Assessment of job satisfaction amongst physicians working in Public hospitals in Addis Ababa, Ethiopia

Tesfaye Gudeta Cheru

Student No: 3073931

A mini-thesis report submitted to the School of Public Health, University of the Western Cape in partial fulfilment of the degree of Master of Public Health (MPH)

UNIVERSITY of the
WESTERN CAPE

Supervisor

Dr. Gavin Reagon

Co-supervisor

Prof. Damen Haile Mariam

February 2014

Key words: Job satisfaction, physicians, job satisfaction factors, job-related factors, work environment conditions, job happiness, physician retention, physician attrition, professional satisfaction, motivating factors

https://etd.uwc.ac.za/

Contents

Abbreviations vi

Abstract 7

I. Introduction 10

Problem statement 13

Purpose of study 15

II. Literature review 15

A. Overview of job satisfaction 15

B. Ways of measuring job satisfaction 16

C. Determinants of job satisfaction 17

D. Job satisfaction levels of health workers 21

E. Job satisfaction level and factors affecting it among physicians 22

F. Consequences of job satisfaction among physicians 23

III. Aim and objectives 26

IV. Methodology 26

Study design 26

Study population 26

Sample 27

Data collection methods 27

Analysis 29

Reliability 30

Validity 31

Generalizability 32

Piloting 32

Ethical considerations 32

UNIVERSITY of the
WESTERN CAPE

https://etd.uwc.ac.za/

V. Results 34
Response rate 34
Univariate analysis 34
Socio-demographic profile and other factors 35
Composite measurement of job satisfaction in dimensions 45
Consequences of job satisfaction 48
Bivariate analysis 50
Multivariate analysis 54
VI. Discussion 57
A. Level of job satisfaction 57
B. Autonomy of practice and cooperation with colleagues 58
C. Age 58
D. Gender 60
E. Plans to emigrate 60
F. Years served in public sector and current hospital 61
G. Thoughts about resigning 61
H. Pay and benefits 62
I. Availability of drugs, equipment and supplies 63
J. Concern for quality of care 63
K. Work and job stress 64
L. Factors not associated with low job satisfaction 65
M. Overall measure of job satisfaction and job satisfaction within dimensions 65
VII. Limitations 68
VIII. Conclusions 69
IX. Recommendations 70
X. References 72

UNIVERSITY of the
WESTERN CAPE

https://etd.uwc.ac.za/

XI. Annexures 83
Information sheet 83
Consent form 85
Questionnaire 86
I. Socio-demographic profile 86
II. Rating level of satisfaction 87
III. Consequences 92
Operational Definitions 98

UNIVERSITY of the
WESTERN CAPE

https://etd.uwc.ac.za/

List of Tables

Page

Table 1: physician's socio-demographic profile, current professional status and future career plans in Addis Ababa public hospitals 36

Table 2: physician's age and year of service..... 37

Table 3: Categorization of individual variable of job satisfaction and correlation with variable "All in all, I am satisfied with my job" and composite job satisfaction score 40

Table 4: Physicians job satisfaction level and correlation between each dimension of job satisfaction with variable "All in all, I am satisfied with my job" and "composite job satisfaction score" 47

Table 5: Importance of key variables to physicians' job satisfaction 48

Table 6: Consequences of job satisfaction levels of the physicians 49

Table 7: socio-demographics, current professional status and future career plans of physicians 52

Table 8: consequence of job satisfaction of physicians 54

Table 9: Multiple logistic regression analysis of potential causes of job satisfaction 55

Table 10: Multiple logistic regression analysis of the potential consequences of low job satisfaction 56

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

List of Figures

Page

Figure 1: Age of physicians working in public health facilities..... 40

UNIVERSITY of the
WESTERN CAPE

https://etd.uwc.ac.za/

Abbreviations

AHJS	Adequate to high job satisfaction
AACP	American Association of Community Psychiatrists
CI	Confidence Interval
Ds	Dissatisfied
FMOH	Federal Ministry of Health
GPs	General practitioners
GTP	Growth and Transformation Plan
HIV/AIDS	Human immunodeficiency virus/Acquired Immune deficiency syndrome
HSDP	Health Sector Development Programme
JDI	Job Descriptive Index
JDS	Job Diagnostic Survey
LJS	Low job satisfaction
MDG	Millennium Development Goals
MSQ	Minnesota Satisfaction Questionnaire
N	Number in sample
p-value	Probability value
S	Satisfied
SPSS	Statistical Package for Social Sciences
Std. Dev	Standard deviation
USD	United States Dollar
VDS	Very dissatisfied
VS	Very satisfied
WHO	World Health Organization

UNIVERSITY of the
WESTERN CAPE

https://etd.uwc.ac.za/

Abstract

Introduction

The Human Resource Strategic Plan of the Ethiopian Ministry of Health lists current health workforce problems as a high attrition rate among public service physicians, poor human resource management, non-conducive working conditions and high workloads. In Addis Ababa's public hospitals, the turnover of physicians is high and – as repeatedly and informally reported by hospital managers – the presence of the contributory factors listed above are also anecdotally thought to be present. These factors present a serious challenge to the delivery of high quality health care services and their presence indicates that the job satisfaction of physicians is likely to be low.

However, factors responsible for job dissatisfaction among physicians and their implications for staff turnover have not been studied or documented in the context of Ethiopia's health system. It was this scenario that motivated the researcher to conduct this study in order to assist policy makers in taking appropriate actions, if and as required.

Aim:

The aim of the study was to assess the level of job satisfaction, the factors influencing job satisfaction and the consequences of job satisfaction among physicians in public hospitals in Addis Ababa, Ethiopia.

Objectives:

- To describe the job satisfaction levels of physicians in public hospitals in Addis Ababa, Ethiopia
- To identify factors affecting the job satisfaction levels of physicians
- To assess possible consequences linked to physicians' job satisfaction levels.

Study design:

A quantitative cross-sectional analytical study design was used.

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

Study population/sample size:

326 physicians, who had completed their internship and had been working full time in Addis Ababa public hospitals for at least one year, were included in the study population.

Data collection:

A self-administered questionnaire was used to measure job satisfaction, composed of 65 individual variables grouped within 13 dimensions and adapted to the Ethiopian context from the Job Descriptive Index and the Minnesota Satisfaction Questionnaire. An additional questionnaire was used to assess socio-demographic variables and the possible consequences of low job satisfaction.

Analysis:

A composite job satisfaction score was obtained by summing the individual answers for each of the variables to assess overall job satisfaction. Bivariate analysis was undertaken, using 2X2 tables (with 95% confidence intervals) to calculate the prevalence ratio for each of the potential causes and consequences of low job satisfaction, using the composite score cut-off levels of job satisfaction. Multivariate analysis was undertaken to obtain the adjusted prevalence odds ratios for both the potential causes and consequences of low job satisfaction, using multiple logistic regression analysis.

UNIVERSITY of the
WESTERN CAPE

Results:

Overall, 65% of physicians have low job satisfaction. However, most of the physicians are satisfied with their authority to accomplish tasks, with the level of cooperation among members of their work group, with job security and report other staff as being friendly and helpful. Greater than 85% are dissatisfied with their pay and benefits, with the perceived fairness of job promotion, with the orientation provided to new staff, with the risk of injury and with the availability of drugs, supplies and equipment.

https://etd.uwc.ac.za/

All individual variables were correlated with the overall measurement of job satisfaction. Fairness of job promotion, availability of drugs, supplies and medical equipment, orientation for new employees and risks of injury or illness were found to have high correlation – while pay, benefits, and the differences in payment between new and experienced staff as well as between public and private sectors had low correlation with the overall measurement of job satisfaction. Notably, moderate-to-strong correlation was observed in hospital policy and its implementation, productivity, concern for patient care and supervisory dimensions.

Age and plans to emigrate were found to be independent predictors of low job satisfaction. "Thoughts about resigning" and quality of care" were independently associated with and were probably the consequences of low job satisfaction.

Conclusions:

This study showed low levels of physician job satisfaction in Addis Ababa's public hospitals. All variables were correlated with the composite job satisfaction of physicians and it was found that youthfulness, plans to emigrate, thoughts about resigning and quality of care were factors independently associated with low job satisfaction.

Recommendations:

Based on the study results, the low level of physicians' job satisfaction might be improved by addressing the expectations of young physicians, devising strategies to improve the fairness of job promotion, improving orientation for new employees, ensuring the continuous availability of drugs, equipment and supplies, and establishing a system to decrease workplace risk of injury and illness. Whether these recommendations are increasing job satisfaction could be monitored by periodically performing rapid assessments of job satisfaction, using only the four dimensions that were highly correlated with job satisfaction.

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

I. Introduction

Because health service provision is labour intensive, human resources are the foundation of a health system and its most important asset. For health institutions to function effectively and efficiently, human resources must be integrated well with financial and material resources. Therefore, the development, retention and improvement of the health care work force in the Ethiopian Ministry of Health and the introduction of modern organizational and regulatory arrangements are mandatory if the stated mission of delivering adequate health services to every corner of the country is to be achieved. A shortage of human resources can cripple a health system and the provision of health care services, particularly in countries with limited resources (Africa Health Workforce Observatory, 2010).

The Ethiopian Ministry of Health re-engineered its health system in 2009 in an attempt to address the inefficient and ineffective health service delivery prevailing before then. The prioritization of human resource development is one of the reforms instituted. The guiding principles identified in the reform strategy are recruiting, retention and continuous professional development with the aim of providing quality health services in prioritized thematic areas (FMOH, 2009). It focuses on preventive and basic curative services, which are intended to attain the Millennium Development Goals (MDGs). These are to improve maternal and child health, to prevent and control malaria, tuberculosis and HIV/AIDS, and to improve environmental and sanitation conditions (Finance and Economy Development Ministry, Federal Democratic Republic of Ethiopia, June 2010).

UNIVERSITY of the WESTERN CAPE

Like the national health system, Addis Ababa's health system is organized into three tiers. The first tier is primary care, which includes health posts, health centres and primary care hospitals that are expected to provide preventive and basic curative services to populations of five thousand, 40 thousand and 100 thousand respectively. In addition to the services available at a health centre, a primary care hospital provides emergency surgical services, including caesarean sections, as well as access to blood transfusion services. It also serves as a referral hub for health centres in its catchment area. A primary care hospital has an in-patient capacity of 35 beds and an average staff of 53, of whom two are general physicians.

https://etd.uwc.ac.za/

The secondary care level is comprised of general hospitals, each of which caters for one million people. Serving as a referral centre for primary care hospitals, it is staffed with an average of 234 professionals of whom approximately 51 are physicians and specialists. The tertiary care level is comprised of specialized hospitals for five million people with an average of 440 professionals of whom approximately 129 are physicians and specialists (FMOH, 2010).

Physicians are primarily involved in clinical management services for both communicable and non-communicable diseases. They are also responsible for leading case teams and various committees established to facilitate service provision such as infection prevention and therapeutic care. In addition, they supervise hospital activities, lead quality improvement activities and coordinate other health professionals (FMOH, 2010).

Nationally, there are 1151 general practitioners (GPs) (82.4% of whom are male, and 17.6% female) and 1001 specialists (82.2% of whom are male, and 17.8% female) serving 82 public and 40 private hospitals. Of the total, 396 GPs and 538 specialists work in the capital city, Addis Ababa. The majority (94%) of the total health workforce (including all categories of health workers such as nurses, physicians, therapists and pharmacists) are found in the public sector. However, high-level health professionals such as physicians and specialists in particular are mainly concentrated at private health facilities. In Addis Ababa, around 60% of the physicians work in the private health sector (Africa Health Workforce Observatory, 2010).

UNIVERSITY of the
WESTERN CAPE

At national level, the health worker to population ratio is 0.84 health worker per 1000 people, although disparities exist in different parts of the country, ranging from the lowest (0.49) in the Somali region to the highest (2.8) in the Harari region. Most areas have a ratio below the WHO standard of 2.3 per 1000 population (Africa Health Workforce Observatory, 2010). Health workforce densities of approximately 0.027, 0.018 and 0.26 per 1000 people exist for physicians, midwives and nurses respectively (Africa Health Workforce Observatory, 2010).

https://etd.uwc.ac.za/

The Ethiopian Ministry of Health Human Resource Strategic Plan listed current health workforce problems as: 1) a high attrition rate of physicians from public services, due to massive out-migration and active recruitment from outside the public sector; 2) poor human resource management at all levels incapable of addressing the concerns of the health workforce in terms of proper motivation and incentives (the performance evaluation system for human resources is also not systematic and lacks proper mechanisms for rewarding best performers); 3) non-conducive working conditions with unfriendly, poor quality supervision, low levels of staff cooperation and lack of career advancement; 4) high workloads with 51% of physicians leaving the public sector stating that they have insufficient time to carry out all their duties; and 5) low opportunities for continuing education and further training, in the absence of a structured career development and professional advancement system. Inadequate and fragmented communication at all levels is also identified as a critical problem (FMOH, 2009). In 2002, approximately 30% of doctors left the country and 72% of medical students indicated their intention to emigrate (McCoy, D. et al, 2008). The Ethiopian salary bill for health care professionals shows that a newly graduated general practitioner earns a gross salary of 200 USD per month, which is extremely low compared to other developing countries (Ministry of Civil Service, 2011).

Attempts are being made to recruit clinical nurses and provide one year midwifery training. During 2010/11, one thousand clinical nurses enrolled for midwifery training in 15 training centres (FMOH, 2009) and it is expected that, in 2012/13, these registered midwifery nurses will join the public health system. In the case of physicians and specialists, annual training enrolment has increased to 2000 per year. However, it will take a long time to produce a sufficient number of physicians and specialists to fully staff the public health system – and the problem of attrition among these professionals remains high. However, with the aim of improving the success rate of recruiting and retaining physicians and specialists, attention is now being paid to understanding the root causes of job satisfaction and dissatisfaction at this level.

