workers are therefore likely to stay on their jobs (McCaffery *et al.* 2009).This does not however preclude them from being dismissed from those jobs.

2.4 Tools utilized in the measurement of job satisfaction-job dissatisfaction

A tool that has been used extensively in job satisfaction-job dissatisfaction studies is the questionnaire. Its increasing use in capturing job satisfaction data has been clearly demonstrated (Pietersen, 2005). Since a self-administered questionnaire has its own limitations, careful consideration has been given in adapting a questionnaire for this study. Table 1 below shows some of the studies that utilized self-administered questionnaires and their limitations.

These studies looked at multiple factors affecting job satisfaction and they attempted to demonstrate a link between these factors and job satisfaction. These instruments were reported by the authors to be valid and reliable and hence their relevance to the present study. Job satisfaction can also be measured using well known instruments such as the Minnesota satisfaction questionnaire as well as the job description index (Pietersen, 2005). For hospital workers custom-made questionnaires may be used to study job satisfaction (Fako, 2000).

Table 1: Assessment of questionnaires used in job satisfaction studies

AUTHOR	LIMITATION OF STUDY
Edwards, 2008	Focuses on organizational efficiency and its associated costs rather than the worker.
Pietersen,2005	Methodological and theoretical adequacy of instrument not taken into account.
Fako, 2000	Psychometric properties and the conceptual basis of the questionnaire are unknown. Only twenty out of thirty one variables found to correlate with job satisfaction. Too long for its purpose.
Leung, 2001	Methodological and theoretical adequacy of instrument not taken into account.
Patrick *et al*., 2003	The study involved physicians in training but the present study does not include physicians in training.

2.5 Studies conducted on job satisfaction-job dissatisfaction among physicians

A variety of scales and self-administered questionnaires have been used to measure job satisfaction among physicians. Many of these studies have also involved other health care workers such as nurses and pharmacists. The studies have also looked at the relationship between various factors and job satisfaction. With respect to job satisfaction, these factors may be classified as either extrinsic or intrinsic**.**

2.5.1 Extrinsic factors

A number of studies have looked at the influence of remuneration together with other extrinsic factors on job satisfaction. It is interesting to note that remuneration has not extensively been considered in isolation. Kisa and Kisa (2006) argue that the most important findings in their study were the physicians' unhappiness with their remuneration and workload and that improvement in remuneration and the promotion of health professionals would ultimately lead to a healthy society. Kisa *et al.* (2006) is supported by similar findings made by Ndiaye *et al.* (2007) in which more than three quarters of the physicians were not satisfied with their remuneration. These two studies inform the present study in that remuneration is one of the main factors to be considered. However it should be pointed out that adequate remuneration alone may not lead to job satisfaction (Shah *et al*., 2001, Abd-El-Aziz *et al.,* 2002, Bovier *et al.,* 2003 and Brondt *et al.,* 2007).In fact the assumption that remuneration alone will enhance physician retention is not supported by literature. Brondt, Vedsted and Olesen (2007) made important findings in a study involving general practitioners (GPs). Although GPs were not satisfied with their remuneration and hours of work, their overall job satisfaction was high because they were found to be satisfied with colleagues, the amount of responsibility that they had and the high degree of autonomy. Brondt *et al*. (2007) findings tend to support the fact that job satisfaction is important for the retention of physicians which compliments the present study.

Shah, Chowdhury, and Shah (2001) carried out a study on job satisfaction among health workers including physicians in Kuwait. For physicians, years of experience were associated negatively with job satisfaction whereas satisfaction with salary, presence of a new employees' program as well as in-service training had a positive association. This study seems to support the importance

of extrinsic factors in job satisfaction although the sample was predominantly non-Kuwaiti. This informs the present study in that nearly 51% of the physicians in the public sector in Botswana are expatriates. Shah *et al.* (2001) utilized an instrument that is based on Herzberg's conceptual model and so does the present study.

Likewise, Akre, Falkum and Hoftvedt (1997) found that open and supportive communication between physicians positively impacts on their job satisfaction especially among non-hospital physicians. Akre *et al*. (1997) findings tend to agree with both Shah *et al.* (2001) and Brondt *et al.* (2007) with regard to extrinsic factors. According to Stevens *et al*. (1992) the work environment is the most important factor in explaining other satisfaction dimensions which underpins the importance of extrinsic factors in job satisfaction.

2.5.2 Intrinsic factors

In exploring domains of work that are important for job satisfaction among physicians and other health workers Krogstad, Hofoss and Veenstra (2006) found that professional development is important for job satisfaction among physicians. Krogstad *et al*. (2006) are supported by Kushnir, Cohen and Kitai (2000) whose findings suggest that opportunities for continuing medical education and professional updating may reduce physicians' job distress and dissatisfaction. The present study also seeks to look at professional development in a similar way. Stoddard, Hargraves and Reed (2001) found that lack of professional autonomy had a negative impact upon job satisfaction among physicians which is supported by a study by Stevens, Diederiks and Philipsen (1992).

2.6 A general view of job satisfaction studies

All the studies cited above used instruments whose validity and reliability had been tested. The findings in these studies tend to agree that both hygienic (extrinsic) and job related factors (intrinsic) have to be fulfilled to ensure job satisfaction. Furthermore, though professional development and the degree of autonomy are particularly important for physician job satisfaction, they are not the sole determinants.

These studies also indicate that the major data collection tool used is the questionnaire. The literature surveyed shows that there are inadequacies on data sources relating to job satisfaction among physicians in Africa.

CHAPTER III

METHODOLOGY

3.0 Introduction

This study reviewed the job satisfaction of physicians in a public hospital in Botswana by identifying factors underpinning both job satisfaction and job dissatisfaction. The study utilized the Herzberg job satisfaction-job dissatisfaction theory as its guiding principle. Chapter 3 therefore, includes a discussion of the following: a) the study design, b) the study population, c) data collection, d) data processing, e) data analysis, f) ethical considerations and limitations.

3.1 Study design

This study used a descriptive survey research design. The survey was conducted at the Princess Marina Hospital located in Gaborone, Botswana.

Herzberg's satisfiers and dissatisfiers were used to define and measure the concept of job satisfaction among physicians. Selected demographic variables were examined and used to contextually describe the physicians in the public sector. These variables were: gender, age, current position, length of service, terms of employment and immigration status.

3.2 Study population

There are two referral hospitals in Botswana, as well as a number of primary care facilities and districts hospitals. The primary and district hospitals have very few physicians, usually less than twenty. A decision was therefore made to conduct the study in the referral hospitals. The

Nyangabgwe referral hospital is 440 km north of the capital, Gaborone and it was, therefore, logistically challenging to include this second referral hospital in the study.

This hospital was selected as it had the highest number of physicians with the most diverse areas of specialization and experience nationwide. The study population therefore consisted of all physicians who were employed at one public referral hospital in the Republic of Botswana at the time of the study. According to hospital administration there were one hundred and twenty physicians at the Princess Marina Hospital at the time of this study.

Since only one hospital was selected for this study, a decision was made to include all physicians who met certain criteria thus obviating the need for sampling. All physicians who participated in this study met the following inclusion criteria:

(i) They were employed at the hospital at the time of the study.

(ii) They had served at least one year at a public hospital in Botswana; the assumption being that this period provided enough time for the entry level physicians to understand the conditions pertaining to the job.

Any physician who did not fulfil the above inclusion criteria was therefore excluded from the study.

3.3 Administration of the data collection instrument

A packet was composed of an invitation letter (Refer to Annex A5) to participants of the study; a confidentiality agreement (Refer to Appendix A6) and a two-part questionnaire (Refer to Appendix B1 and Appendix B2). A consent letter was kept separate from the packet.

In the last week of August 2009, two staff members were selected and trained in a space of three days by the researcher on the objectives of the study, the study instruments and on how to distribute the study packet and make appropriate follow-ups, locale of the physicians as well as critical aspects of informed consent and confidentiality. One of the members was a senior nurse who is also function as a nursing head of unit. The other one was a critical care technologist from the same unit.

The field workers approached every physician in the hospital. After reading the invitation letter and confidentiality agreement, if the physician agreed to participate in the study, they were given the consent form to sign (Refer to Appendix A7).

The study packet was then left with the respondent to complete within seven days and deliver to a marked box outside the researcher's office. A separate numbered list of the respondent's names, departments and cell phone numbers was kept by the trained assistant for follow-up purposes.

If the respondent failed to bring the form, he/she was contacted by phone on the eighth day and asked to complete the questionnaire. The assistant would then offer to collect the duly completed form from the respondent.

3.4 Data Collection instruments

A two-part survey instrument was utilized to collect data. Both parts I and II had an introductory section for demographic background information in which the respondent entered his or her age,

sex, current position, length of service in the public sector, terms of employment and immigration status.

3.4.1 Part I of the survey- Satisfaction and dissatisfaction scale

This scale was adapted from Bailey (1997) with a view to concentrating on factors that are specifically related to the workplace which could also be enhanced through professional development. Of the sixteen parameters on the original satisfaction scale, eleven were selected for this study. This part of the questionnaire used a four point Likert scale such that respondents had to fill in the satisfaction scale or dissatisfaction scale (Refer to Appendix B1) for the rating of their job satisfaction. For the use of this scale, permission was sought and granted from Dr. E. Ann Bailey of Mississippi State University. The instrument has been used in her doctoral thesis titled *"Herzberg's Job Satisfaction-Job Dissatisfaction Theory Revisited: A National Study of its Application to Chief Housing Officers in Higher education"*. The instrument on job satisfaction studies by Blank in 1993 was adopted by Bailey.

3.4.2 Part II of the survey-Motivational survey instrument

A motivation survey instrument was adapted, with permission from, Penn-Kekana (2005). This instrument has a set of questions that explore motivational aspects of job satisfaction among health workers. They explore both intrinsic and extrinsic aspects of job satisfaction and were therefore acceptable for this study. The questionnaire was initially used on nurses and therefore it was changed to suit another group of health care workers, namely, physicians.

This instrument was used in the current study to determine factors associated with job satisfaction. The respondents were required to rate their agreement with each of forty eight statements made.

3.4.3 Validity and reliability of the instrument

Other studies on job satisfaction conducted using instruments based on the Herzberg theory largely agree with Herzberg's findings thus demonstrating a high face and content validity (Blank, 1993). The second instrument (see Appendix B2) has been used and published in other motivational surveys and likewise demonstrates a high content and face validity (Bennet *et al.*, 2001; Price *et al.*, 1997).

Whereas content validity objectively compares test parameters with job content, face validity defines the degree or extent to which a given test measures what it purports to measure (Bailey, 1997). Likewise, reliability refers to internal consistency of a test with repeated use over a given period of time and similar outcomes have been made (Bailey, 1997). The first instrument (Refer to Appendix B1) was extensively piloted on a group of individuals before its application in the main research. Its coefficient alphas or internal consistency estimates reflected a high degree of reliability (Blank, 1993). Hence the job satisfaction scale used in this study is reliable.

3.5 Pilot survey

On the Sixth and the Seventh of July 2009 a pilot study was done to determine the feasibility of this study. This was designed to add relevant or remove irrelevant items from the instrument and to determine the estimated time of completion which was expected to average one quarter to one half of an hour based on the number of questions.

Ten physicians from Princess Marina Hospital were selected to participate in the pilot study and they were not included in the subsequent study. All of them responded and participated. They did not however participate in the main study. This was conducted over one week. No changes were, however, made to either of the instruments following this exercise. In order to ensure

completeness of data for the evaluation of the feasibility of the study, all potential participants were given the questionnaire to complete and then followed up for collection by the, researcher's assistants

3.6 Data collection

Seventy five packets were distributed to potential respondents in the first week of September, 2009 and they were asked to respond within one week. Of these only forty five packets were returned within the specified time. All of them had been duly completed. In the third week of September 2009, a second batch of fifty five packets was distributed targeting those respondents who had either reported the loss of their packet or had not been available at the first attempt. To augment the response rate, respondents who had opted to participate but had not handed in their packet were then reminded by phone through the assistants to do so. This time around, thirty seven responses were obtained by the 30th September 2009.

3.7 Data Analysis

The data was coded and captured in Microsoft Excel spreadsheets and appropriate response validation tools, like restricted or legal values or codes per cell, were used to prevent typographic errors. A data capture assistant with experience in data capturing was used for data entry. If an item was left blank by a respondent or if a response was marked more than once, that answer was treated and coded as missing data.

The researcher double checked all the entries by randomly selecting 25% of the questionnaires, checking all the responses and generating frequencies to clean the data and identify inconsistencies or gaps in the data. Since the same demographic information was required in

both instruments it was possible to eliminate any inconsistencies. The data was then exported to Statistical Program fr the Social Sciences 16.0 for (SPSS Inc., Chicago, Illinois).

Descriptive statistics including frequency distributions were generated for all the key variables. Analysis also compared the distribution of responses by physicians to selected variables by socio-demographic variables and explored associations with job satisfaction and dissatisfaction using cross tabulations and Chi-square for association or Fischer's exact tests. The continuous variable age was grouped into 5-year age categories.

A conceptual framework on motivation responses was used to analyse the motivation responses in part II of the survey instrument. The framework was adapted from Penn-Kekana (2005), (see Appendix C).

3.7.1 Calculation of satisfaction levels

This study sought to determine the level of job satisfaction among physicians by using demographic and non-demographic factors. The results are presented below. Using an average score of all the physicians' responses for each factor, a composite variable "overall satisfaction" was constructed. The number of factors the participant chose on either scale was added. Those who responded on the satisfaction scale (slightly satisfied to highly satisfied) for 6 or more out of the possible 11 domains were considered satisfied. Similarly respondents who answered 5 or more on the dissatisfaction scale were classified as "overall dissatisfied". With regard to the rating of satisfaction, the initial tables were generated according to "slightly", "moderately" and

"highly satisfied". However, since the distribution of respondents between them was insignificant, they were amalgamated.

3.8 Ethical considerations

This study was conducted with written approval from the following institutions: 1) The Princess Marina Hospital Ethics Committee, Botswana, (see Appendix A4); 2) The Health Research Development Unit of the Ministry of Health, Botswana, (see Appendix A1); and 3) The Ethics Committee of the University of Witwatersrand (see Appendix A2).

A letter of invitation to participate in the survey (see Appendix A5) was hand-delivered to each physician by trained assistants and if after reading the letter, the physician agreed to participate in the survey, he or she signed the consent form (see Appendix A4). The physician was then handed a questionnaire which he or she filled and dropped in a box outside the researcher's office in a sealed envelope. The completed questionnaire was collected by an assistant if the respondent was unable to deliver it.

All the questionnaires were packed and checked by the assistant. To maintain a high level of confidentiality, respondents were not asked for their names and each questionnaire had a numeric code. The same code was on the consent form. The assistant had a list of names of the respondents for follow-up purposes and to check if they posted their responses. This list was kept by the assistant only and the researcher had no access to it.

CHAPTER IV

RESULTS

3 Introduction

This chapter presents the results of the study on job satisfaction both in descriptive and analytical forms. The analysis initially evaluates the study population and then examines several factors associated with job satisfaction or dissatisfaction. The results from part II of the instrument are presented using a conceptual framework on motivation and its outcomes (see Appendix C).

A total of 120 questionnaires were distributed. Out of these, 82 physicians from the Princess Marina Hospital participated, and the response rate was 68%. The first packet distribution yielded 45 responses and the second one yielded 37, thus a total of 82.

3.8 Socio-demographic characteristics of respondents

The first part of the instrument used in the study sought to establish the demographic characteristics of the study population**.** Table 4.1 below, gives a summary of the distribution of the study population and the socio-demographic variables. They were aged between 25 and 67, seventy-three percent (73%) were males, and forty-three (43%) of the respondents were between the ages of 21 and 30. The mean and median ages were 37 and 33 years respectively**.** Most of the participants had been working at the hospital for a period of two to five years. There were almost an equal number of local and non-citizen physicians. Most of the physicians who participated in the study were general practitioners (72%).

Table 4.1: Distribution of the characteristics of the study population

Variable (N = 82)	Number	Percentage
Age (years)		
21 – 30	35	43
31 - 40	18	22
41 – 50	18	22
> 50	11	13
Gender		
Female	22	27
Male	60	73
Length of Service in Public Sector		
1 year	17	21
2 - 5 years	36	44
6 - 10 years	14	17
> 10 years	15	18
Terms of employment		
contract	40	49
local	42	51
Immigration Status		
Citizen	45	55
Non-citizen	37	45
Current Position		
Specialist	23	28
General Practitioner	59	72

3.9 Satisfaction levels of physicians for various domains of job satisfaction

This sub-section presents the results on various domains of job satisfaction among physicians. Physicians were asked to choose the level of their satisfaction or dissatisfaction for various domains on one of two scales; depending on whether they were satisfied or dissatisfied. It is important to note that the respondents could only respond on one scale for each domain.

Figure 4.1 below shows the distribution of the satisfaction and dissatisfaction rates among the physicians for the given factors. The percentage of respondents who chose each factor on the satisfaction scale (slightly, somewhat, moderately and highly satisfied) or dissatisfaction scale (slightly, somewhat, moderately and highly dissatisfied) is shown. The Figure 4.1 shows both the number (%) of those that were satisfied or not satisfied for a given domain.

The domains that were chosen on the satisfaction scale were, in descending order; Achievement (82%), Relation with supervisors (74%), Relations with colleagues (73%), Job security (71%) and Job Variety (70%). Fifty-one (51%) of the physicians were satisfied with the factor recognition of their job performance, while 49% were not satisfied.

These results indicate that the physicians were satisfied with these domains. For instance they were highly satisfied with their achievements, relations with their supervisors as well as colleagues.

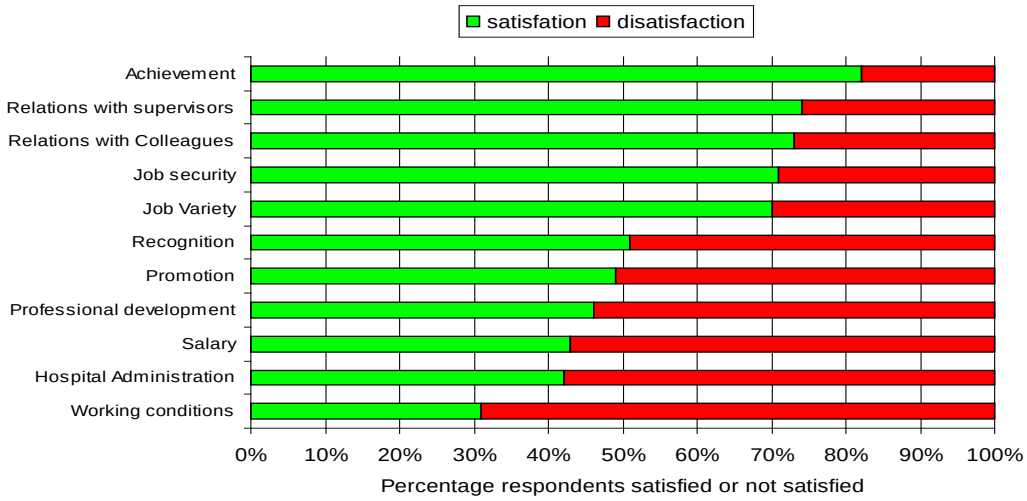


Figure 4.1: Frequency distribution of satisfaction and dissatisfaction rating by physicians for various domains of job satisfaction.

Their responses, also in descending order, on the dissatisfaction scale for the stated domains were as follows: working conditions (69%), hospital administration (58%), salary (57%), professional development (54) and promotion (51%). These results indicate that physicians were

dissatisfied with their working conditions, hospital administration and their salaries. Other domains with which they were dissatisfied include professional development and promotions.

A more detailed analysis of these results is described below. Table 4.2 below shows the percentage of respondents in each domain on the satisfaction Scale. The physicians were highly satisfied with their Achievement (71.7%, moderate to high), Relations with supervisors (74%), relations with colleagues (73%) and job security (71%).

Table 4.2: Rating of factors affecting job satisfaction - Satisfaction scale

	Satisfaction scale			
Factor	**slightly satisfied %**	**somewhat satisfied %**	**moderately satisfied %**	**highly satisfied %**
Achievement	8.3	20.0	50.0	21.7
Promotion	17.1	28.6	28.6	25.7
Professional development	25.0	13.9	36.1	25.0
Relations with Colleagues	3.5	22.8	36.8	36.8
Relations with supervisors	5.3	19.3	50.9	24.6
Job security	12.7	16.4	32.7	38.2
Hospital Administration	9.1	27.3	42.4	21.2
Recognition	15.0	30.0	25.0	30.0
Salary	12.5	21.9	46.9	18.8
Job Variety	13.0	25.9	42.6	18.5
Working conditions	37.5	20.8	29.2	12.5

Table 4.3 below shows the percentages for each domain on the dissatisfaction Scale. The results in this table indicate that physicians were highly dissatisfied with working conditions (69%, moderate to high)). They were also dissatisfied with the hospital administration (58%), salary (57%), professional development (54%) and promotion (51%).