The density of physicians is high in Addis Ababa's public hospitals when compared to regions of a similar size (Federal Ministry of Health, 2009). This may be partially due to the fact that

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

physicians prefer to be transferred to Addis Ababa's public hospitals in order to complete their five-year public health service commitments, as opposed to releasing themselves from their contractual obligations – which can cost as much as 40 thousand USD per person. While there is no documented evidence to explain why, anecdotal evidence points to large numbers of physicians leaving public hospitals to work at private facilities, causing a high turnover of among physicians serving in the capital's public hospitals with concomitant fluctuations in their densities.

As already indicated, problems such as heavy work load, high attrition rates, low staff-to-population ratios, low salaries, poor human resource management, a lack of training opportunities, and discouraging career advancement prospects and promotion opportunities might lead to low job satisfaction. An in-depth understanding of job satisfaction or dissatisfaction among physicians in particular – and the implications of this for career development opportunities – is therefore necessary if gaps in job satisfaction are to be identified and interventions designed to address them successfully.

Low levels of job satisfaction can lead to increased job mobility and more frequent absenteeism, which may reduce the efficiency of health care services (Faragher et al, 2005). This is supported by Luthans (2001), who discussed how the level of employee turnover rates, absenteeism and grievances lodged can be used to determine whether job satisfaction or job dissatisfaction exists within an organization. An understanding of employee job satisfaction and its contributing variables is therefore important if any organization is to be sustained and prosper (Mrayyan, 2005).

UNIVERSITY of the
WESTERN CAPE

Problem statement

Internationally minimum recommended level of physicians is 1 physician per 10,000 populations but current physician to population ratio for Ethiopia is 1 physician to 42,706 populations (Federal Ministry of Health, 2009). As a result, currently Ethiopian health system is suffering from an acute shortage of health workers, especially physicians (FMOH, 2009). Particularly in

https://etd.uwc.ac.za/

Addis Ababa's public hospitals, the turnover of physicians is high – as repeatedly and informally reported by hospital managers. This turnover of physicians is a serious challenge to the delivery of high quality health care services in keeping with WHO recommended standards and is worsened by the fact that physicians are required to attend to both communicable and non-communicable diseases. As indicated in the introduction to this study, high turnover may be caused by low job satisfaction, low pay and benefits, inadequate communication at all levels, lack of opportunities for career advancement, inefficient hospital policies, poor policy implementation and an unattractive working environment.

The study also considers dissatisfaction with a particular job assignment, unhappiness with promotion processes, unfriendly and poor-quality supervision, inadequate performance indicators, poor cooperation among staff, and a heavy work load as factors with the potential to affect physicians' job satisfaction – in turn impacting upon a physician's inclination to continue working in a public hospital. The high concentration of physicians at private health facilities as compared with a shortage of these professionals in state hospitals tends to point to low job satisfaction levels among these professionals within the public sector (Africa Health Workforce Observatory, 2010).

UNIVERSITY of the
WESTERN CAPE

To date, one study was conducted on attitudes of undergraduate medical students of Addis Ababa University towards medical practice and migration in Ethiopia (Deressa and Azazh, 2012). Other study was also conducted on job satisfaction and its determinants among health workers in Jimma University Specialized Hospital, Southwest Ethiopia (Yami, et. Al., 2011). Thus these studies are different from current study population in terms of focus and population as current study focused at job satisfaction amongst physicians who were on their duties at public hospitals in Addis Ababa, Ethiopia. This motivated the researcher to undertake this study in order to assist policy makers in taking appropriate action. The study is designed to assess the factors contributing to job satisfaction and the level of job satisfaction among physicians working in Addis Ababa's public hospitals.

https://etd.uwc.ac.za/

Purpose of study

This study was designed to produce information on the implications of job satisfaction that could be used to improve the management of physicians. Recommendations emerging from the study could also be used in preparing policies for human resources development in the public health sector. In turn, they could help to identify gaps in available information on job satisfaction with the aim of addressing high attrition levels and enabling the Ministry to retain highly skilled professionals.

II. Literature review

A. Overview of job satisfaction

Satisfaction is defined as "the good feeling that one has when s/he has achieved something or when what s/he wanted to happen does happen" (Oxford Advanced Learner's Dictionary, 2001) and "the complete fulfilment of a need or want; or attainment of a desired end" (Merriam Webster Inc., 1961). Ivanchvich, (1998) refers to satisfactions an evaluative term that describes an attitude of liking and disliking.

The term job satisfaction is more difficult to define because it is perceived as an intangible, unseen, unobserved variable and a complex assemblage of cognitions (beliefs or knowledge), emotional feelings (sentiments or evaluations) and related behavioural tendencies (Hammer and Organ, 1978). Various academicians and researchers have nevertheless attempted to define the term. According to Dubrine (1981), job satisfactions a positive emotional state that occurs when a job seems to fulfil important job values, provided that these values are compatible with one's needs (Dubrine, 1981). In the view of Smith (1969), "job satisfaction is the persistent feeling towards discriminable aspects of the job situation". Others have defined job satisfaction in related terms. While, according to Wiener (1982) job satisfaction is an attitude towards work-related conditions, facets, or aspects of the job, Feinstein (2000) believes it to be more of a response to a specific job or various aspects of the job. McCloskey and McCain (1987) describe it as the degree to which employees enjoy their jobs, while according to Spector (1997) job satisfaction is the degree to which people like their jobs.

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

Essentially, job satisfaction is an attitude that employees have about their work and is based on numerous factors, both intrinsic and extrinsic to the individual. It is important from the perspective of maintaining and retaining employees appropriate to an organization, fitting the right person to the right job in the right culture and keeping them satisfied (Ross, 2001; Crow, 1995). More simply defined, job satisfaction is the affective orientation of an employee towards his or her work (Price, 2001). In the view of Kam (1998), it is an affective reaction to a job resulting from the comparison of perceived outcomes with those that are desired, while Chen defines job satisfaction as a term describing the feelings, attitudes or preferences of individuals regarding work. In summary, therefore, job satisfaction is an individual's emotional reaction to and attitude towards the job itself.

B. Ways of measuring job satisfaction

In disciplines such as psychology, sociology, economics and management sciences, job satisfaction is a frequently studied subject in work and organizational literature. This is mainly because of a widely held view among experts on the subject that job satisfaction trends can affect labour market behaviour and influence work productivity, work effort, employee absenteeism and staff turnover. It is also an important aspect of everyday life.

According to Williams (2003) reliable and valid internationally recognised measures of job satisfaction include: the Job Satisfaction Survey (JSS) (Spector, 1997), the Job Descriptive Index (JDI) (Smith, Kendall and Hulin, 1969), the Minnesota Satisfaction Questionnaire (MSQ) (Weiss and Dawis, 1967).And the Job Diagnostic Survey (JDS) (Hackman and Olham, 1975).

Literature shows the JDI to be the most widely used instrument for measuring employees' job satisfaction within organizations based on five aspects of work: pay, promotions, supervision, interaction with co-workers and the work itself (Kreitner and Kinicki, 1995; Spector, 2000). It has also been widely used in job satisfaction research. Worrell (2004) noted in his PhD dissertation that more than 12 thousand research studies are currently archived by the JDI

UNIVERSITY of the WESTERN CAPE
https://etd.uwc.ac.za/

Research Group, while the reliability of the JDI has been assessed in various studies and fulfilled the commonly accepted alpha coefficient criteria of 0.7 and higher (Futrell, 1979; Nagy, 2002). Regarding its validity, Luddy (2005) found that JDI tools were used in over 400 studies, most of which confirmed its validity with high levels of discriminate, convergent and construct validity being reported.

The MSQ has been used since 1957, when a work adjustment project was conducted with the aim of developing diagnostic tools for assessing the potential of applicants for vocational rehabilitation, as well as for evaluating work adjustment outcomes (University of Minnesota, 1977). Found to have adequate internal consistency reliability and construct validity (Worrell, 2004), it is also used to assess employee satisfaction with several different aspects of the work environment and is available in three formats containing between 100 and 20 items. The most meaningful interpretation of the MSQ uses percentile scores for each scale obtained from the most appropriate norm group for the individual concerned. Ordinarily, a percentile score of 75 or higher would be taken to represent a high degree of satisfaction; a percentile of 25 or lower would indicate a low level of satisfaction; and scores in the middle range of percentiles would indicate average satisfaction levels. Mahmoud (2008) showed that MSQ had a Cronbach's alpha of 0.91, which is greater than the benchmark figure.

UNIVERSITY of the
WESTERN CAPE

It is evidently possible, therefore, to obtain a reliable and valid measure of job satisfaction levels among health professionals using these typical instruments.

C. Determinants of job satisfaction

The assessment of employee attitudes such as job satisfaction has become common in organizations in which management is concerned with the physical and psychological well being of its people (Spector, 1997). Using the information obtained from organizational assessments and related research, different factors were identified as determinants of job satisfaction and are summarized below.

https://etd.uwc.ac.za/

Research has identified several demographic variables affecting the job satisfaction level of employees including education, work experience, and position in the hierarchy (Hinshaw and Atwood, 1984; Sengin, 2003). Being educated and a recognised health professional gave registered nurses a sense of satisfaction and, as they gained work experience, promotion to higher managerial positions tended to increase their job satisfaction. In another study conducted on the correlates of job satisfaction among healthcare professionals in Kuwait, the findings revealed a significant relationship between educational level and job satisfaction – respondents with a diploma reporting the highest level of job satisfaction (Shah et al, 2001).Employees with longer work experience were also more satisfied than those with relatively less experience of the world of work.

According to a study conducted among Nigerian radiographers in South Eastern Nigeria, among there is a negative correlation between job satisfaction and marital status, professional qualifications, job location and work experience (Okaro et al, 2010). On the other hand, Bodur (2002) found no significant difference between the job satisfaction scores of staff according to age, gender, marital status, workplace (rural or urban) and professional work experience. In a study conducted in Turkey on 153 full-time health workers (GPs, midwives, nurses and health technicians) selected from 21 health centres, job satisfaction scores showed differences related to profession, although midwives scored significantly lower than the others on eight items. These included salary, rapport with co-workers, implementing health policy receiving praise for performing well, and the freedom to self-assess and try new methods. Nurses scored lower than the others only on the item relating to how line managers treated their subordinates.

Among the work place environment factors affecting job satisfaction, is supervision, which relates to leadership. Generally, an employee-centred leadership style enhances job satisfaction because the leader looks after subordinates carefully, displaying friendship, respect and warmth towards employees. A production oriented leader, on the other hand, may cause low job satisfaction among employees, adversely affecting staff turnover and absenteeism (Rao and Narayana, 1996).Supervision style matches Maslow's social (affiliation) need in that employees

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

emphasise the importance of harmonious working relationships with superiors, subordinates and customers (Maslow, 1954).In addition, according to Herzberg's two-factor theory, as a "hygiene issue" supervision can only become a 'dissatisfier' if it is absent or mishandled (Herzberg, 1957). Hertzberg defines hygiene issues as the parts of a job creating dissatisfaction but, if not present, only returning the worker to a neutral point of job satisfaction. Consequently, hygiene issues cannot motivate employees but can minimize dissatisfaction and serve as a point of departure for motivation. This explains why he advised firms to be careful when appointing anyone to the role of supervisor.

Another factor is co-worker relationships. Herzberg (1957) contends that employees want a reasonable amount of time in which to socialize with each other because this determines their interpersonal relations in the workplace. Maslow describes man as a gregarious being who wants to associate, to gain acceptance, and to give and receive friendship and affection (Edwards, 2008). According to this author, people congregate because of mutual feelings of being beaten by a system in which individuals are treated as inert instruments, machine tools, and mere appendages in the production process. Other research also found that isolated workers dislike their jobs (Walker and Hauest, 1952). By comparison, Mowday (1993) posits that an individual's level of job satisfaction might be a function of personal characteristics and the characteristics of the groups to which s/he belongs. Another study showed that the better the relationship with co-workers and supervisors, the greater the job satisfaction (Kalleberg and Grifinon, (1978).

UNIVERSITY of the
WESTERN CAPE

Job content is also identified as a determinant of job satisfaction and one of Herzberg's motivators, along with recognition, responsibility, advancement and achievement (Herzberg, 1957). These factors correspond with Maslow's upper-level needs of esteem and self-actualization (Maslow, 1954). Herzberg's analysis indicated that job content factors create satisfaction by fulfilling an individual's needs for meaning and personal growth, making people feel useful. If managers wish to increase motivation and improve performance, they need to enrich the work entailed and allow the employee the freedom to determine how s/he approaches it. In the absence of motivators, employees are neutral about their work.

https://etd.uwc.ac.za/

In a related way, Maslow's esteem needs include the desire for both self-esteem and public esteem. Self-esteem needs include competency, confidence, self-actualization, knowledge, independence and the individual employee's perception of his/her ability to control the tasks performed. Public esteem needs include those for prestige, status, recognition and appreciation. According to Maslow, the satisfaction of esteem needs produces feelings of self-confidence, high worth, empowerment, capability, adequacy, and a true sense of importance. Other researchers have also found that job satisfaction has a positive relation with high motivation levels (Arvey and Dewhirst, 1976); working independently or exercising autonomy (Abdel-Halim, 1983); doing non-repetitive tasks (Kam, 1998) and high levels of professional status (Sirin; 2009). While organizations providing opportunities for professional development are likely to have satisfied employees (Penn et al, 1998),,by contrast the absence of work life balance, lack of advancement opportunities, a poor work environment, and lack of recognition and encouragement may lead to stress – eventually resulting in dissatisfaction, burnout and an increased turnover rate within the organization (Ahmadi and Alireza, 2007).

Compensation and job security together constitute another important work place environment factor affecting employees' job satisfaction. One study linked employee profit sharing schemes increased job satisfaction while, inadequate salary led to dissatisfaction (Carr and Kazanowsky, 1994). Miller (1980) found that satisfaction was greatest among workers in jobs that were more secure and highly paid. Other influential factors include whether the work is part time or full time, affecting income, and whether an individual is self-employed – and therefore self-managing, with the potential to earn more but with less financial security than when working for someone else. Stevens (2005) also found that a sense of job security increased employee job satisfaction. By comparison, Simons (1995) found that components of the reward system leading to satisfaction differed by type of worker; industrial workers gave interesting jobs greater importance than higher paid work, whereas hotel workers showed a preference for jobs with higher wages. Others discussed the limitations of money as a factor influencing job satisfaction. Herzberg, for example, identified salary as the most important "hygiene issue "factor affecting

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

job satisfaction, creating a zero level of motivation because dissatisfaction is merely avoided if an employee's salary is maintained at its proper level, This suggests that, while money helps to fulfil basic needs, its influence on job satisfaction is limited above a certain level of income at which all or most basic needs are fulfilled.

D. Job satisfaction levels of health workers

Researchers appear not to agree about the extent to which the job satisfaction of physicians differs from that of other health providers. A study conducted on radiographers in Nigeria found that their levels of job satisfaction affect daily work attendance and overall output (Okaro et al, 2010). Research undertaken by Chaudhury and Banerjee (2004) assessing the job satisfaction of medical officers in the armed forces linked low levels of job satisfaction with poor skills utilization, poor promotional prospects, inadequate redress of grievances, organizational policy, and inadequate pay and allowances. The highest contributing factor to job satisfaction was found to be an opportunity for self-development, job security, prestige in within the organization, the nature of the work entailed and promotion opportunities.

In a survey of Columbia University Public Psychiatry Fellowship alumni by Ranz, Stueve and McQuistion (2001), medical directors reported experiencing higher levels of job satisfaction than staff psychiatrists. To further this inquiry, the authors conducted an expanded survey among members of the American Association of Community Psychiatrists (AACP), where the results were the same. They attributed this largely to job conditions, noting that medical directors on average perform more managerial activities, and that the performance of administrative tasks promotes job satisfaction. The survey also found that job satisfaction decreased over time for staff psychiatrists but not for medical directors. Based on these findings, the researchers recommended that staff psychiatrists might be well advised to seek promotions to medical director positions as their careers progressed, or to reconfigure their positions to include more administrative responsibilities.

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

Motivation and job satisfaction among medical and nursing staff in a Cyprus public general hospital studied by Lambrou and colleagues (2010) found that medical staff showed statistically significant lower job satisfaction levels compared to nursing staff. Surgical sector nurses and those above 55 years of age reported higher levels of job satisfaction when compared to the other groups.

Bodur (2002) studied job satisfaction levels and their causes among health care workers employed at public health centres in Konya, a town in Turkey. The percentage of satisfied health care workers was 60%, with midwives scoring lowest. While working environment and income were identified as the most important factors influencing dissatisfaction levels, there was no correlation between global satisfaction levels and other demographic variables.

Satisfaction and intent to stay among the Ugandan health workforce was studied by the Ministry of Health in Uganda (2007). Overall job satisfaction levels among Ugandan health workers were found not to be high: fewer than half the respondents expressed dissatisfaction with their jobs. Satisfaction with salary was particularly low, with physicians being the least satisfied. Furthermore, working and living conditions were very poor and the workload was judged to be unmanageable. While working conditions were found to be better in the non-profit sector than in the public sector, compensation (salary and fringe benefits) and job security were viewed as superior in the public sector.

UNIVERSITY of the
WESTERN CAPE

E. Job satisfaction level and factors affecting it among physicians

Among physicians, working freedom, working environment, salary and fringe benefits are the major factors contributing towards job satisfaction, while they are most dissatisfied with the clerical workload (Okerlund et al, 1994; Speakman et al, 1996). Specifically, health workers in an ambulatory care hospital were observed to be generally satisfied with the job because of its autonomous setting (Akroyd et al, 1994). Physicians found their work especially satisfying when they received positive feedback from their patients (Haas et al, 2000). A study conducted in Pakistan showed that most physicians (56%) were dissatisfied with their income levels and only

https://etd.uwc.ac.za/

10% very satisfied (Shakir Syed et al, 2007). Pathman et al, (2002) showed that relative dissatisfaction with pay among physicians younger than 55 was associated with emigration plans; while older physicians were generally more satisfied with their jobs, they nevertheless looked forward to leaving. Although the researchers postulated that this might well be related to retirement plans, they made it clear that their data had not allowed them to explore this relationship in detail. Research conducted in a Karachi hospital found that female physicians were less satisfied than their male counterparts (Khuwaja et al, 2004), pointing to the impact of gender on job satisfaction levels among physicians in certain environments.

There is close correlation between the job satisfaction of health care staff and the overall quality of health services (Bodur, 2002). According to McCoy and his colleagues (2008), job satisfaction is an important factor influencing productivity levels and the quality of performance, especially among health care workers. This has implications for the effectiveness and efficiency with which services are delivered, as well as healthcare costs. In addition, the level of professional satisfaction among health care workers is directly linked to low absenteeism, good interpersonal relations and improved work organization. The same authors drew attention to the extent to which work dissatisfaction can increase the risk of general discontent. Stress, burnout and complex shift work were important determinants of the overall well-being of health care workers, also influencing their professional satisfaction. Worldwide, studies have shown that – as with other workers – many factors impact upon job satisfaction in the health care sector, including gender, age, education level, work experience, work organization, working conditions, payment, working hours and promotion opportunities.

UNIVERSITY of the
WESTERN CAPE

F. Consequences of job satisfaction among physicians

Job satisfaction has been internationally researched for decades (Huby, 2002), with studies identifying some positive and negative consequences for organizations overall performance and their employees 'personal lives. This tends to point to the advantages of studying job satisfaction levels among physicians in Ethiopia with the aim of improving management and human resource development practices.

https://etd.uwc.ac.za/

The most obvious, practical spinoffs of job satisfaction and improved morale among physicians are administrative stability and better patient care. According to Robbins (1999), satisfied workers usually perform well, are absent from work less frequently and choose to remain in thePeltiereir jobs. In short, satisfied physicians improve the overall working environment of health care facilities. Other studies confirm this. Syed Shakir and his colleagues found that most doctors (78%) working at a teaching hospital in Bahawalpur, Pakistan, would like to work abroad. According to Hadley and colleagues (1999) job satisfaction levels among physicians affects their effectiveness, the quality of care they give to patients and, as a result, patients' willingness to comply with their recommendations. Physicians are happiest when their work makes a positive difference to the lives of their patients. This mutually reinforcing aspect of health care has obvious implications for its outcomes (Zuger, 2004).Empirical studies have pointed to an association between job satisfaction levels among physicians and a number of factors influencing the quality of care (Williams and Skinner, 2003). For example, the patients of physicians with higher levels of job satisfaction are more diligent in following their instructions (DiMatteo, 1993), while satisfied physicians tend to be more attentive to their patients' needs – resulting in higher levels of patient satisfaction (Linn, 1985). Physician dissatisfaction, on the other hand, has been linked to riskier prescribing practices (Melville, 1980).

UNIVERSITY of the
WESTERN CAPE

Job satisfaction is also related to mental health as one aspect of overall life satisfaction so that, according to Newstrom and Davis (1989), work experiences can influence perceptions off the job and vice versa. A classic study providing empirical evidence of the relationship between job satisfaction and mental health concluded, not inexplicably, that job satisfaction and life satisfaction are inextricably bound (Edwards, 2008). It can impact on psychological well-being (Wheaton, 1990), with many unresolved personality problems and maladjustments arising out of an individual's inability to find satisfaction in his/her work (Rao and Narayana, 1996).

Moreover, if job dissatisfaction is prolonged it may result in health problems for the physicians (Sundquist, 2000). While a positive correlation between job satisfaction and physical health has

https://etd.uwc.ac.za/

been established, one study concluded that people who enjoy their work are likely to live longer (Palmore, 1969). APeltier although this finding might point to links between job satisfaction, higher education levels, and better income and greater benefits promoting longevity, chronic dissatisfaction with work could increase stress levels – eventually taking its toll on the individual concerned. Health experts contend that emotional stress has been implicated as a contributory factor in the genesis of hypertension, coronary artery disease, digestive ailments, and even some forms of cancer.

Thus, with physicians' as with other workers job satisfaction is influenced by and impacts on a complex array of interrelated workplace phenomena including employee attitudes, management practices and the health of the individuals concerned. It is therefore an important managerial issue, affecting organizational culture, staff performance and client satisfaction. A review of the literature shows that the relationship of numerous variables to job satisfaction have been investigated including age, gender, recognition, advancement, responsibility, salary, supervision, and working conditions. Against this background, it is not surprising that job satisfaction also plays a role in building a sense of goodwill towards the organization in the community it serves. According to Rao and Narayana (1996), people who feel positive about their work life are more apt to voice "favourable sentiments" about the organization, attracting more dynamic and better qualified new entrants.

UNIVERSITY of the
WESTERN CAPE

Noting that a small but significant relationship exists between low levels of job satisfaction and staff turnover (Lance, C.A, 1995), it can be hypothesized that job satisfaction could function as a buffer against conditions leading to worker attrition. Dissatisfied physicians are more likely to leave clinical practice or relocate, disrupting continuity of care and jeopardizing access to services in underserved regions (Lichtenstein, R.L 1984). However, even satisfied employees may decide to leave their organizations. In their study of job satisfaction among physicians, Pathman and colleagues (2002) concluded that building ever-increasing levels of satisfaction generally does not prevent turnover. In their view, satisfaction is relative and, in order to foster workforce stability, managers should address aspects of physicians' work or jobs causing them to be less satisfied than physicians working elsewhere.

https://etd.uwc.ac.za/

III. Aim and objectives

The aim of the study is to assess the levels of job satisfaction, the factors influencing job satisfaction and the consequences of job satisfaction among physicians in public hospitals in Addis Ababa, Ethiopia.

The objectives are:

1. To describe the job satisfaction levels of physicians in public hospitals in Addis Ababa, Ethiopia
2. To identify factors affecting the job satisfaction levels of physicians
3. To assess the possible consequences of physicians' job satisfaction levels.

IV. Methodology

Study design

The study used a quantitative cross-sectional analytical study design as this was seen to be the most efficient way to assess job satisfaction levels among one category of workers at a specific period in time. In the researcher's view, a cross-sectional study design would also most adequately address the first two objectives of the study. As current job satisfaction is closely linked to both past and current workplace experiences, a quantitative cross-sectional design was deemed most likely to yield adequate results.

UNIVERSITY of the
WESTERN CAPE

The third objective was however only partially achieved with this study design. While the study measured only current job satisfaction levels, their immediate consequences could be perceived to reflect both past job satisfaction levels (which were not measured) and current satisfaction levels. A further deficiency of this time-static study design affecting objectives 2 and 3 is that the direction of causality could be reversed in respect of several factors affecting job satisfaction and the consequences of job satisfaction levels. As a result, while this is unlikely, factors thought to be causative could in fact be consequences and vice versa.

Study population

https://etd.uwc.ac.za/

The study population comprised all physicians who have completed their internship, have been working fulltime in public hospitals, and have spent at least one year at a public hospital in Addis Ababa. The researcher excluded physicians who are two or less years away from retirement, as well as those with chronic/severe illnesses causing them to take extended or frequent sick leave.

Sample

All physicians working in all 10public hospitals in Addis Ababa who met the inclusion criteria were included in the study sample. There were 358 physicians eligible.

Data collection methods

Noting that all physicians in Ethiopia receive their medical training in English and hence can read and understand the language easily, a self-administered English language questionnaire was devised based on the John Hopkins Hospital job satisfaction survey guide (Health System Corporation, 2005), the Job Descriptive Index(JDI) (Kinicki, 1995) and the Minnesota Satisfaction Questionnaire(MSQ) (University of Minnesota, 1977) and used as an instrument for collecting data on the job satisfaction levels of physicians working in the public hospitals of Addis Ababa. The questionnaire endeavoured to be easy to understand, appropriate to the study circumstances and was confined to core issues around job satisfaction of likely relevance to the Addis Ababa context.

UNIVERSITY of the
WESTERN CAPE

In order to access physicians, the researcher used the following procedures in the sequence indicated:

1. After obtaining formal permission from the hospital administration, the researcher/data collectors orally communicated and presented the purpose of the study at a regular physicians' meeting.
2. The researcher/data collectors requested that the physicians complete a consent form to indicate their agreement or unwillingness to participate in the study.

https://etd.uwc.ac.za/

3. Placed in an unmarked envelope, the questionnaire was given to each of the physicians who had agreed to participate in the study, and an explanation of how to complete its three sections was provided.

4. The researcher/data collectors requested that each physician place the completed self-administered questionnaire into a pre-prepared envelope and return it on a conveniently scheduled date.

5. The sealed envelopes were deposited by all study subjects in a sealed box.

6. Each sealed envelope was opened only after the completion of the entire data collection process at all the hospitals involved in the study.

Collecting the data in a sealed unmarked envelope from each participant ensured anonymity, hopefully engendering a sense of trust among study participants and therefore increasing the veracity of the answers to the questions.

The data collection tools assessed the main dimensions of job satisfaction: work satisfaction; co-worker performance/cooperation; pay and benefits; promotions/career advancement; supervisory considerations; communication; policies; productivity/efficiency; training and development; physical working conditions; and concern for patient care/customer service. Questions were arranged in closed-ended format. The questionnaire also included a short note explaining the value of the study. Seventeen variables including age, sex, experience etc were collected for cause and 12 variables including intention to resign, workload etc were assessed to measure consequence of job satisfaction of physicians,

Ten experienced data collectors were used, along with three physician supervisors working outside Addis Ababa. One day's training was provided on the objectives of the study and the data collection tools used in order to ensure that each team member could clearly explain to the physicians concerned how to complete the questionnaire, thereby increasing the probability of questionnaires being completed correctly. One data collector was assigned to each hospital, with each supervisor responsible for three hospitals. The researcher, in addition to doing the overall monitoring of the data collection process, supervised one hospital. While data collectors were

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

advised to collect completed questionnaires from respondents during physicians' morning meetings that all physicians were expected to attend, they also took the box to physicians at other convenient times using a pre-prepared list to record returned questionnaires. Having taken e-mail and telephone addresses for each respondent, data collectors used these to remind the respondents to return the questionnaire when they had not done so after a period of time.