Table 4.3: Rating of factors affecting job satisfaction - dissatisfaction scale

Factor	Slightly dissatisfied %	somewhat dissatisfied %	moderately dissatisfied %	highly dissatisfied %
Achievement	61.5	7.7	23.1	7.7
Promotion	18.9	27.0	18.9	35.1
Professional development	23.3	14.0	41.9	20.9
Relations with Colleagues	28.6	38.1	19.0	14.3
Relations with supervisors	40.0	30.0	10.0	20.0
Job security	39.1	13.0	17.4	30.4
Hospital Administration	23.9	19.6	19.6	37.0
Recognition	26.3	21.1	28.9	23.7
Salary	16.3	20.9	20.9	41.9
Job Variety	26.1	26.1	21.7	26.1
Working conditions	11.1	11.1	20.4	57.4

3.10 Overall satisfaction level

Figure 4.2 below shows the distribution of the overall satisfaction. Forty-two (42) percent of the physicians were overall, satisfied with their job, and 58% were not satisfied.

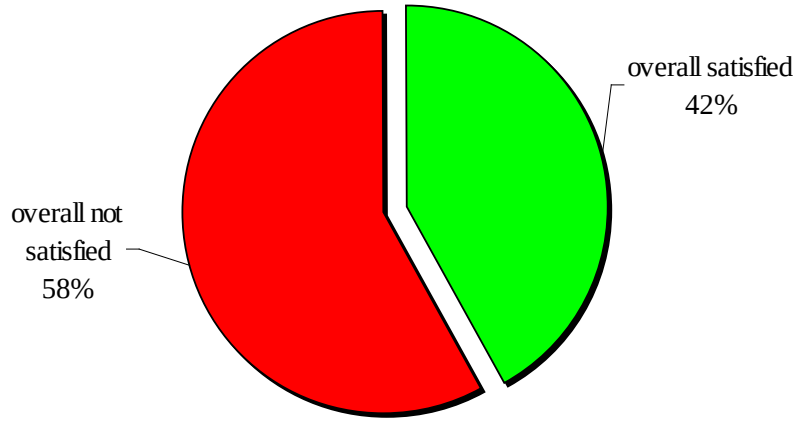


Figure 4.2: Distribution of the overall rating of Job satisfaction

Figure 4.3 below shows the distribution of overall job satisfaction by age. Although there was no significant correlation between age and overall job satisfaction (Fishers' exact=6.53; p = 0.086), the age group 21 – 30 years had a higher proportion of participants not satisfied with their job because of high demands at this age. Most of the respondents over the age of 50 were satisfied with their job.

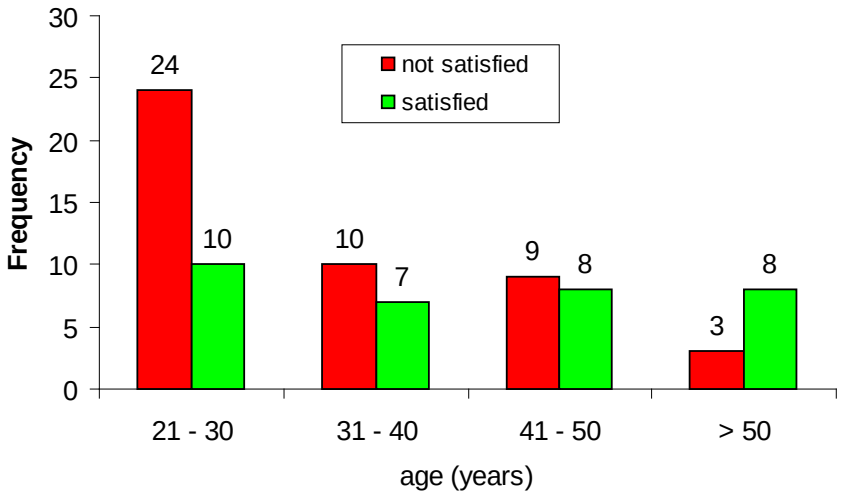


Figure 4.3: Distribution of the overall job satisfaction by age

Figure 4.4 below shows the distribution of overall job satisfaction by gender.

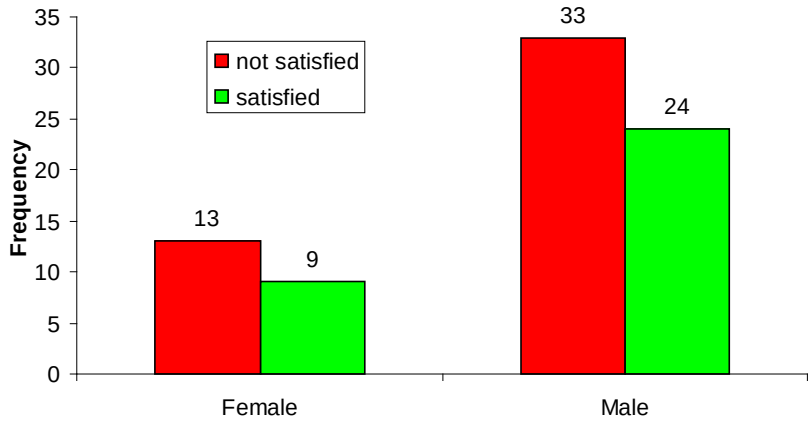


Figure 4.4: Distribution of the overall job satisfaction by gender

Further analysis of the results in Figure 4.4 also indicates that there were no significant associations between job satisfaction and gender (χ^2=0.09; p = 0.923).

Figure 4.5 below shows the distribution of overall job satisfaction with the length of service.



Figure 4.5: Distribution of the overall job satisfaction by length of service

Further analysis of the results in Figure 4.5 also indicates that there is no significant association between the length of service and job satisfaction (χ^2=2.89; p = 0.408).

Figure 4.6 below shows the distribution of overall job satisfaction by employment terms and immigration status.

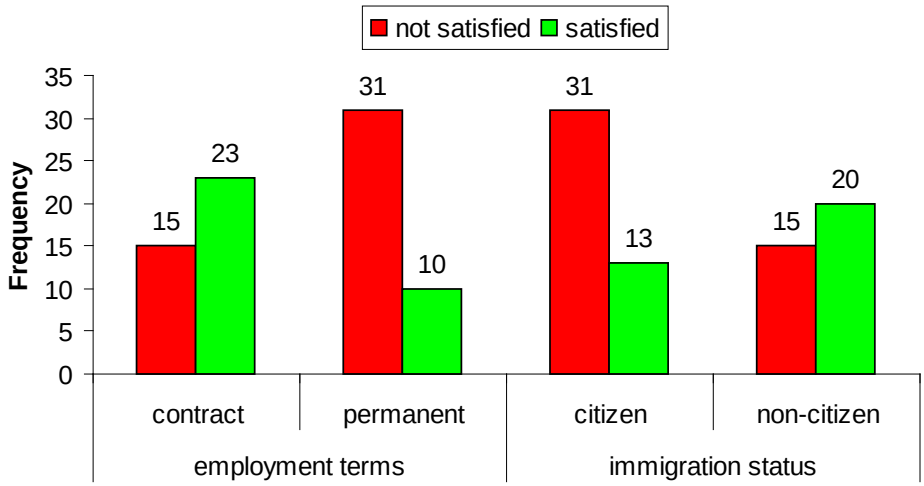


Figure 4.6: Distribution of the overall job satisfaction by employment terms and immigration status**.**

Further analysis of the results in Figure 4.6 indicates that immigration status and employment terms were significantly associated with overall job satisfaction. The majority of the physicians on local terms of employment (76%) were not satisfied with their job (χ^2=0.09; p = 0.923) and similarly, the majority of the physicians who came from Botswana (70%) expressed dissatisfaction with their job at the hospital (χ^2=0.09; p = 0.923). The main difference between permanent and pensionable employees and expatriates is the payment of a lump sum end of contract (gratuity) every three years.

3.11 Significant associations between selected individual domains and socio-demographic variables

3.11.1 Working conditions and socio-demographic variables

Almost all female physicians (87%) were dissatisfied with the working conditions. In general, there was a significant association between gender and working conditions (Fischer's exact test p = 0.033). No other socio-demographic variable was significantly associated with this domain.

Satisfaction with hospital administration and working conditions

The socio-demographic part of the instrument also looked at current position by which physicians are either employed as specialists or general practitioners. Figure 4.7 shows the distribution of overall job satisfaction by current position. The results in Figure 4.7 indicate that most general practitioners (65%) were not satisfied with the hospital administration ((χ^2=3.76; p = 0.047).

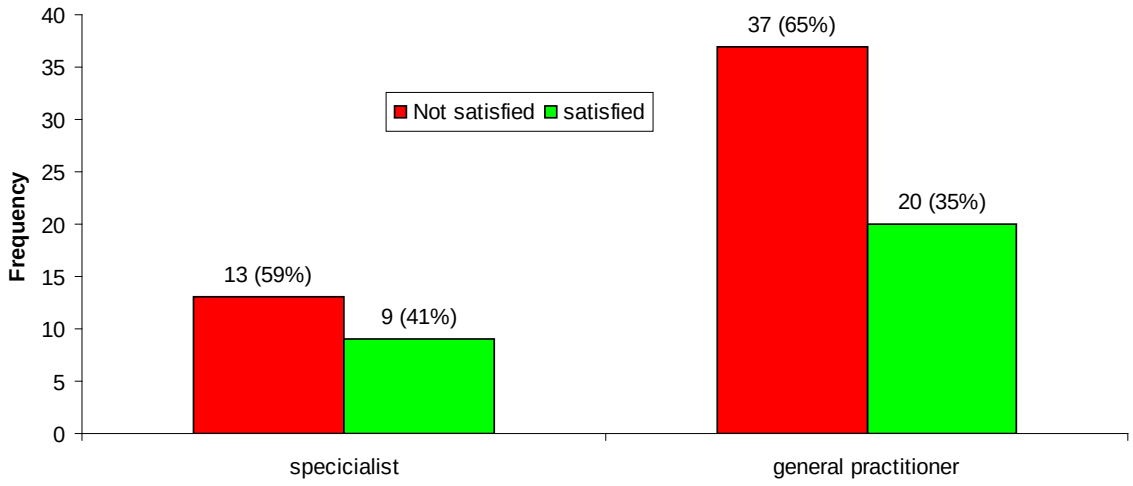


Figure 4.7: Distribution of the overall job satisfaction by current position.

The responses to Hospital administration with respect to immigration status were also examined.

Figure 4.8 shows the distribution of responses on Hospital administration by immigration status.