The self administered data collection technique was chosen because it is quick, minimizes bias and is an efficient way to obtain truthful answers. It is also less costly than interviewing and ensures the anonymity of participants (Dessler, 2000). Because one disadvantage is that the response rate may be low, the researcher used the different procedures described above to avoid this.

Analysis

The data collected was coded and entered into a computer using statistical database SPSS Version 16 software. After data entry, the dataset was verified to determine its suitability for further analysis by checking the collected data and cleaning data elements as required. The cleaning of data elements involved identifying strange values, checking for missing values, checking for plausibility and identifying errors that may have occurred when the data was coded, transcribed and entered. After data cleaning, univariate, bivariate and multivariate analyses were undertaken.

UNIVERSITY of the
WESTERN CAPE

Univariate analysis of the socio-demographic data in section 1 of the questionnaire and the potential consequences of the level of job satisfaction in section 3 involved calculating proportions with categorical data, and by deriving mean values with standard deviations for continuous data.

The degree of job satisfaction for each variable within the overall job satisfaction measurement in section 2 of the questionnaire was assessed on a scale of 1 to 5. The values of very

https://etd.uwc.ac.za/

dissatisfied, dissatisfied, neutral, satisfied and very satisfied were 1, 2, 3, 4 and 5 respectively – thus, the higher the score obtained the higher the level of job satisfaction.

A composite job satisfaction score was obtained by summing the individual answers for each of the variables used to assess the different aspects of job satisfaction. Noting that there were 65 variables a maximum composite score of 325 was therefore possible.

Bivariate analysis – using 2 by 2 tables with 95% confidence intervals to calculate the prevalence ratio for each of the potential causes of low job satisfaction – was undertaken underpinned by the composite score cut-off levels of job satisfaction. The prevalence ratio for the potential consequences of low job satisfaction was also assessed using 2 by 2 tables with 95% confidence intervals. In order to obtain the adjusted prevalence ratios for both the potential causes and consequences of low job satisfaction, multivariate analysis was undertaken using multiple logistic regressions.

Using the Pearson correlation technique, further analysis was conducted to assess the degree of correlation of each of the individual variables (in section 2 of the questionnaire) used to assess various aspects of job satisfaction with a single overall measure of job satisfaction (measured via the question: "All in all, I am satisfied with my job"). Correlation between each individual job satisfaction variable and the composite job satisfaction score was also assessed. Knowing the correlation coefficient of each aspect of job satisfaction has been found to assist managers in determining where best to target interventions aimed at increasing job satisfaction, should such interventions be required

UNIVERSITY of the
WESTERN CAPE

Reliability

According to Anastasi and Urbina (1997), the term reliability refers to the consistency of scores obtained by the same persons when re-examined with the same test on different occasions, or with different sets of equivalent tests, or under variable conditions. These researchers assessed the internal consistency of the MSQ questionnaire and found the reliability coefficient of 83% of

https://etd.uwc.ac.za/

the groups studied to be 0.8 or higher. The data suggests that, in general, the MSQ scales have adequate internal consistency reliability.

A reliability test was therefore conducted in Bishoftu Hospital, with fifteen of its physicians participating in the pilot test. The data collector provided the questionnaire twice to each respondent within a two week period, and exploratory work was conducted on the data collected. The repeatability of the questionnaires was tested using a test-retest procedure. The agreement level was calculated using the Kappa test and found to be greater than 0.7, which is considered to be quite good.

Validity

Validity refers to the degree to which the study actually measures what it purports to measure (Anastasi& Urbina, 1997). In this study, attempts were made to address validity arising from chance, precision, bias and confounding. All physicians working in Addis Ababa's public hospitals were included in the study and continuous efforts were made to obtain an adequate response rate with the aim of enhancing precision and minimizing chance. To improve the response rate, the data collector sent follow-up reminders to respondents using an agreed schedule. Information bias was avoided by using supplementary open-ended questions designed to capture information not easily obtained by way of closed-ended questions. This helped to identify, analyze and interpret issues not addressed in participants' answers to closed-ended questions.

UNIVERSITY of the
WESTERN CAPE

The questionnaire was adapted from the JDI and MSQ, which have been used in many studies on job satisfaction as illustrated in the literature review. Regarding the validity of the JDI,in his thesis Luddy (2005) discussed its use in over 400 studies and found that these achieved their objectives, indicating high levels of discriminate, convergent and construct validity. Similarly, regarding MSQ in investigating several studies using this tool Worrell (2004) found it to indicate high levels of reliability and validity.

https://etd.uwc.ac.za/

Generalizability

Since all public hospitals in Ethiopia are administered according to similar rules and standards, the research findings are probably applicable to physicians working at public hospitals in urban areas other than Addis Ababa, where the study was conducted. However, it is highly unlikely that the findings can be generalized to apply to physicians working in the private sector and in rural hospitals, as their work circumstances would differ considerably from those of the study population.

Piloting

A pilot study was conducted in Bishoutu Public Hospital, which is located in a city near Addis Ababa. While insights gleaned from the pilot study were used to improve the content and clarity of the questionnaires, it was also useful in assessing the response rate and in determining which data collection strategies would enhance it

Ethical considerations

Data collection was carried out only on those who had been fully informed about the study and had signed consent forms after carefully reading and understanding the contents of the study. Ethical principles such as autonomy, justice, beneficence and non-maleficence were fully implemented with respect to study participants and study hospitals. Before actual data collection took place, the researcher obtained ethical clearance from the research committee of the University of the Western Cape. Permission to conduct the study at the hospitals concerned was obtained from the Ethiopian Federal Ministry of Health (FMOH) and the Addis Ababa City Administration Health Bureau. The researcher delivered letters prepared by these authorities to the individual hospitals to obtain their permission to proceed with the study. Prospective study participants were informed about the purpose of the study orally and assured that there would be no adverse consequences should they choose not to be involved. In addition, the study questionnaire was completely anonymous.

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

Because the study describes job satisfaction levels, factors affecting job satisfaction and the consequences of job dissatisfaction among physicians within the Ethiopian health delivery system, not only could it prompt health policy makers to address these issues – it could also be used to inform any interventions they make with that in mind. The research will be made available to participating physicians, hospital management, the Ministry of Health and anybody else who might benefit from using it.

The research would try to disseminate the study findings through different methods without breaching confidentiality of study participants. The findings would be published in scientifically acceptable journal to reach wider audience. In addition to that final document would be given to Ethiopian Ministry of Health to make accessible for health professional and other concerned bodies.


UNIVERSITY of the
WESTERN CAPE

https://etd.uwc.ac.za/

V. Results

Response rate

When the data was collected in December 2012, 358 physicians were working in Addis Ababa's public hospitals of whom three refused to participate in the study. The questionnaire was therefore distributed to the remaining 355 physicians. Questionnaires were collected in four consecutive phases.

During the first collection round only 270 physicians returned their questionnaires. The second round yielded an additional 30 questionnaires and, following a reminder at the physicians' morning meetings, 22 questionnaires were returned during the third collection round. After several reminders a fourth round yielded a further 18 questionnaires.

Of the total of 340 questionnaires collected, 14 were found to be incomplete and were therefore rejected. The completion rate for this study was eventually 91.8%, or 326 out of 355. The research team attributes this high completion rate to the involvement and cooperation of senior officials, agreement with physicians on return dates, collecting the data in sealed unmarked envelopes to ensure anonymity, and consistently regular follow-up in respect of those who had not yet returned their questionnaires after each of the collection rounds.

UNIVERSITY of the
WESTERN CAPE

This chapter presents results from the univariate, bivariate and multivariate analyses. Each section provides details of the calculations made, an explanation of the results obtained and a presentation focusing on narration, tables and graphs. The narrative highlights the main results, while the detailed results are contained in tables and graphs. Descriptive and inferential data analysis was conducted using SPSS version 16.0. Statistical significance was declared if the p-value was found to be less than 0.05 for both bivariate and multivariate analyses.

Univariate analysis

This section presents all pertinent results from the questionnaire and is divided into socio-demographic profile, level of job satisfaction and consequences of job satisfaction. Categorical

https://etd.uwc.ac.za/

variables are presented in counts and proportions, while continuous data is presented using means, medians, standard deviations and inter-quartile ranges. Graphs are used to present selected continuous results.

Socio-demographic profile and other factors

Tables 1 and 2 summarize the socio-demographic profile, the current professional status and the future career plans of physicians who participated in the study. The majority of the respondents were male, single and general practitioners. Around half planned neither to remain in their current hospital nor in the public sector, while in turn around half of these planned to emigrate within the next five years. Although most respondents had never practised in the private sector, 60% planned to join the private health sector in Ethiopia within the next 5 years. Major reasons given for this were higher pay and better working conditions. Better income, an upgrade in career level and opportunities to improve their skills through access to better technology were reasons given for wanting to emigrate.


UNIVERSITY of the
WESTERN CAPE

https://etd.uwc.ac.za/

Table 1: Physicians' socio-demographic profile, current professional status and future career plans

Variable		Count	Percentage (%)
Sex of respondent	Male	213	65.30%
	Female	113	34.70%
Marital status	Married	115	35.30%
	Single	210	64.40%
	Divorced	1	0.30%
	Widowed	0	0.00%
	Living together	0	0.00%
Private practice	Yes	90	27.60%
	No	236	72.40%
Current professional status	GP	226	69.30%
	Specialist	100	30.70%
Plans to join the private health sector in Ethiopia within the next 5 years	Yes	93	60.40%
	No	61	39.60%
Plans to emigrate within the next 5 years	Yes	165	50.60%
	No	161	49.40%
Postgraduate degree	Yes	106	32.50%
	No	220	67.50%
Interest in promotion to management position	Yes	99	30.40%
	No	227	69.60%
Plans to remain in current hospital for 5 or more years	Yes	133	40.80%
	No	193	59.20%
Plans to remain in public health sector for 5 or more years	Yes	156	47.90%
	No	170	52.10%
Plans to remain in current profession for 5 or more years	Yes	157	48.20%
	No	169	51.80%
Specialty	No specialty	220	67.50%
	Public Health	8	2.50%
	Gynaecologist	26	8.00%
	Surgeon	15	4.60%
	Paediatrician	19	5.80%
	Radiologist	11	3.40%
	Dermatologist	11	3.40%
	Ophthalmologist	16	4.90%

The fact that more than half of the physicians participating in the study did not plan to remain in their current profession for five or more years probably means that they intend specializing. This is the most likely conclusion since, out of 169 respondents who said 'No', 82% were general

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

practitioners, around two thirds having no specialty. Table 2 and Figure 1 summarize respondents' age and years of service. The mean age of respondents (32.26) shows a relatively young population of physicians working in Addis Ababa's public health facilities. On average, the doctors had worked for less than five and seven years in their current public hospital and the public sector as a whole respectively.

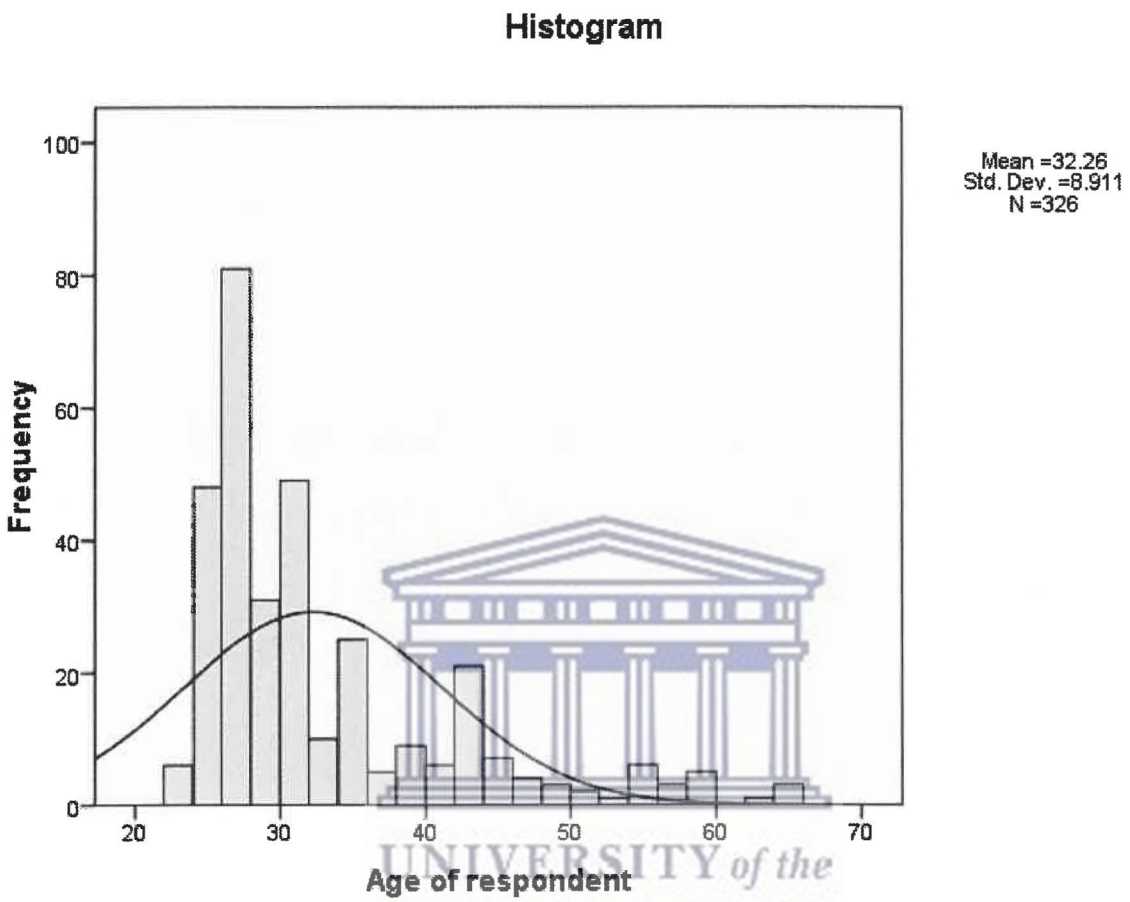
Table 2: Physicians' age and years of service

Measurement		Age of respondent	Years since graduation	Years of service in public sector	Years of service in private health sector for those who had worked there	Years of service in current hospital
Mean		32.26	7.4	6.4	3.05	4.89
Median		29	5	3	2	3
Std. deviation		8.911	6.64	6.845	2.01	5.03
Percentiles	25	26	3	2	2	2
	50	29	5	3	2	3
	75	35	8	8	3	6
N=274 for variable "years since graduation", N=90 for variable "physicians working in private health sector" and N=326 for the remaining variables						

UNIVERSITY of the
WESTERN CAPE

https://etd.uwc.ac.za/

Figure 1: Age of physicians working in public health facilities



UNIVERSITY of the
WESTERN CAPE

https://etd.uwc.ac.za/

Job satisfaction levels based on single variables as well as their correlation with a composite score and with a single variable summary score

The degree of job satisfaction for each of 65 variables is assessed on a scale of 1 to 5. The value of 1, 2, 3, 4 and 5 are given for very dissatisfied, dissatisfied, neutral, satisfied and very satisfied respectively. Distribution of cases within the scales is further categorized into low satisfaction and adequate-to-high satisfaction. Sub-scales 1 and 2 are the "clearly dissatisfied" category and subscales 4 and 5 the "clearly satisfied" category. Physicians who chose neutral (sub-scale 3) are neither satisfied nor dissatisfied. Therefore, it is reasonable to categorize them as "low satisfaction" level. On that basis, sub-scales 1, 2 and 3 were categorized as "low job satisfaction" (LJS) and sub-scales 4 and 5 as "adequate-to-high job satisfaction" (AHJS). A composite job satisfaction score was also calculated by adding up the score for each of the 65 variables, with equal weighting given to each variable.