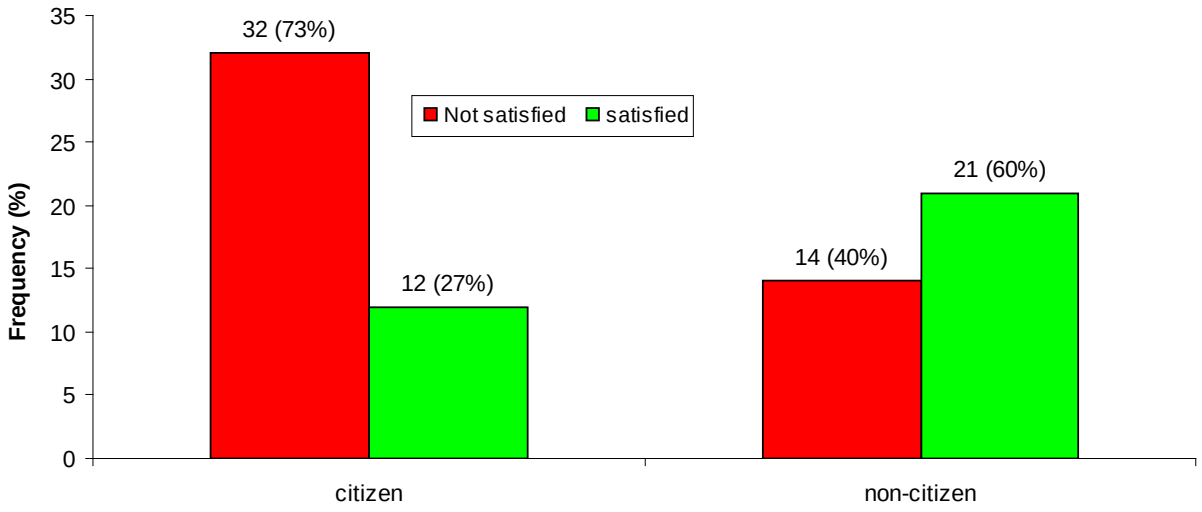


Figure 4.8: Distribution of rating of hospital administration by immigration status

The results in Figure 4.8 indicate that physicians who were employed on local terms and are Botswana nationals were dissatisfied with the hospital administration (χ^2=10.59; p = 0.001).

3.11.2 Salary

The satisfaction with the salary was also examined with respect to immigration status. Figure 4.9 shows salary distribution by immigration status. The results in Figure 4.9 indicate that Seventy-two percent (72%) were not satisfied with the current salary as compared to their non-citizen counterparts (χ^2=8.975; p = 0.001). Physicians who are Botswana nationals were more likely to be unhappy with their salary compared to their foreign counterparts. Again the foreign

physicians find the salary better by virtue of their countries of origin which may be economically not at par with Botswana.

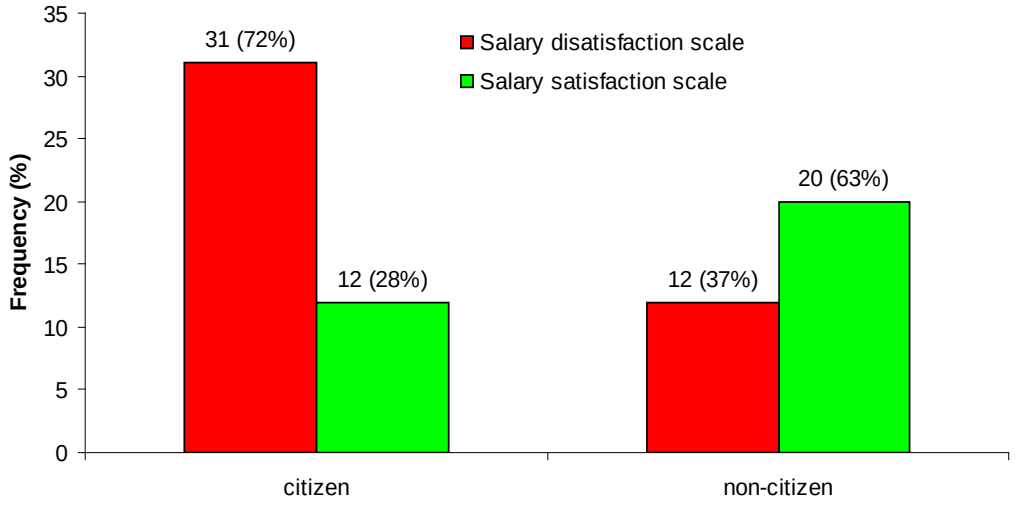


Figure 4.9: Distribution of the salary satisfaction by immigration status

3.12 Motivation Outcomes

3.12.1 General Motivation Outcomes

Tables 4.4 and 4.5 show results for the motivational outcomes. The total number of responses for each domain should ideally add up to 82 but this is not the case. The number of responses varies from 75 to 81. The calculated percentages are based on the actual number of responses.

The domains in tables 4.4 and 4.5 have been grouped according to the conceptual framework on motivation and its outcomes (see Appendix C). The domains include but are not limited to motivation, job satisfaction and burnout.

Table 4.4 shows the responses of the physicians with regard to intrinsic factors affecting job satisfaction. These were grouped under, motivation, job satisfaction, organizational commitment, intention to leave, attitudes to patients, burnout, work ethic/job environment, self efficacy/locus of control, vocation/job choice and attitude to change.

Table 4.5 shows the responses of the physicians with regard to extrinsic factors affecting job satisfaction. These are grouped as follows; job satisfaction, workload, extrinsic job characteristics, organizational citizenship, supervision and support, management and support, stress/work hazards, HIV/AIDS hazards and policy environment.

3.12.1.1 Motivation

The results in Table 4.4 indicate that 55% of the physicians strongly agreed and 41% agreed with the statement "*I am confident about my ability to do my job*". Of those who responded, 51% agreed and 40% strongly agreed with the statement *"I do things that need doing without being asked or told"*. This implies that physicians are motivated and they like their profession. These results are also statistically significant as expressed by the corresponding means and standard deviations.

3.12.1.2 Job satisfaction

A notable observation was made with regard to the statement *"Overall, I am very satisfied with my job"*. The results in Table 4.4 indicate that 16% strongly agreed and 33% of them agreed with

the statement but 19% of them were not sure which implies that there are other underlying factors. Furthermore only 9% of the physicians strongly agreed and 32% agreed with the statement *"At work, I can generally achieve whatever I set out to achieve"*. These results imply that there is a low job satisfaction among physicians.

3.12.1.3 Organizational commitment

Among the respondents only 10% strongly agreed and 13% agreed with the statement "*I feel very little commitment to this hospital*". The results in Table 4.4 also indicate that 16% of the physicians strongly agreed and 39% of them agreed with the statement *"I am proud to be working for this hospital"* This implies that most of the physicians felt committed to the hospital despite their low job satisfaction.

3.12.1.4 Attitudes to patients

Physician attitudes to patients were also examined in this study. The results in Table 4.4 indicate that 38% of the physicians either strongly disagreed or disagreed respectively with the statement *"I feel that I don't care for patients like I used to"*. This implies that there is a positive attitude towards patient care among physicians because they are motivated by their professional work.

3.12.1.5 Burnout

The results in Table 4.4 indicate that 29% of the physicians strongly agreed and 24% agreed with the statement *"I feel emotionally drained at the end of everyday"*. This is statistically significant as well.

3.12.1.6 Work ethic/environment

The results in Table 4.4 also indicate that 51% of the physicians strongly agreed and 38% of them agreed with the statement, *"Doing my job well makes me feel worthwhile"*. This implies that physicians have strong professional ethics which serve to motivate them in their job.

3.12.1.7 Self efficacy and locus of control

Another significant result from Table 4.4 indicates that 62% of the physicians agreed and 17% strongly agreed with the statement *"my work is always of high quality"*. This further reflects self confidence and motivation in their professional work, again reaffirming what has been found in this study.

3.12.1.8 Job satisfaction

Physician job satisfaction was examined with respect to job related factors. The results in Table 4.5 indicate that 54 % of the physicians agreed and 26 % strongly agreed with the statement *"my job gives me a feeling of achievement and accomplishment"*. Furthermore, 30% of them strongly agreed and 56% agreed with then statement *"I like the responsibility that my work gives me"*. This again implies that physicians draw satisfaction from their job.

3.12.1.9 Workload

The physicians raised concerns with regard to the work load. The results in Table 4.5 indicate that 54% of them strongly disagreed and 28% disagreed with the statement *"there are enough physicians to do the work in this hospital"*. Conversely, 44% of the physicians agreed and 29% strongly agreed with the statement *"the amount of work I have to do is very demanding"*. This implies that the demands of the job upon physicians appear to be high yet they are still motivated to do their work.

3.12.1.10 Extrinsic job characteristics

The physicians' job circumstances were a source of concern too. The results in Table 4.5 indicate that 39% of the physicians strongly disagreed and 32% disagreed with the statement "*my job offers adequate pay compared with similar jobs"*. Furthermore, 47% of the physicians agreed and 12% strongly agreed with the statement *"With this job I have to worry about how to support myself and my family"*. This implies that physicians were in general, not motivated by the circumstances of their job.

3.12.1.11 Management and support

The study also examined the support of the physicians in their professional capacity from the Hospital Administration. The results in table 4.5 indicate that 25% of the physicians strongly agreed and 29% agreed with the statement *"Suggestions made by physicians on how to improve their work are usually ignored by hospital management"*. This implies that there is need for more support for physicians in their professional capacity from the hospital administration.

3.12.1.12 Policy environment

The policy environment was also considered in this study. The results in Table 4.5 indicate that 30% of the physicians who responded agreed and 26% of them strongly agreed with the statement *"the Ministry of Health does not adequately consider the effect of its decisions on staff when developing new policies"*. However 30% of the respondents were not sure. Similarly, 23% of the physicians strongly disagreed and 33% disagreed with the statement *"we are well informed about policy changes affecting the work"* but 24% of them were not sure which raises further issues.

Table 4.4: Motivational responses of physicians at Princess Marina Hospital I

Domain	Strongly Disagree	Disagree	Not sure	Agree	Strongly Agree	
	%	%	%	%	%	N
Motivation						
al) I am confident about the ability to do my Job	0	1.3	2.5	41.3	55	80
l) These days, I don't feel motivated to work as hard as I could	22	26	10	30	12	81
s) I do things that need doing without being asked or told	0	3	6	51	40	80
Job satisfaction						
i) Overall, I am very satisfied with my job	9	24	19	33	16	80
q) At work I can generally achieve whatever I set out to achieve	8	24	27	32	9	78
Organizational commitment						
b) I feel very little commitment to this hospital	28	38	11	13	10	79
r) I am proud to be working for this hospital	9	10	25	39	16	79
t) I find that my values and this hospital's values are very similar	15	14	34	26	11	80
Intention to leave						
d) I can see myself working overseas in the future	16	14	32	21	17	81
p) I would prefer not to work in the public sector	20	26	30	14	10	80
h) I intend to leave this hospital in the next one year	24	14	34	20	9	80
Attitudes to patients						
j) In this hospital, it is always possible to treat patients with respect	5	25	9	44	17	81
f) I feel that I don't care for patients like I used to	38	38	6	13	4	78
Burnout						
n) I feel emotionally drained at the end of every day	6	33	8	24	29	79
u) When I get up in the morning I dread having to face another day at work	19	43	8	20	10	79

Work ethic/job environment						
c) The major satisfaction in my life comes from my work	10	36	14	25	16	81
v) Doing my job well makes me feel worthwhile	4	2	5	38	51	81
o) I try to work hard because of my religious beliefs	16	26	9	35	14	80
Self efficacy and locus of control						
g) My work is always of high quality	3	3	17	62	17	78
e) I feel that I am not in control of things which affect my work	13	21	14	31	22	78
Vocation/Job choice						
m) I am proud to tell others that I am a doctor	5	6	14	42	33	81
w) I wish that I had chosen a different profession	42	29	11	6	11	79
Attitude to change						
k) I cope well with change	1	5	7	65	21	81
x) There have been too many changes in this hospital in the past few years	9.2	19.7	46.1	17.1	7.9	76

Table 4.5: Motivational responses of physicians at Princess Marina Hospital II

Domain	Strongly Disagree	Disagree	Not sure	Agree	Strongly Agree	
	%	%	%	%	%	N
Job satisfaction						
a) My job gives me a feeling of achievement and accomplishment	3	5	13	54	26	78
x) I like the responsibility that my work gives me	3	4	8	56	30	80
Workload						
g) There are enough doctors to do the work in this hospital	54	28	9	8	3	80
t) The amount of work I have to do is too demanding	4	15	8	44	29	79
Extrinsic job characteristics						
f) My job offers adequate pay compared with similar jobs	39	32	12	8	10	78
i) My job duties, requirements, and goals are clear and specific	13	27	15	35	10	79
m) With this job I have to worry about how to support myself and my family	9	22	10	47	12	78
q) There are sufficient opportunities for promotion in my job	18	30	31	22		78
Organizational citizenship						
e) My colleagues are jealous of my expertise and not willing to learn from me	26	56	15	1	1	80
j) In this hospital, everyone works together to get the work done	16	38	18	28	1	80
Supervision and support						
l) The support of my supervisor is essential in getting my work done	3	15	4	51	28	80
o) I am able to talk to my supervisor about a personal problem affecting my work	9	20	23	38	10	79
p) In this hospital, decisions about performance and promotion are made fairly	18	25	44	11	1	79
u) I do not get adequate support and supervision from my supervisor	18	34	15	28	5	79
Management support						
b) Hospital management really cares about	22	29	32	14	4	79

my well-being						
h) In this hospital, decisions about who goes on training courses are made fairly	29	23	39	9		77
d) I am able to say what I really think about how things are going at the hospital when talking to hospital management	6	29	22	33	10	79
w) Suggestions made by doctors on how to improve their work are usually ignored by hospital management	3	14	29	29	25	79
n) Hospital management communicates well with doctors in this hospital	25	25	28	18	4	79
Stress/work hazards						
s) I am worried about being assaulted by patients or their relatives at work	16	40	6	24	14	80
c) The stress of working in this hospitals has made me think about transferring	9	30	15	29	18	80
HIV/AIDS hazards						
v) The risk of HIV has made me think about leaving my job	22	46	10	13	10	79
Policy environment						
k) We are well informed about policy changes affecting our work	23	33	24	19	1	79
r) The Ministry of Health does not adequately consider the effect of its decisions on staff when developing new policies	8	7	30	30	26	77

3.12.2 Further analysis of motivational responses

3.12.2.1 Perceived contextual factors

Using significant results in Tables 4.4 and 4.5 together with the conceptual framework (Appendix C), Figure 4.10 was generated. As per descriptive analysis above the most critical domains affecting job satisfaction were perceived contextual factors. These areas were grouped

as workload, extrinsic job characteristics, and management support and policy environment. The results then shown in Figure 4.10 below.

Workload

The results in Table 4.10 indicate that eighty one percent of the physicians (81%) disagreed that there were enough physicians to work in the hospital and this was complemented by 73% of the physicians who agreed that the workload was too demanding. This essentially implies that physicians face a heavy workload.

Management support

Analysis of the results in Table 4.10 made interesting revelations about the physicians with regard to management support. Of those who responded, 28% of them were not sure whether *"hospital management communicates well with physicians"* but 51% of them disagreed with the statement. Similarly, 29% of the physicians were not sure whether *"suggestions made by physicians on how to improve their work are ignored"* but 54% of them agreed with the statement.

Policy environment

A similar observation is made under the policy environment in Figure 4.10. The policy environment was another area of concern among physicians. Of those who respondent, 56% of the physicians agreed with the statement *"the MOH does not adequately consider the effect of its decisions on staff"* but 56% of them disagreed with the statement *"we are well informed about*

policy changes affecting our work". This implies that there is the need to pay attention to the policy environment particularly with regard to communication.

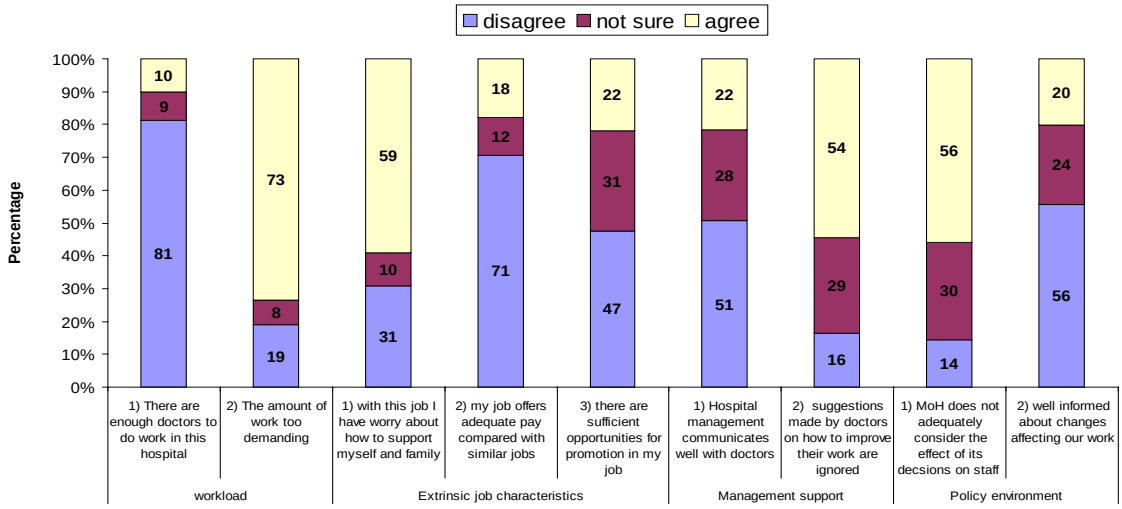


Figure 4.10: Selected determinants of motivation (job satisfaction) among physicians.

Extrinsic job characteristics

The results in Table 4.10 also indicate that 59% of the physicians agreed with the statement *"with this job I have to worry about how to support myself and my family"* but 71% of them disagreed with the statement *"my job offers adequate pay compared with similar jobs"*. This implies that physicians perceive that they are not adequately remunerated. In other words they are not satisfied with their salary.

CHAPTER V

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

4 INTRODUCTION

This chapter provides a discussion of the results, conclusion and recommendations on the study on job satisfaction. The broad objective of the study was to examine job satisfaction among physicians in public service in Botswana. The methodology employed in data collection was a two-part structured questionnaire.

4.8 DISCUSSION

In this study, physicians perceived that they have a heavy workload; they were dissatisfied with the hospital management as well as the policy environment and their remuneration notably the salary. However, despite these findings, they appeared to be motivated by their work, they have a positive attitude towards patients, they are ambivalent about their intention to leave the public service and they are driven by a strong professional ethic. Overall they are dissatisfied with their job. The specific areas that are covered in these findings are presented below.

The first part of this study sought to determine the level of job satisfaction among physicians in public service. The results of this study show that physician's job's satisfaction is of great concern. An understanding of the aspects contributing to satisfaction or dissatisfaction is essential because dissatisfaction may have adverse effects on the quality of care, costs and outcome of health care, as well the physicians' well being (Devoe et al., 2002). In this study, only 42% of the physicians were satisfied with their job. This finding is similar to other studies

in Africa where health systems are under pressure with high patient numbers and heavy physician workloads (Abdel-Rahman et al., 2008). This is in sharp contrast to what is found in developed countries which document higher satisfaction rates (Brondt et al., 2007).

The second aspect of this study sought to establish the factor(s) underpinning job satisfaction among physicians. The findings of this study suggest that the factors that satisfied physicians were job related or intrinsic factors. These findings are consistent with previous studies which reported, for example, that relationships with patients and colleagues were rated highly (Konrad et al.., 1999; Gadallah, Randy and Abdelazeem, 2000; Landon, 2004). Conversely, Physicians were not satisfied with their working conditions, such as the workload and similar findings have been made in previous studies (Abdel-Rahman et al., 2008). It has been postulated that if the working environment lacks certain important attributes then job satisfaction is likely to decline which suggests a similar trend in the present study (Abdel-Rahman et al., 2008). Physicians were also dissatisfied with the hospital administration which is consistent with the finding in a previous study that lack of organizational support could negatively impact on job satisfaction although that study was done among nurses (Pietersen et al., 2005). This implies that there is need for the hospital administration to communicate with the physicians more effectively and consider their opinions before making decisions.

This study also sought to determine the level of job satisfaction with respect to salary among physicians in the Botswana public service. The findings revealed that there was significant dissatisfaction with salary. Similar findings have also been made elsewhere in West Africa (Ndiaye et al., 2007). Whenever this occurs physicians have to look for an extra source of

income but this does not occur in Botswana because public sector physicians are only licensed for public service (McCoy et al., 2008). In Nigeria, for instance, 45% of the health workers reported that they supplemented their income privately (McCoy et al., 2008). Indeed, other studies have demonstrated that physician dissatisfaction with pay is likely to reduce their retention within the service (Landon et al., 2002). Contract physician's pay in Botswana does differ significantly from the non-contract (pensionable) physician's pay. Perhaps the major difference is the payment of a lump sum at the end of each two to three year tour of duty (contract). Although this study did not specifically examine the influence on physician job satisfaction of the recent review of the pay structure by the Government, it is possible to make the assumption that salary increment per se is not likely to influence physician job satisfaction. Similar findings have been made in previous studies (Mathauer, 2006).