The degree of correlation of each of the individual variables used to assess the various aspects of job satisfaction with a single overall measure of job satisfaction (measured via the question: "All in all, I am satisfied with my job") was undertaken using the Pearson correlation method. Similarly, an assessment was made of the correlation between each individual job satisfaction variable and the composite job satisfaction score. This was done on the assumption that knowledge of the correlation coefficient of each aspect of job satisfaction would be helpful in determining where best to target interventions to increase job satisfaction, should such interventions be required.

UNIVERSITY of the
WESTERN CAPE

https://etd.uwc.ac.za/

Table 3: Categorization of individual variables of job satisfaction and correlation with variable "All in all, and composite job satisfaction score

Variables	N	Job satisfaction of each variable					Categorized job satisfaction		All in a satisfac
		VD	D	N	S	VS	LJS	AHJS	Pearson Correlatio
Job measures up to expectations	326	56	98	77	79	16	71%	29%	0.51
Good place to work	326	67	75	78	90	16	67%	33%	0.61
Would recommend as a good place to work to friend or relative	326	55	74	101	80	16	71%	29%	0.58
Good when compared to other workplaces in Addis Ababa	326	59	70	67	101	29	60%	40%	0.70
All in all, I am satisfied with my job	326	58	72	65	90	41	60%	40%	1.00
Job makes good use of skills and abilities	326	26	68	69	116	47	50%	50%	0.52
Job provides opportunities to learn new skills	326	35	36	63	120	72	41%	59%	0.42
Work is personally rewarding	326	28	42	69	145	42	43%	57%	0.41
Job provides opportunities to perform tasks I do best	326	47	46	87	109	37	55%	45%	0.55
Find work interesting	326	47	39	78	99	63	50%	50%	0.55
Good feeling of accomplishment about the work	326	53	48	78	99	48	55%	45%	0.54
Paid fairly for the work	326	212	67	26	9	12	94%	6%	0.24
Pay reflects the effort	326	219	54	41	8	4	96%	4%	0.22
Difference in pay between new and experienced employee doing same job	326	134	90	89	9	4	96%	4%	0.14
Received benefits (health insurance, vacation etc) are adequate	326	213	54	42	13	4	95%	5%	0.16

UNIVERSITY of the
WESTERN CAPE

https://etd.uwc.ac.za/

Variables	N	Job satisfaction of each variable					Categorized job satisfaction		All in a satisfac
		VD	D	N	S	VS	LJS	AHJS	Pearson Correlatio
Pay and benefit package compared to colleagues in the private sector	326	179	110	28	5	4	97%	3%	***-0.01***
Opportunity to improve professional knowledge and job	326	64	102	80	67	13	75%	25%	0.19
Provision of effective one-job training	326	80	90	90	60	6	80%	20%	0.28
Job promotion in this hospital is fair and objective	326	59	78	160	23	6	91%	9%	0.26
Promotions at this hospital are based on performance	326	54	63	158	45	6	84%	16%	0.23
Past job promotions	326	51	45	169	51	10	81%	19%	0.26
Would be considered for transfer to other job if I had the required skills	326	35	54	165	52	20	78%	22%	0.09
Work assignments made fairly	326	45	63	112	81	25	67%	33%	0.27
Friendly immediate supervisor	326	28	61	81	113	43	52%	48%	0.18
Supervisor supports employee suggestions for correcting existing problems	326	47	54	104	90	31	63%	37%	0.20
Performance evaluation by supervisor(s) fair and objective	326	75	44	93	85	29	65%	35%	0.19
Supervisor encourages team work	326	61	47	92	94	32	61%	39%	0.21
Opportunities to participate in decisions by supervisor that affect work environment	326	58	50	110	86	22	67%	33%	0.10

UNIVERSITY of the
WESTERN CAPE

https://etd.uwc.ac.za/

Variables	N	Job satisfaction of each variable					Categorized job satisfaction		All in a satisfac
		VD	D	N	S	VS	LJS	AHJS	Pearson Correlatio
Supervisor encourages new ways of doing job	326	63	51	98	93	21	65%	35%	0.14
Supervisor regularly gives valuable feedback on work performance	326	58	58	113	67	30	70%	30%	0.08
Clear directions from supervisor	326	37	73	109	78	29	67%	33%	0.15
Immediate supervisor has enough job knowledge to make decisions about work	326	52	54	114	75	31	67%	33%	0.02
Hospital policies are clearly communicated	326	70	78	113	59	6	80%	20%	0.20
Orientation for new employees is adequate	326	70	87	130	33	6	88%	12%	0.25
Senior management responds to employees' problems in a fair manner	326	69	89	116	41	11	84%	16%	0.27
Consistency between departments in administration of human resource policies	326	57	99	121	42	7	85%	15%	0.17
Satisfied with hospital's human resource/personnel policies	326	74	89	105	42	16	82%	18%	0.18
Perception of job security	326	97	47	85	76	21	70%	30%	0.19
Organization has realistic goals and objectives	326	54	44	104	99	25	62%	38%	0.29
Managers are appropriately concerned with accomplishing goals and objectives	326	58	61	80	99	28	61%	39%	0.28
There is good cooperation with other departments	326	71	45	111	85	14	70%	30%	0.27

UNIVERSITY of the
WESTERN CAPE

https://etd.uwc.ac.za/

Variables	N	Job satisfaction of each variable					Categorized job satisfaction		All in a satisfac
		VD	D	N	S	VS	LJS	AHJS	Pearson Correlatio
Much job effort is unproductive because of things in the hospital beyond my control. (reverse-scored item)	326	24	65	93	81	63	56%	44%	-0.16
Best use made of new work methods and technological advances	326	85	69	107	56	9			0.20
Enough authority to accomplish the work expected	326	66	63	101	87	9	71%	29%	0.19
Employees who work here understand the hospital's strategy and mission	326	79	78	100	56	13	79%	21%	0.27
Availability of functional medical equipment	326	108	100	72	44	2	86%	14%	0.28
Satisfaction with availability of drugs	326	95	119	75	37	0	89%	11%	0.27
Satisfaction with availability of supplies	326	94	127	66	39	0	88%	12%	0.20
Satisfied with physical working conditions	326	93	87	74	57	15	78%	22%	0.21
Perform without serious risk of injury or illness due to unsafe working conditions	326	111	103	68	33	11	87%	13%	0.19
Satisfaction with cleanliness of facility	326	60	100	91	55	20	77%	23%	0.10
Policies and practices promote most effective patient/customer care	326	74	101	77	69	5	77%	23%	0.28
Hospital committed to quality service to patients	326	58	96	110	49	13	81%	19%	0.22

UNIVERSITY of the
WESTERN CAPE

https://etd.uwc.ac.za/

Variables	N	Job satisfaction of each variable					Categorized job satisfaction		All in a satisfac
		VD	D	N	S	VS	LJS	AHJS	Pearson Correlatio
Hospital employees genuinely care about patients	326	53	73	127	66	7	78%	22%	0.31
If I was in need of medical care, I would want to be treated at this hospital	326	82	63	95	77	9	74%	26%	0.19
Friendly and helpful work colleagues	326	33	34	86	122	51	47%	53%	0.24
Good cooperation among work group members	326	31	39	84	119	53	47%	53%	0.27
Satisfied with performance of co-workers	326	39	48	88	104	47	54%	46%	0.30
Opportunities to improve professional knowledge and job skills	326	22	70	160	69	5	77%	23%	0.16
Senior managers frequently visit my department	326	35	43	146	79	23	69%	31%	0.05
Senior hospital management concerned about employees	326	26	29	189	49	33	75%	25%	0.03
Job security	326	32	27	97	125	45	48%	52%	0.16
Senior management responds to problems in a fair manner	326	26	47	149	56	48	68%	32%	0.15
Authority to accomplish the work expected	326	22	23	68	166	47	35%	65%	0.26
People are available in physician teams to assist with workload	326	33	74	79	110	30	57%	43%	0.18

UNIVERSITY of the
WESTERN CAPE

https://etd.uwc.ac.za/

There was wide variability between the individual components of physician job satisfaction. Physicians were in decreasing order relatively satisfied with: their authority to accomplish the work expected (65%); the opportunity to learn new skills (59%);the availability of personally rewarding work (57%);the friendliness and helpfulness of co-workers (53%);levels of staff cooperation (53%); job security (52%);the use of their skills and abilities(50%); and the extent to which they found their work interesting (50%).

Physicians indicated very low levels of satisfaction with all variables related to their pay and benefit packages (this ranged from 94% to 96% for the specific variables) and even lower satisfaction (97%) when these were compared to those of colleagues in the private sector. Next to pay and benefit satisfaction, physicians had in decreasing order very low satisfaction levels in respect of: fair and objective job promotion (91%); the availability of drugs (89%); the availability of supplies (88%); the orientation given to new employees (88%): and unsafe working conditions (87%).

Composite measurement of job satisfaction in dimensions

A composite score of job satisfaction was obtained for each dimension using the steps described below.

UNIVERSITY of the
WESTERN CAPE

Firstly, all variables were transformed from a string ordinal scale to a numeric scale with values from 1 to 5 to facilitate analysis. When conducting this transformation, all variables were assumed to have equal weight. It should be noted that one variable in the productivity dimension is a reverse-scored item and was therefore analyzed accordingly but then reversed in the presentation (value is given from 5 to 1 by physicians). Secondly, composite variables for each of the 12 dimensions were computed by summing the answers for the variables under each dimension. The number of variables in each dimension ranges from 2 in the "job stress" dimension to ten in the "supervisory consideration" and "productivity/efficiency" dimensions.

Each dimension is grouped into "low job satisfaction" and "adequate to high job satisfaction". However, in the absence of an accepted cut-off point common to both groups, the midpoint of each dimension was calculated on the basis that a minimum score equal to the number of

https://etd.uwc.ac.za/

variables in the dimension and a maximum score of the number of variables multiplied by 5 is possible. The cut-off point of "number of variables multiplied by 3" was taken to mark the gradation from dissatisfied to satisfied in each dimension. Therefore, by way of example, in the "productivity/efficiency" dimension a score of <30 (3 multiplied by 10) would indicate "low job satisfaction" and a score of >30 "adequate to high job satisfaction".

A similar procedure was followed to calculate a composite job satisfaction score for all 65 variables. A cut off point of 65 multiplied by 3 (that is 195) was used in determining LJS and AHJS, with variables at or below 195 being grouped into LJS and those above 195 into AHJS. The satisfaction of physicians is categorized using these cut off points in table 4, which also shows the correlation between each dimension of job satisfaction and the variable "All in all, I am satisfied with my job" along with the composite job satisfaction score. While all dimensions of job satisfaction were significantly correlated with the variable "All in all, I am satisfied with my job" and with the composite job satisfaction score, correlation was found to be greater for the composite job satisfaction score than the individual variable.

In eight of the ten dimensions, the majority of physicians reported experiencing low job satisfaction. This was most pronounced for the dimension of "pay and benefits" where a massive 95% of physicians exhibited low job satisfaction, followed by the "physical working conditions" dimension where 83% of physicians exhibited low job satisfaction. On the composite score of all 65 variables, 65% of physicians reported low job satisfaction. While most dimensions showed good correlation with the composite score of job satisfaction, only two showed good correlation with the variable "All in all I am satisfied with my job". Interestingly, the correlation between the "pay and benefits" dimension and both the composite score of job satisfaction and the variable "All in all I am satisfied with my job" was poor, suggesting that – although the overwhelming majority of physicians are unhappy with their pay and benefits – this does not appear to have a major effect on their overall level of job satisfaction. Nevertheless, the results in table 5 below –listing pay and benefits as the most important factors affecting job satisfaction – appear to contradict this.