Promotion as a motivator and job satisfier was another aspect this study sought to determine among physicians in Botswana. This study has revealed that physicians are dissatisfied with their promotion opportunities. Again, this is consistent with similar studies done elsewhere in Africa (Ndiaye et al., 2007; Abdel-Rahman et al., 2008). Since, promotion goes hand in hand with professional recognition on the part of physicians; lack of promotion also implies lack of professional recognition. This in turn is likely to lead to lack of job satisfaction among physicians. Similarly physicians were found to be dissatisfied with their professional development in this study. This is important because it may negatively affect job performance, competency and professional recognition.

Other factors examined by this study included age, gender and immigration status. It was also found, in the present study that most physicians who were dissatisfied were in the age group 21-30 which is consistent with other previous studies (Al-Eisa et al., 2005). The assumption is that physicians in this age group have higher demands but they tend to adapt with age. Most female physicians were dissatisfied with the working conditions. The fact that female physicians may have domestic chores in addition to their professional work is a plausible explanation for this finding.

Another observation in this study was that physicians on contract (mainly expatriates) were satisfied with their employment terms unlike their local counterparts. For instance, it was found, in this study that, most of the local physicians were dissatisfied with their current salary. Physicians on contract are satisfied with their employment terms probably due to the better economic conditions prevailing in Botswana as opposed to their countries of origin.

Although physicians were not satisfied with the working conditions at the hospital, it does appear that the job context does not influence their level of job satisfaction. It is generally known that job performance and job satisfaction are directly influenced by the level of motivation (Mathauer, 2006). Looking at the responses in Part II of the survey instrument more physicians agreed that their job gave them a feeling of achievement and accomplishment than those who did not. Furthermore most physicians disagreed that there were enough physicians in the hospital, but they agreed that their work load was too demanding and they felt ignored by the hospital management. Even though their workload was demanding, the physicians liked the responsibility that goes with their work. This may suggests the role of ethical considerations play a far greater role in the provision of care and support for patients. In other words it seems to support the fact

that health workers are strongly guided by their professional conscience and similar aspects related to professional ethos (Mathauer, 2006).

The data generated through this study provides needed baseline information that could be used strategically with regard to managing health service delivery and quality. Retaining, managing and distributing physicians in the public sector can significantly and drastically improve access to services. This seems to suggest that, a review of the working conditions such as facilities and resources, physician-patient ratio, physician density and administration support and logistics, will be critical in sustaining any initiatives to sustain job satisfaction and hence retention. Although the sample size was by all means small in this study, a lot of information can be deduced from the results and therefore action can start even at hospital level to make improvements and retain physicians. A brief discussion of some possible strategies that could be adopted to address some of the issues will now follow. In order to do this a framework of motivational determinants and Human Resource Management (HRM) tools is used as shown Figure 4.11 below. This figure also depicts how the various determinants influence each other.

Figure 4.11 below shows some of the motivational determinants and the point of collective application of HRM tools to address some of the issues uncovered by this study. Some of the HRM tools that could be applied to address these issues include but are not limited to; recognition schemes, training and professional development, participation mechanisms, as well as intra-organizational communication processes (Mathauer *et al.*, 2006). Since most physicians lamented their non-participation in decision making and the lack of communication between them and the hospital management, staff participation and involvement provides a

viable HRM tool. This particular tool would optimize physicians' knowledge and ideas for improvement. Furthermore, physician participation will involve recognition and appreciation of their competencies which makes them feel valued and therefore they get motivated. This motivation will be at two levels as shown in Figure 4.11; "will-do" (i.e. professional satisfaction) and the "can-do" (i.e. raises self-confidence), (Mathauer *et al.*, 2006). One way of fostering participation is through regular meetings with physicians in which ideas for improvement are openly discussed and adopted.

A study in Kenya and Benin found that non-financial incentives and HRM play an important role in raising motivation among health care professionals (Mathauer *et al.*, 2006). This clearly demonstrates that non-financial incentives and HRM tools may be effective at improving motivation among physicians in the public service in Botswana. HRM tools therefore promote physicians' professional ethos and commitment as well as their perception of self efficacy (Mathauer *et al.*, 2006). However, serious deficits in the application of HRM tools may lead to low motivation among physicians. Therefore physicians need to be valued and supported in order to meet their technical, personal as well as their psychological needs (Mathauer *et al.*, 2006). A motivated physician will most likely stay in the public service sector.

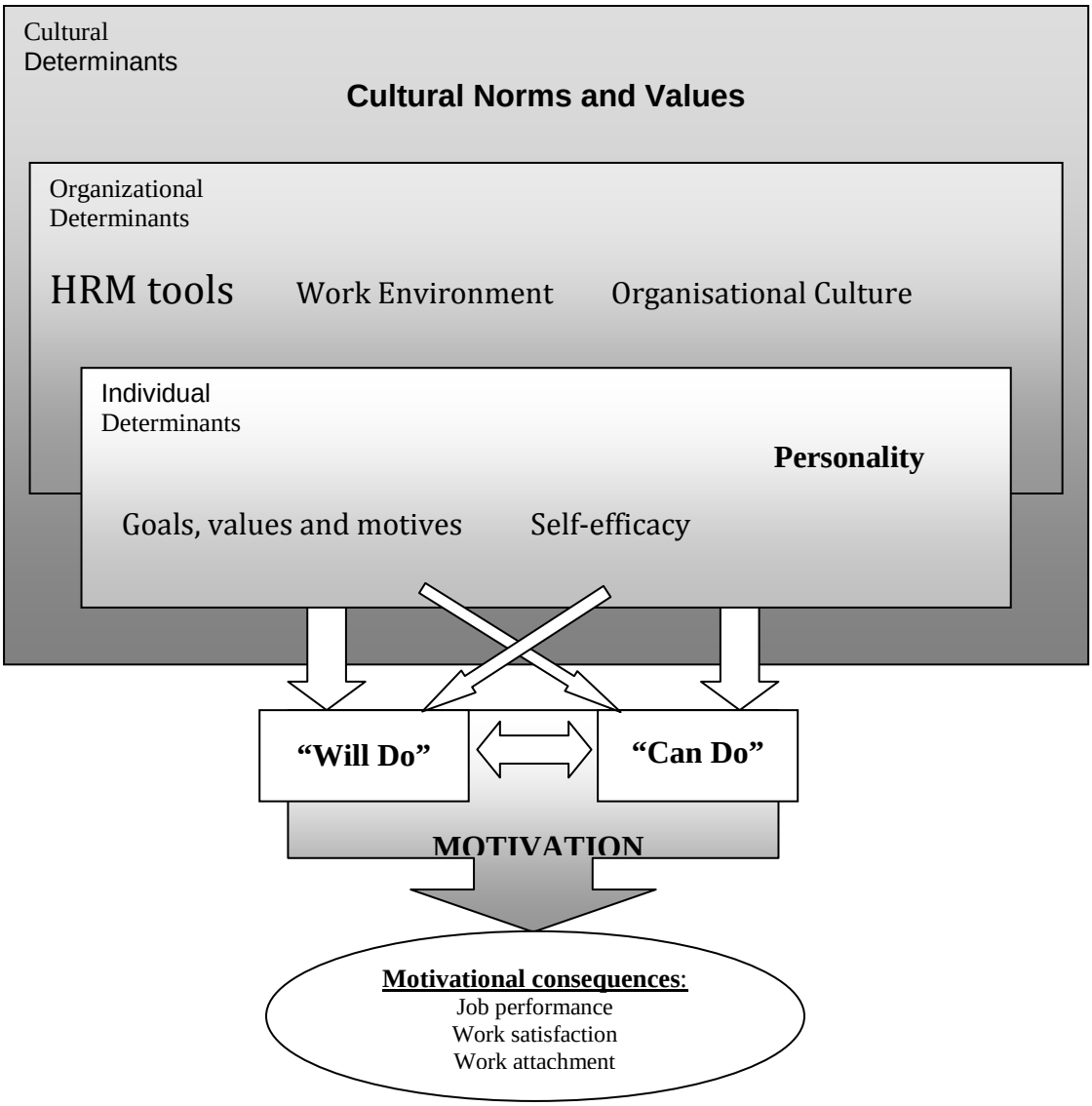


Figure 4.11: The motivational determinants and processes (Mathauer *et al.*, 2006)

5.1 CONCLUSION

The evidence from this study indicates that there is overall low satisfaction among physicians at Princess Marina Hospital, that may be directly related to the high workload, a non-conducive working environment characterised by low support from the management. However, it was also evident that despite these findings, they are still able to carry out their professional duties (see table 4.10). The physicians like their job; they are motivated in it, and have a positive attitude towards patients although they are not satisfied with their job. Despite this overall picture the study has also shown that there are several areas of concern to the physicians at the Princes Marina Hospital.

4.9 RECOMMENDATION

This study reveals that less than half of the physicians at the Princes Marina hospital are not satisfied with their job. This study therefore recommends that focus should be given to working conditions, relations with hospital administration, salary, professional development and promotion. Since physicians are guided by their professional ethos, it is possible to conclude that their job dissatisfaction or lack of job satisfaction may indeed emanate from the failure to fulfil their professional obligations due to lack of an enabling environment. Hence there is need to pay particular attention to the physician work environment since improvements in this domain will most likely lead to job satisfaction.

Moreover, this study calls for further research to explore and evaluate intervention strategies for improvement of job satisfaction in the public sector in Botswana with a special emphasis on young physicians and local physicians. It goes without saying that the sample size in this study

was small and therefore the findings could not necessarily be extrapolated to other areas of the country, especially the rural areas and hence the need for further research.

4.10 LIMITATIONS OF THE STUDY

The response rate in this study was adequate and acceptable for self-administered questionnaires (Bovier *et al.,* 2003). At least half of the respondents needed to be reminded to complete the questionnaire after the stipulated period. They cited a heavy workload as the reason for failing to respond in time.

This study is limited in so far as the Herzberg theory and the instruments used are concerned. This theory has yielded inconsistent results over the course of time and therefore attracted a lot of criticism. Notable among those criticisms are: occupational generality because the original sample of accountants and engineers that was used by Herzberg may not represent the general working population; method-boundness because studies that have used the same methodology as Herzberg did (content analysis of recalled incidents) tended to support the theory as opposed those who did not and tend to criticise it. This may lead to questioning its validity; failure to account for individual differences such as age; lack of clear differentiation between factors ,for instance, pay may impact satisfaction in one sample and dissatisfaction in another (Moorhead and Griffin., 1995). The theory is also criticised for the absence of a clear interpretation. For example, this theory may be interpreted in the following two ways: quote

1. *All motivators(satisfiers) combined contribute more to job satisfaction than to job dissatisfaction, and all hygiene (dissatisfiers) combined contribute more to job dissatisfaction than to job satisfaction*
2. *All motivators (satisfiers) combined contribute more to job satisfaction than do all hygienes (dissatifiers) combined, and all hygienes (didssatifiers) combined contribute more to job dissatisfaction than all motivators (satisfiers) combined* (Bailey, 1997d).

Despite these limitations, Herzberg's theory has made a significant contribution to job satisfaction over the past four decades. This theory has contributed to the development of contemporary concepts such as job enrichment, shared leadership and quality of work life that contribute to job satisfaction (Bailey, 1997e).

Furthermore, the study instrument relies on self-reporting and therefore results are limited to the extent to which physicians in the public sector perceive their feelings of job satisfaction. This study is limited to one public referral hospital in the capital city, Gaborone, thus excluding the second referral hospital in the North as well other smaller hospitals countrywide. Although the study site provides a variety of physicians it does not represent a variety of work environments that other physicians working in Botswana experience and experience in more rural areas may be very different as well. There are a considerable number of foreign physicians working at the Princess Marina hospital and their perceptions of job satisfaction is affected by the level of satisfaction in their country of origin. Since the researcher is a senior member of staff in the hospital, it is possible that there may have been some reporting bias.

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APPENDIX A: Ethical Approvals and Permissions

APPENDIX A1: Approval from the Health and Research Unit

Telephone: (267) 363200
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TELEGRAMS: RABONGAKA
TELEX: 2818 CARE BD



MINISTRY OF HEALTH
PRIVATE BAG 0038
GABORONE

REPUBLIC OF BOTSWANA

REFERENCE NO: PPME 13/18/1 PS IV (33) 22 June 2009

Health Research and Development Division

Notification of IRB Review: New application

Dr Jack J. Mkubwa
P.O. Box 258
Gaborone

Protocol Title:	**JOB SATISFACTION AMONG PUBLIC SECTOR PHYSICIANS IN BOTSWANA, VERSION 1**
HRU Protocol Number:	HRU 00534
Sponsor:	N/A
HRU Review Date:	June 18, 2009
HRU Expiration Date:	June 17, 2010
HRU Review Type:	HRU reviewed
HRU Review Determination:	Approved
Risk Determination:	Minimal risk

Dear Dr Mkubwa

Thank you for submitting a new Application for the above referenced Protocol.
This approval includes the following:

1. Application form
2. Proposal
3. Consent form
4. Data collection tool

This permit does not however give you authority to collect data from the selected site without prior approval from the management. Consent from the identified individuals should be obtained at all times.

The research should be conducted as outlined in the approved proposal. Any changes to the approved proposal must be submitted to the Health Research and Development Division in the Ministry of Health for consideration and approval.

Furthermore, you are requested to submit at least one hardcopy and an electronic copy of the report to the Health Research, Ministry of Health within 3 months of completion of the study. Approval is for academic fulfillment only. Copies should also be submitted to all other relevant authorities.

If you have any questions please do not hesitate to contact Mr. P. Khulumani at pkhulumani@gov.bw, Tel +267-3914467 or Mary Kasule at mkasule@gov.bw or marykasule@gmail.com Tel: +267-3632466

Continuing Review

In order to continue work on this study (including data analysis) beyond the expiry date, submit a Continuing Review Form for Approval at least three (3) months prior to the protocol's expiration date. The Continuing Review Form can be obtained from the Health Research Division Office (HRDD), Office No. 9A 11 or Ministry of Health website: www.moh.gov.bw or can be requested via e-mail from Mr. Kgomotso Motlhanka, e-mail address: kmotlhanka@gov.bw As a courtesy, the HRDD will send you a reminder email about eight (8) weeks before the lapse date, but failure to receive it does not affect your responsibility to submit a timely Continuing Report form

Amendments

During the approval period, if you propose any change to the protocol such as its funding source, recruiting materials, or consent documents, you must seek HRDC approval before implementing it. Please summarize the proposed change and the rationale for it in the amendment form available from the Health Research Division Office (HRDD), Office No. 9A 11 or Ministry of Health website: www.moh.gov.bw or can be requested via e- mail from Mr. Kgomotso Motlhanka, e-mail address: kmotlhanka@gov.bw . In addition submit three copies of an updated version of your original protocol application showing all proposed changes in bold or "track changes".

Reporting

Other events which must be reported promptly in writing to the HRDC include:

- Suspension or termination of the protocol by you or the grantor
- Unexpected problems involving risk to subjects or others
- Adverse events, including unanticipated or anticipated but severe physical harm to subjects.

Do not hesitate to contact us if you have any questions. Thank you for your cooperation and your commitment to the protection of human subjects in research.

Yours sincerely

P. Khulumani
For Permanent Secretary

PERMANENT SECRETARY
MINISTRY OF HEALTH
RESEARCH UNIT
22 JUN 2009
P/BAG 0038
GABORONE
REPUBLIC OF BOTSWANA

APPENDIX A2: Approvals from the University

CANDIDATE'S SURNAME: **Mkubwa** [Please print]	FIRST NAME/S: **Jack**	STUDENT NUMBER: **0515671H**
CURRENT QUALIFICATIONS: **M.B.Ch.B, MMed (Nrb)**		
TEL: **+267 3909391** CELL: **+267-71-55-9235**	E-MAIL: **mkubwajoseph@yahoo.com**	FAX: **+267 3973776**
DEGREE FOR WHICH PROTOCOL IS BEING SUBMITTED: **MPH**		
PART-TIME OR FULL-TIME: P/T		
FIRST REGISTERED FOR THIS DEGREE: **2007**	TERM : **Second**	YEAR: **Second**
DEPARTMENT: **Witwatersrand School of Public Health**		
TITLE OF PROPOSED RESEARCH: **Job satisfaction among public sector physicians in Botswana.**		
CANDIDATE'S SIGNATURE:		DATE: **12/01/2009**
SUPERVISOR'S NAME: **Dr. Julia Moorman**,		
SUPERVISOR'S QUALIFICATIONS: **PhD**		
SUPERVISOR'S ADDRESS / TEL / E-MAIL: **Julia.Moorman@wits.ac.za**		
SUPERVISOR'S DEPARTMENT: **School of Public Health**		
SYNOPSIS OF RESEARCH: **See next page**		
ETHICS PENDING: **Yes (applied)** ETHICS APPROVED: (circle appropriate symbol)	IF Y SUPPLY ETHICS CLEARANCE No:	

SIGNATURE OF SUPERVISOR/S:	.....	....
SIGNATURE PG OFFICE STAFF	REGISTERED YES..... NO.....	STAMP

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Division of the Deputy Registrar (Research)

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)
R14/49 Dr Jack J Mkubwa

CLEARANCE CERTIFICATE	M090573
PROJECT	Job Satisfaction among Public Sector Physicians in Botswana
INVESTIGATORS	Dr Jack J Mkubwa.
DEPARTMENT	School of Public Health
DATE CONSIDERED	
DECISION OF THE COMMITTEE*	Approved unconditionally

Unless otherwise specified this ethical clearance is valid for 5 years and may be renewed upon application.

DATE 09.05.11 **CHAIRPERSON** .....
(Professor P E Cleaton Jones)

*Guidelines for written 'informed consent' attached where applicable

cc: Supervisor : Dr J Moorman

DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and **ONE COPY** returned to the Secretary at Room 10004, 10th Floor, Senate House, University.
I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee. **I agree to a completion of a yearly progress report.**

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES...

APPENDIX A3: Approval from the Princess Marina Hospital

Princess Marina Hospital
P.O. Box 258
Gaborone Botswana

REPUBLIC OF BOTSWANA

Tel: 3621400
Fax: 3973776
Email: ygureja@gov.bw (chairman)
Boisa2002@yahoo.com(secretary)

PRINCESS MARINA HOSPITAL INSTITUTIONAL REVIEW BOARD

Our Ref: PMH2/09-030

Date: 08 July 2009

Dr Jack Mkubwa
University of Witswatersrand
Republic of South Africa

Dear Dr Mkubwa

Re: Job satisfaction among Public Sector Physicians in Botswana

The Ethics Committee reviewed your submitted research proposal, and following expedited review, they have granted approval to conduct the above mentioned study in Princess Marina Hospital.

This approval is valid for a period of 12 months from the date of this letter, and is on condition that, the researcher:

- Resubmit for approval should any changes be made to the protocol.
- Provide both a hard and an electronic copy of the report and results when the study is completed.

The Committee would like to communicate its support in this very important endeavour. Your continued communication and update is greatly appreciated.

Yours sincerely,

Boitumelo Mokgatla-Moipolai
Secretary
Contacts: 362 1778/1509 (office)
Email: Boisa2002@yahoo.com

APPENDIX A4: Letter of Permission Request

Ethical Committee,
Princess Marina Hospital,
P.O.Box 258,
Gaborone, Botswana. 12th June 2008

Dear Sir/Madam,

Dr. Jack Mkubwa, as part of the requirement for completion of the degree of Master of Public health of the University of the Witwatersrand in South Africa, intends to conduct a qualitative study on Job satisfaction among physicians. Princess Marina hospital has been selected for this study. This hospital was chosen because it has the highest number of physicians with diverse specialization at all levels.

The purpose of this study is to explore factors underlying job satisfaction among physicians. No similar study has been conducted in the past. Furthermore the findings of this study will provide invaluable information for use in decisions on planning and deployment of human resources.

A self-administered questionnaire will be used to gather data which will be subsequently analysed. Consent will be obtained from each respondent and a confidentiality agreement will be signed between the researcher and the respondent as well.

There will be feedback to both the hospital management and the respondents following the conclusion of the study.

The purpose of this letter is to request permission to conduct the study in this hospital.

Thanking you in anticipation,

Sincerely,

Dr. J. J. Mkubwa.
Researcher.

APPENDIX A5: Invitation to participate in the study

INVITATION TO PARTICIPATE IN THE STUDY

Date

Dear Colleague,

I am writing to invite you to participate in a research project that forms part of my thesis for the completion of the Masters programme in Public Health at the University of the Witwatersrand, South Africa. The topic of the study is "A qualitative study on job satisfaction among physicians in the public health sector in Botswana." The outcome of this study will add to the body of knowledge that has been accumulated so far in this area. However, this is also a ground breaking study among physicians in this country as no similar study had been done previously.

The letter is being circulated to approximately one hundred and twenty physicians at the Princess Marina Hospital at all levels. If you indicate willingness to participate, questions will be hand delivered to you. You will be expected to fill questions in the presence of the researcher and this will, take approximately thirty minutes.