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

Table 4: Physicians' job satisfaction level and correlation between each dimension of job satisfaction with variable "All in all, I am satisfied with my job" and composite job satisfaction score

Variable		N	%	All in all satisfaction		Composite satisfaction score of 65 variables	
				Pearson Correlation	Sig. (2-tailed)	Pearson Correlation	Sig. (2-tailed)
Overall job morale	LJS	187	57%	0.83	0.00	0.69	0.00
	AHJS	139	43%				
Work satisfaction	LJS	127	39%	0.61	0.00	0.50	0.00
	AHJS	199	61%				
Pay and benefit satisfaction	LJS	309	95%	0.20	0.00	0.36	0.00
	AHJS	17	5%				
Career advancement and training	LJS	234	72%	0.28	0.00	0.70	0.00
	AHJS	92	28%				
Supervisory consideration	LJS	159	49%	0.18	0.00	0.78	0.00
	AHJS	167	51%				
Hospital policy and implementation	LJS	245	75%	0.26	0.00	0.83	0.00
	AHJS	81	25%				
Productivity/efficiency	LJS	218	67%	0.32	0.00	0.80	0.00
	AHJS	108	33%				
Physical working conditions	LJS	272	83%	0.20	0.00	0.67	0.00
	AHJS	54	17%				
Concern for patient care	LJS	236	72%	0.29	0.00	0.78	0.00
	AHJS	90	28%				
Co-worker cooperation	LJS	145	45%	0.29	0.00	0.69	0.00
	AHJS	181	55%				
Concern for employees	LJS	170	52%	0.14	0.00	0.42	0.00
	AHJS	156	48%				
Job stress	LJS	127	39%	0.27	0.00	0.45	0.00
	AHJS	199	61%				
Composite satisfaction score of 65 variables	LJS	211	65%	0.492	0.000	1	
	AHJS	115	35%				
N.B: Low job satisfaction (LJS) and adequate-to-high job satisfaction (AHJS)							

The importance of six key variables for job satisfaction was ranked from 1 to 6, 1 being the least important and 6 being the most important. For the sake of clarity, ranks1 and 2 are categorized as being lowest in importance and ranks 5 and 6 as highest in importance. As shown in table 5

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

below, training was rated as the variable of lowest importance to job satisfaction by most of physicians, while benefits were rated highest in importance.

Table 5: Importance of key variables to physicians' job satisfaction

Importance to job Satisfaction	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank6	% Ranked 1 and 2 (lowest)	% Ranked 5 and 6 (highest)
Training opportunities	55	64	91	78	13	25	37%	12%
Career and promotion	33	53	80	102	44	13	26%	18%
Supervision	20	47	97	75	55	32	21%	27%
Pay	67	41	21	49	48	100	33%	45%
Benefits	61	17	22	41	142	43	24%	57%
Policies and procedures	39	30	95	42	66	54	21%	37%

Consequences of job satisfaction

Table 6 summarizes the potential consequences of physicians' job satisfaction levels using both categorical and continuous variables. Six months prior to time of data collection, around half the respondents had thought seriously of resigning. On average, eight out of ten physicians ranked benefit and pay as the top reasons for resigning, while political interference, mismanagement and an attractive environment in private and non-governmental organizations were also mentioned. Around one out of three respondents had experienced discrepancies between prior expectations of their assignments and their current job status, wanting either to change jobs within the hospital or to be transferred. Reasons given for wanting to be transferred to a different hospital were improved pay and benefits; better resourced facilities in which to carry out procedures requiring different skills; safer working conditions and an improved atmosphere; established systems for recognizing performance; and more effective communication channels. One respondent said, "*I believe other hospitals work in a proper hierarchical manner and that those who do best are recognized*".

Reasons given for wanting to change jobs within the hospital were preference for other areas of work or specialty (e.g. physicians wanting to join the surgical department); some departments not being fully equipped and professionally resourced; and burnout. While most physicians

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

reported a high work load, most did not feel stressed at work and reported excellent health. On average, five days' sick leave was taken during the six months prior to data collection.

Around half the physicians participating in the study had been assigned routine tasks such as team coordination and committee work. Although these duties did increase work load and deflect professional focus away from clinical work, their effect on job satisfaction was positive because of their broader impact on overall service delivery in the hospital.

Regarding higher levels of job satisfaction, physicians provided the following key recommendations:

- Improve the quality and availability of drugs and other medical supplies
- Provide new technologies and equipment, which should be properly maintained
- Introduce a system for monitoring compliance with professional ethics
- Establish a system for performance recognition related to benefits
- Introduce programmes for continuous professional development, including opportunities for consulting work
- Introduce a systems-thinking approach to decision making based on evidence
- Foster team work
- Take into account the perspectives of all professionals, clients and management.

UNIVERSITY of the
WESTERN CAPE

Table 6: Consequences of job satisfaction levels of the physicians

Variables		Count	Percentage (%)
Categorical variables			
Thought seriously of resigning during last six months	Yes	153	47.5
	No	169	52.5
Diverse patients are fairly treated (N=325)	Yes	292	89.8
	No	33	10.2
Diverse staff are fairly treated (N=321)	Yes	263	81.9
	No	58	18.1
Discrepancy between prior expectations and current job status	Yes	107	32.8
	No	219	67.2
Want to change job within hospital	Yes	100	30.7
	No	226	69.3
Want to be transferred to different hospital	Yes	112	34.4
	No	214	65.6
Assigned to do routine work	Yes	167	51.2

https://etd.uwc.ac.za/

			No	159	48.8
Level of satisfaction affects quality of care			Strongly	108	33.8
			Agree	109	34.1
			Disagree	65	20.3
			Strongly	38	11.9
Reasons for wanting to resign	Rank 1	Rank2	Rank3	Rank4	% Ranked 3 and 4 (Highest)
Supervisor	65	44	39	7	29.70%
Pay	12	15	12	116	82.60%
Benefits	5	21	52	77	83.20%
Career advancement	41	39	56	25	50.30%
What is your workload level			Heavyhigh	59	18.20%
			High	171	52.60%
			Moderate	94	28.90%
			Low	1	0.30%
			Very low	0	0.00%
Stressed at work			Very	33	10.20%
			High	84	25.90%
			Medium	200	61.70%
			Low	7	2.20%
			Very low	0	0.00%
Rating of own health on a scale of 1 to 10, with 1 being extremely poor health and 10 being excellent health			4	1	3%
			7	24	8%
			8	54	17%
			9	71	22%
			10	167	53%

Continuous variable, days of sick leave taken during last six months(N=164)					
Mean	Median	Std. deviation	Percentiles (25)	50	75
4.96	5	3.06	2	5	7

UNIVERSITY of the
WESTERN CAPE

Bivariate analysis

This section presents a bivariate analysis of the association between potential causes and job satisfaction level as measured by the composite score of job satisfaction (see table 4). It also presents the association between the potential consequences of job satisfaction and job satisfaction levels.

The analysis was conducted using 2 by 2 tables (with 95% confidence intervals) to calculate the prevalence ratio for socio-demographic, current professional status and future career plans as potential causes (see table 7). Continuous variables such as age and service years were categorized into two groups to perform a chi-square test. The inter-quartile range in the descriptive analysis section of the results helped to guide the categorization of variables.

https://etd.uwc.ac.za/

Age is categorized into: less than or equal to 35 years; and greater than 35 years. The number of years served in the public sector and the current hospital is categorized into: less than or equal to five years; and greater than five years. In the marital status variable, the divorced physician count was too small to be assessed alone in the analysis and was therefore merged with the single respondent variable.


UNIVERSITY of the
WESTERN CAPE

https://etd.uwc.ac.za/

Table 7: Socio-demographic, current professional status and future career plans of physicians

Variable		N	Composite job satisfaction score (%)		Prevalence ratio	95% confidence interval		P-Value
			Low Satisfaction	Adequate to high satisfaction				
Gender	Male	213	65.7	34.3	1.05	0.8	1.24	**0.603**
	Female	113	62.8	37.2				
Age	<=35	250	70.8	29.2	1.58	1.2	2.06	**000**
	> 35	76	44.7	55.3				
Marital status	Married	115	62.6	37.4	0.95	0.8	1.29	0.555
	Single+	211	65.9	34.1				
Years of public sector service	<= 5	220	69.1	30.9	1.24	1.0	1.50	**0.017**
	> 5	106	55.7	44.3				
Years in current hospital	<= 5	244	69.3	30.7	1.35	1.0	1.70	**0.003**
	> 5	82	51.2	48.8				
Profession	GP	226	65.9	34.1	1.06	0.8	1.27	0.494
	Specialist	100	62.0	38.0				
Plan to remain in current profession	Yes	157	60.5	39.5	0.88	0.7	1.04	0.125
	No	169	68.6	31.4				
Plan to remain in public health sector for 5 years	Yes	156	62.2	37.8	0.93	0.7	1.09	0.357
	No	170	67.1	32.9				
Plan to remain in current hospital for 5 years	Y	6	3	0				(
	No	193	67.4	32.6				
Interest in management position	Yes	99	67.7	32.3	1.07	0.9	1.26	0.461
	No	227	63.4	36.6				
Post graduate degree	Yes	106	61.3	38.7	0.92	0.7	1.10	0.372
	No	220	66.4	33.6				
Plan to emigrate within next 5 years	Yes	159	71.7	28.3	1.23	1.0	1.45	**0.010**
	No	167	58.1	41.9				
Plan to join private health sector	Yes	93	59.1	40.9	1.29	0.9	1.78	0.107
	No	61	45.9	54.1				

Table 7 indicates an association between the socio-demographics, current professional status and future career plans of physicians and the composite job satisfaction score. There was a significant association between age, years of public sector service, service years in the current hospital, and to emigrate within the next five years, and physicians' job satisfaction. For example, physicians aged less than or equal to 35 years were 1.58 more likely to experience low

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

job satisfaction than their older counterparts. None of the other variables assessed showed a significant association with composite job satisfaction.

Bivariate analysis was also conducted using 2 by 2 tables (with 95% confidence intervals) and the job satisfaction composite score to calculate the prevalence ratio for the potential consequences of job satisfaction. The continuous variable "days of sick leave" was categorized into less than or equal to 5 days and greater than 5 days (see table 8). The workload of physicians was categorized into "low to moderate", "high" and "very high". Stress was also divided into two categories: "high to very high" and "moderate to low". Physician-rated health status was categorized into less than or equal to 7 and greater than 7, with a level above 7 indicating very good to excellent health. Since the chi-square analysis works only for 2 by 2 tables, binary logistic regression was used for the three category variable (workload).

There was a significant association between the variable "thoughts about resigning in last six months", "stress", "quality of care", "workload" and "want to change job within hospital", and job satisfaction. For example, physicians who had thought seriously of resigning during the six months prior to data collection were 1.55 times more likely to experience low levels of job satisfaction than those who had not entertained the thought. There were no significant associations between the other variables and physicians' job satisfaction.

UNIVERSITY of the
WESTERN CAPE

https://etd.uwc.ac.za/

Table 8: Consequences of job satisfaction among physicians

Variable		N	Composite job satisfaction score (%)		Prevalence Ratio	95% confidence interval		P_Value
			Low	Adequate to high				
Thoughts of resigning during last six months	Yes	153	79.7	20.3	1.55	1.3	1.83	**0.000**
	No	169	51.5	48.5				
Fair treatment of diverse patients	Yes	292	63.7	36.3	0.88	0.7	1.10	**0.304**
	No	33	72.7	27.3				
Fair treatment of diverse staff	Yes	263	63.9	36.1	0.93	0.7	1.13	0.463
	No	58	69.0	31.0				
Expectations and current job	Yes	107	69.2	30.8	1.11	0.9	1.30	0.241
	No	219	62.6	37.4				
Want to change job within hospital	Yes	100	76.0	24.0	1.27	1.0	1.40	**0.005**
	No	226	59.7	40.3				
Want to be transferred to another hospital	Yes	112	70.5	29.5	1.14	0.9	1.34	0.112
	No	214	61.7	38.3				
Assigned routine work	Yes	167	59.9	40.1	0.89	0.7	1.01	**0.061**
	No	159	69.8	30.2				
Workload categorized (Ref=Low to moderate)	Very high	59	74.6	25.4	1.38	1.0	1.75	**0.011**
	High	171	67.3	32.7	1.24	1.0	1.53	**0.034**
	Low to moderate	96	54.2	45.8				
Stress	High to very high	117	76.9	23.1	1.34	1.15	1.56	0.000
	Low to Moderate	207	58.0	42.0				
Sick leave days taken within 6 months	<=5 days	110	70.9	29.1	1.24	0.9	1.60	0.087
	>5days	54	57.4	42.6				
Rated health status of physicians	<=7	25	84.0	16.0	1.21	0.9	1.48	0.13
	>7	292	63.4	36.6				
Level of job satisfaction affects quality of care to patients	Strongly agree to agree	103	61.3	38.7	0.84	0.72	0.98	0.038
	Disagree to strongly disagree	217	72.8	27.2				

UNIVERSITY of the WESTERN CAPE

Multivariate analysis

Multivariate analysis to obtain the adjusted prevalence ratios for both the potential causes and consequences of low job satisfaction was undertaken using multiple logistic regression analysis.

https://etd.uwc.ac.za/

All variables found to be significant in the bivariate analysis were entered in order to determine the independent effect of each of them on job satisfaction. A composite job satisfaction score categorized into "low satisfaction" and "adequate-to-high satisfaction" was again taken as the dependent variable.

Table 9 presents the results of the multiple logistic regression analysis for the potential causes of job satisfaction. Age and "plans to emigrate in the next five years "were found to be significant predictors of physicians' job satisfaction levels.

Physicians aged less than or equal to 35 years were around four times more likely to experience low job satisfaction levels than their older counterparts, given other variablesbeing constant.