If you are interested in participating in this study you will be requested to fill in the consent form which is attached. On the day that you will fill in the questionnaire you will also sign a confidentiality form. Your name will not be mentioned in the report.

Thanking you in anticipation'

Sincerely,

Code

Jack J. Mkubwa.

Ref. Cheryl D. Krossa.

APPENDIX A6: Confidentiality Agreement

CONFIDENTIALITY AGREEMENT

This is to the effect that

All information obtained during the course of this study, including personal data and research data will be kept strictly confidential. Data that may be reported in scientific journals will not include any information that identifies you as a participant.
This information will be reviewed by the University of the Witwatersrand, Research Ethics Committee.

Researcher Respondent

APPENDIX A7: Consent to Participate In Research

CONSENT TO PARTICIPATE IN RESEARCH

A. Purpose and Background: Dr. Jack Mkubwa as part of the requirement for completion of the degree of Master of Public health of the University of the Witwatersrand in South Africa is conducting a qualitative study on Job satisfaction among physicians in the public sector which I am being asked to participate in.

B. Procedures:

If I agree to participate in the study, the following will occur,

1. I will be asked to respond to fill in a questionnaire in the presence of the researcher.
2. This will take place at a time and location which will be agreed upon by both parties.
3. The questionnaire will take approximately thirty minutes to fill in.

C. Risks and discomforts:

To maintain a high level of confidentiality each respondent will be given a code. Furthermore another form will be signed by the respondent to guarantee his or her confidentiality throughout the process.

D. Benefits: There will be no direct benefit to the respondent emanating from participation in the study.

E. Alternatives: The respondent is free to choose not to participate in the study.

F. Costs: The respondent will incur no costs by participation in the study.

G. Reimbursement: The respondent will receive no monetary compensation for taking part in this study.

H. Questions: The respondent will contact the researcher in case of any questions on 71-55-92-35 or 362-1678

I. Consent: The respondent will be given a copy of this consent to keep.

PARTICIPATION IN RESEARCH IS VOLUNTARY, the respondent is free to withdraw at any point in time.

APPENDIX B: Questionnaires

APPENDIX B1: Questionnaire Part 1

BACKGROUND INFORMATION

District		
1. Today's date		
2. Age		years
3. Sex	Female	Male
4. Current Position	Specialist	General Practitioner

5. How long have you been working in the public sector?

Number of years if greater than one year? _____ years

6. What are your terms of employment?	contract	local
7. Immigration status	citizen	non-citizen

QUESTIONNAIRE1: SATISFACTION AND DISSATISFACTION SCALE

Please mark either the satisfaction scale value or the dissatisfaction scale value that best describes how you feel about each of these aspects of your work life. Only one cell per row should be selected.

SATISFACTION: Contentment, enjoyment, fulfillment, happiness				DISSATISFACTION: Disappointment, discontentment, displeasure			
1 Slightly Satisfied	2 Somewhat Satisfied	3 Moderately Satisfied	4 Highly Satisfied	1 Slightly Dissatisfied	2 Somewhat Dissatisfied	3 Moderately Dissatisfied	4 Highly Satisfied

	SATISFACTION					DISSATISFACTION			
1. Achievement: Successful or unsuccessful completion of a medical procedure or solution or non-solution of professional issues	1	2	3	4		1	2	3	4
2. Promotion: Change in status within the hospital as a result of performance.									
3. Professional Development: increase or decrease in chances to learn, attend seminars or other work-related events									
4. Inter-personal Relations with colleagues: pleasant or un pleasant interaction with professional colleagues inn the Hospital									
5. Interpersonal Relations with Supervisors: pleasant or unpleasant interaction with persons at a higher level in the hospital which may or may not be relevant to professional tasks.									
6. Job Security: clear indications of the likelihood or unlikelihood of continuous employment such as permanent contracts, or assurances of continued employment									
7. Hospital Administration: clarity of communication, adequacy of resources, personnel policies and fringe benefits.									
8. Recognition: Personal acknowledgement by the supervisor in the form of a praise or certificate of achievement for reward that is job-related. Hospital management could act similarly.									
9. Salary: pay scale, review of salary and reimbursements if any.									
10. Job Variety: nature of professional work per se; whether routine or varied; interesting or dull.									
11. Working conditions: the workload, medical equipment and drug supplies.									

APPENDIX B2: Questionnaire part 2

INSTRUCTIONS

This questionnaire is for a study on hospital services at this Hospital. We are doing this research to try and help improve performance. We are not carrying out an inspection, but trying to learn what is really happening in this facility. This facility was not selected for any reason. Your participation in this study is therefore entirely voluntary. If you choose not to participate there will be no negative consequences for you in any way. At the same time, participating in this study will not give you any advantages.

We would like you to fill in this questionnaire as completely and honestly as possible. Your answers are completely confidential and you should not write down your name on this questionnaire. We will ask you to sign a consent form to show that you have agreed to participate in the study, but the consent form will be kept separately from this questionnaire. Your name and the name of this Hospital will not be used in the report. The questionnaire should take you about THIRTY minutes to complete.

BACKGROUND INFORMATION

1.Today's date

2. Age ____ years

3. Sex | Female | Male |

4.Current Position | Specialist | General Practitioner |

5. How long have you been working in the public sector?

Number of years if greater than one year? ____ years

6. What are your terms of employment? | contract | local |

7.Immigration status | citizen | Non-citizen |

8. Please indicate how strongly you agree or disagree with the following statements by ticking the appropriate box. Please read the statements carefully and answer the questions as honestly as possible. Tick one option only.

	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
a) I am confident about my ability to do my job					
b) I feel very little commitment to this hospital					
c) The major satisfaction in my life comes from my work					
d) I can see myself working overseas in the future					
e) I feel that I am not in control of things which affect my work					
f) I feel that I don't care for patients like I used to					
g) My work is always of high quality					
h) I intend to leave this hospital in the next one year					
i) Overall, I am very satisfied with my job					
j) In this hospital, it is always possible to treat patients with respect					
k) I cope well with change					
l) These days, I don't feel motivated to work as hard as I could					
m) I am proud to tell others that I am a doctor					
n) I feel emotionally drained at the end of every day					
o) I try to work hard because of my religious beliefs					
p) I would prefer not to work in the public sector					
q) At work I can generally achieve whatever I set out to achieve					
r) I am proud to be working for this hospital					
s) I do things that need doing without being asked or told					
t) I find that my values and this hospital's values are very similar					
u) When I get up in the morning I dread having to face another day at work					
v) Doing my job well makes me feel worthwhile					
w) I wish that I had chosen a different profession					
x) There have been too many changes in this hospital in the past few years					

9. In total, how many hours did you spend on learning activities last month? | | hours

Include the time spent :

- *Attending training courses*
- *Attending in-service training*
- *Participating in hospital case teaching*
- *Your own self-study*

10. Is there always somebody available for you to consult about patient management, either in person or by telephone?

No	Yes

11. Please indicate how strongly you agree or disagree with the following statements by ticking the appropriate box. Please read the statements carefully and answer the questions as honestly as possible. Tick one option only.

	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
a) My job gives me a feeling of achievement and accomplishment					
b) Hospital management really cares about my well-being					
c) The stress of working in this hospitals has made me think about transferring					
d) I am able to say what I really think about how things are going at the hospital when talking to hospital management					
e) My colleagues are jealous of my expertise and not willing to learn from me					
f) My job offers adequate pay compared with similar jobs					
g) There are enough doctors to do the work in this hospital					
h) In this hospital, decisions about who goes on training courses are made fairly					
i) My job duties, requirements, and goals are clear and specific					
j) In this hospital, everyone works together to get the work done					
k) We are well informed about policy changes affecting our work					
l) The support of my supervisor is essential in getting my work done					
m) With this job I have to worry about how to support myself and my family					
n) Hospital management communicates well with doctors in this hospital					
o) I am able to talk to my supervisor about a personal problem affecting my work					
p) In this hospital, decisions about performance and promotion are made fairly					
q) There are sufficient opportunities for promotion in my job					
r) The Ministry of Health does not adequately consider the effect of its decisions on staff when developing new policies					
s) I am worried about being assaulted by patients or their relatives at work					
t) The amount of work I have to do is too demanding					
u) I do not get adequate support and supervision from my supervisor					
v) The risk of HIV has made me think about leaving my job					
w) Suggestions made by doctors on how to improve their work are usually ignored by hospital management					
x) I like the responsibility that my work gives me					

APPENDIX C: Questions used according to the conceptual framework

Area		Domain	Questions
Motivational outcomes	Worker effect &cognition	Motivation	These days I do not feel motivated to work as hard as I could
		Job satisfaction	Overall I am very satisfied with my job
		Organizational commitment	I feel very little commitment to this hospital
			I am proud to be working for this hospital
		Intention to leave	I can see myself working overseas in the future
			I would prefer not to work in the public sector
			I intent to leave this hospital in the next one year
		Attitudes to patients	In this hospital, it is possible treat patients with respect
			I feel that I do not care for patients like I used to
		Burnout	I feel emotionally drained at the end of every day
			When I get up in the morning, I dread having to face another day at work
Motivational Determinants	Individual Characteristics	Work Ethic/Job involvement	The major satisfaction in my life comes from my work
			Doing my job well makes me feel worthwhile
			I work hard because of my religious beliefs
		Self efficacy/locus of control	I feel that I am not in control of things which affect my work.
			I am confident about my ability to do my job
		Vocation/job choice	I am proud to tell others that I am a doctor
			I wish that I had chosen a different profession.
		Attitude to change	I cope well with change
			There have been too many changes in this hospital in the past few years
	Perceived contextual factors	workload	There are enough doctors to do the work in this unit
			The amount of work I have to do is too demanding
		Extrinsic job characteristics	With this job I have to worry about how to support myself and my family
			There are sufficient opportunities for promotion in my facility
			My job offers adequate pay compared with similar jobs
		Organizational citizenship	My co-workers are jealous of my expertise and not willing to learn from me
			The doctors and nurses work together well in this unit
			If there is an emergency I can rely on my colleagues in this hospital
		Supervision and support	I do not get adequate support and supervision from my supervisor
			I am able to talk to my supervisor about a personal problem affecting my work
		Management support	I like how this hospital/clinic treats its employees
			Hospital management communicates well with nurses in this hospital
			Suggestions made by doctors on how to improve their work are usually ignored by hospital management
		Stress/work hazards	I am worried about being assaulted by patients or their relatives at work

		HIV/AIDS hazards	The risk of HIV has made me think about leaving my job
		Policy environment	The MOH does not adequately consider the effect of its decisions on staff when developing new policies
			We are well informed about policy changes affecting our work