Table 9: Multiple logistic regression analysis of potential causes of low job satisfaction

Variables		P	Adjusted POR	95.0% C.I. for adjusted POR	
				Lower	Upper
Age category	= < 35 years (ref >35)	0.002	3.67	1.59	8.48
Years served in public health sector	= < 5 years (ref= >5)	0.117	2.23	0.82	6.10
Years served in current hospital	< =5 years (ref= >5)	0.173	1.89	0.76	4.74
Plans to emigrate	Yes (ref=No)	0.011	1.86	1.15	3.01

UNIVERSITY of the WESTERN CAPE

Table 10 presents the results of the multiple regression analysis for the potential consequences associated with job satisfaction. "Thoughts about resigning" and "quality of care to patients" were independently associated with low levels of job satisfaction among physicians. The variables "work load", "stress at work" and "want to change job within hospital" were not independently associated with low job satisfaction. For example, physicians who had thought about resigning during the six months proceeding data collection were 4.33 times more likely to experience low job satisfaction levels than those who had not entertained the idea during the same period, with other variables being constant. In this cross- sectional design, no attempt was made to estimate the cause-effect relationship between low job satisfaction and its consequences.

https://etd.uwc.ac.za/

Table 10: Multiple logistic regression analysis of the potential consequences of low job satisfaction

Variable		P	POR	95.0% C.I. for POR	
				Lower	Upper
Thoughts about resigning	Yes (ref =No)	0.000	4.33	2.33	8.07
Stress at work	High to very high (ref =low to medium)	0.082	1.75	0.93	3.27
Want to change job within hospital	Yes (ref =No)	0.583	0.83	0.42	1.63
Level of job satisfaction affects quality of care to patients	Strongly agree to agree (ref =disagree to strongly disagree)	0.006	0.46	0.27	0.80
Work load	Very high (ref=low to moderate)	0.143	1.93	0.80	4.67
	High	0.075	1.71	0.95	3.08

UNIVERSITY of the
WESTERN CAPE

https://etd.uwc.ac.za/

VI. Discussion

This chapter provides a detailed discussion of the prominent findings of the study in relation to the hypotheses and other relevant research. The limitations of the study are then explained, conclusions drawn, and recommendations to improve job satisfaction provided.

A. Level of job satisfaction

Physicians experienced dissatisfaction in relation to almost every variable of job satisfaction. This result is consistent with a study conducted at South Rand Hospital ramasodi (2010), which showed that for almost all variables there was a high level of job dissatisfaction among health care professionals. A low job satisfaction level among physicians in all variables implies that they behave differently in their approach to service provision. For example, physicians dissatisfied with their pay and benefits might behave in a manner that could lead to an increase in their income, whereas physicians dissatisfied with a co-worker's level of cooperation might attempt to move to another department. As a result, hospitals need to target interventions according to the category most relevant to the type of job dissatisfaction being experienced by the physician/s concerned.

In order of magnitude, individual variables in the measurement of job satisfaction for which very large percentages of physicians are dissatisfied (>85% dissatisfied) were:

- Pay levels
- Benefits
- Pay does not reflect effort
- Difference in pay levels between new and experienced staff
- Difference in pay level between private and public sector
- Fairness of job promotion
- Orientation for new employees
- Availability of drugs
- Availability of equipment
- Availability of supplies
- Risk of injury or illness.

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

More than 50% of physicians are satisfied with only six individual variables. In decreasing order these are: "authority to accomplish the work expected" (65%), "jobs provide opportunities for learning new skills" (59%), "work is personally rewarding" (57%)', "good cooperation among members of work group" (53%), "co-workers are friendly and helpful" (53%) and "job security" (52%).

B. Autonomy of practice and cooperation with colleagues

Physicians' satisfaction with the variable "authority to accomplish the work expected" might be negatively related to the extent to which physicians experience stress in the workplace. Around one third (36%) of physicians recorded high to very high levels of stress at work, while 65% were satisfied with their authority to accomplish the tasks assigned to them.

Physicians' levels of satisfaction with their workplace autonomy coincides with the findings of Akroyd and colleagues (1994), who concluded that health workers in an ambulatory care hospital were generally satisfied with their jobs because of the autonomous setting in which they worked.

The facility to which physicians are assigned may affect their autonomy as well as opportunities for them to learn new skills. With that in mind, public hospitals might need to take these factors into account when placing physicians in situations involving duties that may limit them.

UNIVERSITY of the
WESTERN CAPE

C. Age

Age is one of the factors both independently associated with and a probable cause (although a proxy cause) of "low job satisfaction". The adjusted odds ratio suggests that physicians aged less than or equal to 35 years were much more likely to experience low job satisfaction than their older counterparts. This is consistent with the view shared by international authors (Drafke and Kossen, 2002; Greenberg and Baron, 1995; Al Juhani & Kishk, A 2006), that older people are generally happier with their jobs than younger employees.

The relatively low level of job satisfaction among young physicians should be interpreted within the national context of Ethiopia and Addis Ababa as its capital city. Recently graduated

https://etd.uwc.ac.za/

Ethiopian physicians are required to commit to five years' service in public hospitals, failing which they are obliged to pay back 40 thousand USD in tuition fees, which is unaffordable for most graduates. In addition, physicians working in Addis Ababa are required to serve in a public hospital for four years in order to be considered for specialization. While young physicians earn only 200USD per month, they have fewer opportunities for part-time private sector work than older physicians – whose core income is already higher than that of their younger colleagues.

A study by Okpara (2004) cited by Josias (2005) concluded that overall satisfaction is positively associated with age. Explanations for this are listed below.

- Older employees have adjusted to their work over time, which may lead to higher job satisfaction levels
- Prestige and confidence are likely to increase with age, which could result in older employees being more satisfied with their jobs
- Younger employees without family ties may be more mobile, which could lead to restlessness and lower levels of satisfaction with their current employment
- Younger employees are more likely to hold high expectations of their jobs and, if these expectations are not met, may experience lower job satisfaction levels

In addition, experienced older physicians in Addis Ababa are probably preferred by patients to younger physicians because of the experience and confidence they have developed over time.

UNIVERSITY of the
WESTERN CAPE

By contrast, a study conducted by Josias (2005) among 121 workers at an electricity utility in South Africa's Western Cape found that age does not significantly explain the variance in job satisfaction levels among employees. However, 85% of respondents were above 40 years of age. This might suggest an under-representation of younger staff due to employee selection practices, affecting sample size and the potential for a significant relationship to emerge.

The relatively low levels of job satisfaction among younger physicians in Addis Ababa could have important implications for staff turnover, since a young physician not intending to remain long in the public health system is probably less inclined to give thought to strategic ways in

https://etd.uwc.ac.za/

which to improve it in the longer term. A correlation between a large proportion of physicians planning to leave for the private sector or emigrate and low job satisfaction supports this view. In addition, young physicians with relatively low levels of job satisfaction – particularly in respect of their salary – might be absent more frequently in order to earn extra money by working illegally in the private sector. On the other hand, older physicians already relatively satisfied with their jobs might not feel motivated to give extra effort to improving the public health service.

In order to increase job satisfaction levels among young physicians, human resource policy and development programmes should focus on improved payment and benefit packages, align job promotion and career development with performance, and ensure that policy is implemented fairly with the involvement of staff.

D. Gender

While one third of the study participants are females, no association was found between gender and low job satisfaction. Regarding gender, Robbins and colleagues (1999) noted that no evidence has been found to suggest that gender has a direct impact on job satisfaction, nevertheless maintaining that gender differences can affect the relationship between job dimensions and job satisfaction. Similarly, a study undertaken by Hulin and Smith (1969) cited in Chui (1998) found that women experienced lower job satisfaction levels as a result of variables that co-varied with gender, including rank and opportunities for promotion.

UNIVERSITY of the
WESTERN CAPE

E. Plans to emigrate

Regarding the number of physicians planning to emigrate, the results suggests that physicians who had considered this option during the six months preceding data collection experience lower job satisfaction levels than those who had not. While Ethiopia is characterized by high emigration rates driven by various socio-economic factors, physicians with friends or relatives elsewhere, or who have registered with private international recruitment agencies, leave the country mainly for economic reasons. With this in mind, plans to emigrate might be a consequence of low job satisfaction among physicians or the cause of it. Physicians who have already chosen to leave the public health service and also to emigrate are therefore more likely to experience lower levels of job satisfaction – or at least claim to do so – since they have lost the motivation to make a positive impact on the system.

https://etd.uwc.ac.za/

According to a strategic plan for human resources compiled by the Ministry of Health, a study conducted in Ethiopia by Sera and colleagues during 2008 revealed that 30% of doctors left the country that year. Notwithstanding the serious implications of a loss of this magnitude for Ethiopia's health sector, it is compounded by the fact that around 72% of medical students have also indicated their intention to emigrate. This would appear to point to ongoing low levels of allegiance both to the public health care sector as a whole and to the state hospitals to which newly qualified physicians are assigned.

F. Years served in public sector and current hospital

While a bivariate analysis of the number of years served in the public sector and at the hospital in which physicians recurrently working identified potential causal factors linked to low job satisfaction levels, these factors were not shown to be independently associated with low job satisfaction levels. Physicians with more than five years' service in the public health sector were more likely to experience higher levels of job satisfaction than those who with fewer than five years' service.

This is consistent with the view shared by international authors Ronen (1978) and Mahdavi et al (2005), who found a significant difference in job satisfaction based on tenure. Ronen, cited in Oshagbemi (2003), asserted that, while employee expectations are high at the time of appointment, when these expectations are not met job satisfaction levels decrease and remain relatively low for the next few years. Employee job satisfaction levels rise again as the employee's years of employment increase. The longer physicians serve in the public sector, the more experience they accumulate and the lower their expectations become – hence the improvement in job satisfaction levels.

G. Thoughts about resigning

Among the factors strongly and independently associated with, and probably a consequence of, low job satisfaction levels is "thoughts about resigning" The study revealed that around half the participating physicians had thought seriously of resigning during the six months prior to data collection. Given that "thoughts about resigning" and job satisfaction are inversely related, the

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

lower the job satisfaction level the higher the intention to resign. Typically, poor pay and low benefits are the top reasons for resigning, although low job satisfaction levels clearly impact on the decision. A study conducted in Uganda among 700 health workers in 2007 showed that half of the participating doctors would like to leave their jobs (Ugandan Ministry of Health, 2007). This appears to indicate similar levels of dissatisfaction to those found in Addis Ababa's public hospitals, where around half the physicians participating in the study planned either to leave the public sector or to emigrate within five years. The implications of this for a public health sector already burdened with scarcity of skilled human resources are serious, not to mention the futility of spending money on training people who are likely to leave not only the public service but also the country. This is consistent with the findings of Ronra and Chaisawat (2009), Lu (2002), Robbins (1999) and Lance (1995). In their research into the impact of job satisfaction on employee turnover at hotel resorts in Thailand, Ronra and Chaisawat found that variables related to job satisfaction – such as insufficient tools and inadequate resources to do the daily work – were the main causes of high staff turnover, followed by inadequate recognition and rewards for a job well done.

On the other hand, in a study of job satisfaction levels among physicians, Pathman and colleagues (2002) found that building increasingly higher levels of job satisfaction generally does not prevent attrition. They concluded that job satisfaction is relative and recommended that – in order to foster workforce stability – managers should address aspects of physicians' work or jobs causing them relative dissatisfaction or, more specifically, satisfaction lower than that of physicians working elsewhere. The study also revealed that, compared to the private sector, almost all (97%) participating physicians' experienced low levels of satisfaction in respect of pay and benefits. On that basis, it is hardly surprising that 60.4% of physicians working in Addis Ababa's state hospital plan to join the private sector within the next five years.

H. Pay and benefits

Variables related to pay and benefits are among those that adversely affected more than 85% of physicians participating in the study. In Ethiopia's public health system, the salaries and benefits of professionals do not keep pace with inflation; the current remuneration structure was approved in 1997, with obvious implications for purchasing power. Neither does pay reflect the number of

UNIVERSITY of the WESTERN CAPE
https://etd.uwc.ac.za/

years' experience a physician may have accumulated. While newly graduated professionals may reach their salary ceiling within a short period of time, more experienced physicians often receive packages similar to those of their less experienced colleagues.

In addition, many international development organisations offering better salary packages for physicians are based in Addis Ababa, where several private hospitals generally associated with higher salaries are also located. Together with the impact of spiralling food, shelter and transport costs, this relative difference in salary might increase the level of job-related dissatisfaction among physicians working in public hospitals – with possible implications for motivation that could lead to higher rates of absenteeism, lower levels of commitment to service delivery and patient care, and several spill-over effects such as ill health and job attrition.

I. Availability of drugs, equipment and supplies

Despite a reengineering of the overall pharmaceutical management system in 2010, public hospitals still suffer from a shortage of drugs, medical equipment and supplies. Budget constraints, poor inventory management and long procurement processes were identified as challenges in the Ministry of Health's 2012 annual report. On-going shortages tend to imply that physicians are obliged to prescribe based on second- or third-rate alternatives and to make decisions in the absence of a comprehensive diagnosis. The negative implications of conditions such as these on a physician's job satisfaction are clear, pointing to an urgent need for systems to address this at hospital level.

UNIVERSITY of the
WESTERN CAPE

J. Concern for quality of care

This was a dimension in which 72% of participating physicians were dissatisfied. However, since those experiencing low job satisfaction levels were unlikely to acknowledge their impact on the quality of care they provide, the research indicated an adjusted odds ratio of 0.46. This differs from the findings of studies conducted by Peltier and Dahl (2009), Aiken, L.H and colleagues (2012), Kwak and colleagues (2010), and Julia and colleagues (1997), all of which showed that job satisfaction does affect the quality of care patients receive.

To understand how employee satisfaction, patient care and patient satisfaction are linked, Peltier and other researchers conducted an empirical study at a major public hospital in New York City.

https://etd.uwc.ac.za/

They found that a high level of employee engagement with work improves job satisfaction, resulting in better patient care. Also citing Peltier's research, a study conducted by Newman and associates (2001) shows a chain of connectivity linking working conditions and the work environment to staff service capability, influencing job satisfaction and, in turn, affecting staff retention. Improvements in respect of all these factors can result in better quality patient care and higher levels of patient satisfaction. In other words, hospitals providing a working environment that enhances the service capability of staff through opportunities for empowered decision making will nurture positive levels of job satisfaction among physicians – who are more likely to remain loyal to the organization and provide higher levels of care.

Aiken, L.H and others also conducted cross-sectional surveys among more than 61,000 nurses and 131,000patients in 12 countries across Europe as well as the United States, focusing on patient safety, patient satisfaction, and quality of hospital care. In all these countries, they found that nurse staffing levels and the quality of the hospital's work environment (managerial support for nursing care, good doctor-nurse relations, nurse participation in decision making, and organizational prioritization of quality of care) were significantly associated with patient satisfaction and the quality and safety of care.

The two studies show that, while job satisfaction impacts positively on the quality of patient care, job dissatisfaction does not necessarily mean that physicians intentionally compromise the quality of care they provide. It can therefore be concluded that quality of care to patients might be improved by encouraging physicians' involvement in decisions made with the aim of improving the capacity of hospitals to deliver health services effectively.

UNIVERSITY of the
WESTERN CAPE

K. Work and job stress

Dimensions in which the majority of physicians are satisfied (>60%) are "satisfaction with the work" and "job stress". Because cases are referred to Addis Ababa's relatively well-resourced hospitals from all over the country, physicians encounter a greater variety of cases and therefore have more opportunities not only to make good use of their existing skills but also to learn new ones. Their likelihood of working with clinicians with sub-speciality training from other countries is also higher. In addition, physicians in Ethiopia are often assigned to lead different

https://etd.uwc.ac.za/

case teams and given relatively high degrees of authority so that they can accomplish the job. Together, these factors might well enhance job satisfaction among the majority of physicians, improving productivity levels and reducing stress.

However, the study also revealed that more than 70% of participating physicians experienced heavy workloads, possibly resulting in work-related stress. In addition, 56% of physicians showed low satisfaction levels in respect of counter-productive aspects of the hospital system over which they have no control. This might limit the impact of their work to areas of service delivery in which they exercise some degree of authority.

Satisfaction with both their work and related stress levels implies that physicians feel confident in performing their duties and taking on challenging assignments despite shortcomings in many aspects of their work environment. While overall service delivery and quality of care might well benefit from this, evidence suggests that a heavy workload and the impact of dysfunctional aspects of the hospital environment on a physician's ability to perform well could increase job-related stress levels, resulting in poor patient outcomes. It can therefore be concluded that issues affecting a physician's ability to perform according to expectations need to be addressed holistically if the quality of overall patient care is to improve.

L. Factors not associated with low job satisfaction

Potential causal factors linked to "low job satisfaction" for which no association was found in this study are "gender", "marital status", "profession", "plans to remain in current profession", "plans to remain in current hospital", "interest in management position", "post-graduate degree" and "plans to join private sector". This tends to imply that interventions designed to address these variables may not necessarily improve job satisfaction levels among physicians. The other causes of low job satisfaction among physicians in Addis Ababa's public hospitals should therefore be given priority attention.

M. Overall measure of job satisfaction and job satisfaction within dimensions

On composite overall score, the majority (65%) of physicians experience low levels of job satisfaction. This is consistent with a study undertaken by Chaudhury and Banerjee (2004) to assess the job satisfaction of medical officers working at a military hospital in India, in which

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

they reported low levels of job satisfaction. Similarly, according to a study conducted by the Ugandan Ministry of Health (2007), fewer than half the Ugandan health workforce was found to be satisfied with their jobs.

All individual variables are directly correlated with the overall measurement of job satisfaction, with some being relatively weak predictors and others relatively strong. Variables such as "opportunities to improve job skills", "frequent visits from senior management", "concern about employees", "job security", "authority to accomplish work" and "availability of team members to assist with workload" are poor predictors with a Pearson correlation of less than 0.4. Variables such as "policy and practice promoting patient care", "encouragement from supervisor", "human resource policy consistently implemented", "realistic goals" and "managers concerned about capacity to accomplish tasks assigned" are good predictors, with a Pearson correlation greater than 0.7. This suggests that working towards addressing issues found to impact negatively on the overall job satisfaction levels among physicians could bring about a marked improvement.

While all individual variables are directly correlated with the single broad measurement "All in all I am satisfied with my job", only the dimensions "overall workplace morale" and "satisfaction with work "showed strong levels of correlation with it. As a result, this measurement cannot be used as an overall summary of job satisfaction levels.

UNIVERSITY of the
WESTERN CAPE

In the dimensions "overall workplace morale", "career advancement and training", "hospital policy and its implementation", "supervisor considerate", "productivity", "working conditions", "concern for patient care" and "co-worker cooperation", all the individual variables and the dimensions themselves were strongly correlated with the overall measurement of job satisfaction. This suggests that – instead of measuring all 13 dimensions – these eight dimensions could be used in Ethiopia and similar settings to measure overall job satisfaction. It might even be possible to just four – "hospital policy and its implementation", ""considerate supervisor", "concern for patient care" and "productivity" – to measure overall job satisfaction, since these correlate very strongly with it.

https://etd.uwc.ac.za/

Although not properly assessed in this study, recently engineered organizational changes in overall health sector delivery systems might affect the hospital environment as well as physicians' satisfaction levels across all variables. Hospitals therefore need to closely monitor the impact of these reforms on hospital policy, productivity and efficiency.

While variables such as pay, benefits, "pay does not reflect effort", "differences in pay levels between new and experienced staff" and, "differences in pay levels between private and public sectors" showed large percentages of physicians with low job satisfaction levels, their correlation with the overall measurement of job satisfaction was low. This suggests that improvements in respect of these variables might not necessarily increase overall job satisfaction levels among physicians, although they could have a positive impact on certain individuals. Physicians appear to view the rewards of their work (pay and benefits) as separate from the job itself, so the overlap between these two issues is small. Job satisfaction as a whole cannot, therefore, be determined by measuring levels of satisfaction with pay and benefits only.

Although Stevens (2005) found remuneration to be limited in its effect on employees' job satisfaction, Herzberg (1957) identified salaries as the most important "hygiene issue" in creating a zero level of motivation. This suggests that, if it keeps pace with inflation, an employee's salary can prevent job dissatisfaction. Nevertheless, an increase in salary does not necessarily improve job satisfaction. While financial reward helps to fulfil basic needs, its influence on job satisfaction is limited above an income level at which those needs are met. However, because basic needs are relative, actual income thresholds vary according to context.

UNIVERSITY of the
WESTERN CAPE

Severable variables such as "fairness of job promotion", "orientation for new employees", "availability of drugs", "availability of equipment", "availability of supplies", and "risk of injury or illness "showed a high level of correlation with low job satisfaction levels among a large percentage of physicians. This implies that improvements in respect of these variables would probably improve overall job satisfaction levels. Regarding promotion-related variables, a study undertaken by Ahmadi and Alireza (2007) showed that lack of encouragement and recognition may lead to stress, causing dissatisfaction, burnout and eventually an increased staff turnover.

https://etd.uwc.ac.za/

VII. Limitations

The limitations of this study include aspects of the methodology used and the context in which it took place.

It is difficult to distinguish between cause and effect in a cross-sectional study. For example, a physician wanting to change jobs within a hospital might choose this option in order to address burnout after working in one department for a long period of time. On the other hand, job dissatisfaction generally might cause a physician to consider moving.

The study was conducted in Addis Ababa, Ethiopia's capital city and largest urban area. Its results can therefore only be generalized to physicians working in city hospitals and not to those serving small towns and rural areas.

The study did not include physicians who had already left their jobs as a result of job dissatisfaction. This could imply that physicians working in the hospitals at the time of data collection were relatively satisfied with their jobs, creating a bias in the results in respect of job satisfaction levels among physicians still serving in public hospitals. However, because younger newly graduated physicians are constantly joining the staff while other young physicians are leaving because of regulatory requirements, this limitation only applies to older physicians

UNIVERSITY of the
WESTERN CAPE

The study did not measure variables such as economic status, involvement of the general public in hospital governance, being able to take pride in a job well done, and the availability of a functioning electronic health technology system – all of which might impact on job satisfaction.

The study did not assess the effect of recent organizational changes, many of which have involved the transfer of employees from one position to another across reconfigured departments.

Variables such as addiction, experience of recent conflict, prevalence of malpractice, and the extent and impact of complaints from patients were not measured but might never the less potentially lead to low job satisfaction levels.

https://etd.uwc.ac.za/

This study was used only structured approach to conduct study to enhance generalizability of the finding to larger population to maximize its implement ability through attracting attention from scientific community and human resource development policy makers. It would be better to conduct qualitatively to fill gaps which could be created due to structured approach of data collection.

VIII. Conclusions

On overall measurement of job satisfaction the majority (65%) of physicians experience low levels of job satisfaction and recorded dissatisfaction in respect of almost every variable and dimension of job satisfaction. "Age" and "plans to emigrate" are factors independently associated with and probable causes of low job satisfaction while "thought about resigning" and "quality of care" are factors independently associated with and probable consequences of it. Other findings of the study are summarized below.

Improving variables such as the fairness of job promotion procedures; the orientation of new employees; the availability of drugs, equipment and supplies; and reducing the risk of work-related injury or illness would probably improve overall job satisfaction levels.

All individual variables and dimensions are directly correlated with the overall measure of job satisfaction, ranging from weak to strong

UNIVERSITY of the
WESTERN CAPE

Very large percentages of physicians are dissatisfied with dimensions relating to pay and benefits, working conditions, hospital policy and its implementation, career advancement and training, and concern for patient care.

More than 85% of participating physicians are dissatisfied with the variables: "pay levels";"benefits";"pay does not reflect effort";"differences in the pay levels of new and experienced staff";"differences in pay between private and public sectors";"fairness of job promotion;"orientation of new employees";"availability of drugs, equipment and supplies"; and "risk of injury or illness".

https://etd.uwc.ac.za/

Improvements in payment and benefits would probably not improve the overall job satisfaction levels of physicians. This is because the variables concerned show low levels of correlation with the overall measurement of job satisfaction, despite the fact that large percentages of physicians recorded low job satisfaction levels in respect of payment-related variables.

The dimensions "hospital policy and its implementation", "supervisors considerate", "concern for patient care" and "productivity" correlate very strongly with overall job satisfaction. Measuring these dimensions only would therefore provide sufficient information with which to assess overall job satisfaction.

IX. Recommendations

The low level of job satisfaction among physicians highlights the need for policies, strategies and programmes to address the issues entailed, thereby improving service delivery and the quality of care patients receive. Based on the study results, appropriate and practical recommendations are presented below.

Regularly identify and address the expectations of young physicians. By way of example, revisit the time they are required to work before they can join a specialty service, and involve them in the assignment of tasks.

UNIVERSITY of the
WESTERN CAPE

Devise strategies and programmes to improve the fairness of job promotion procedures and provide orientation for new employees so that they understand what can be realistically expected of them and what they should do to improve their working conditions.

Improve the availability of drugs, equipment and supplies by strengthening existing management systems and involving physicians in drug and therapeutic committees.

Reduce the risk of injury or illness through interventions to strengthen infection controls and the provision of post-HIV exposure prophylaxis, among other things.

https://etd.uwc.ac.za/

Periodically perform a rapid assessment of job satisfaction using the dimensions "hospital policy and its implementation", "considerate supervisors", "concern for patient care" and "productivity" to determine how much progress is being made.

In addition, further research is required in order to include the views of physicians and other health professionals who have already left Addis Ababa's public hospitals as part of a broader assessment of the causes and consequences of job satisfaction. . This could explore the potential of various factors either to cause or become consequences of low job satisfaction and should include: .the reasons for physicians resigning from public hospitals; the role of physicians in team work; the effect of physicians' economic status on job satisfaction; and the influence of pay increases on performance where such increases are deserved.


UNIVERSITY of the
WESTERN CAPE

https://etd.uwc.ac.za/

X. References

Abdel-Halim, A. (1983). Effects of task and personality characteristics on subordinate responses to participative decision making. *Academy of Management Journal*, 26 (3): 477-84.

Al Juhani, A.M. and Kishk, N.A. (2006). Job Satisfaction among Primary Health Care Physicians and Nurses in Al-Madinah Al-Munawwara. JEPHAss, 81(3): 165-180.

Africa Health Workforce Observatory. (2010). Human Resources for Health: Country Profile Ethiopia.[Online],Available:[http://www.unfpa.org/sowmy/resources/docs/library/R045_AHWO_2010_Ethiopia_HRHProfile.pdf] [Downloaded: 07/13/13 8:30 PM]

Ahmadi, K. and K. Alireza, (2007). Stress and job satisfaction among air force military pilots. *Journal of Social Sciences,* 3(3): 159 – 163.

Aiken, L.H., Sermeus, W., Heede, K.V., Sloane, D.M., Busse, R., McKee, M., Bruyneel, L., Rafferty, A.M., Griffiths, P., Moreno-Casbas, M.T., Tishelman, C., Scott, A., Brzostek, T., Kinnunen, J., Schwendimann, R., Heinen, M., Zikos, D., Sjetne, I.S., Smith, H.L., and Kutney-Lee, A. (2012). Patient safety, satisfaction, and quality of hospital care: Cross sectional surveys of nurses and patients in 12 countries in Europe and the United States. British Medical Journal, 22(4) 344-1717.

Akroyd, D., Wilson, S., Painter, J. and Figuers, C. (1994). Intrinsic and extrinsic predictors of work satisfaction in ambulatory care and hospital settings. *Journal of Allied Health*, 23(3):155-164.

Anastasi, A. and Urbina, S. (1997). *Psychological testing (Seventh edition)*. New Jersey: Prentice-Hall Inc.

Arvey, R.D., Dewhirst, H.D. and Boling, J.C. (1976). Relationships between goal clarity, participation in goal setting, and personality characteristics on job satisfaction in a scientific organization. *Journal of Applied Psychology*, 61, 103-105.

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

Bodur, S. (2002). Job satisfaction of health care staff employed at health centres in Turkey. *Occupational Medicine*, 52 (6): 353–355

Carr, K.K. and Kazanowski, M.K. (1994). Factors affecting job satisfaction of nurses who work in long-term care. *Journal of Advance Nursing*, 19: 878-883.

Chaudhary S. and Banerjee A. (2004). Correlates of job satisfaction in medical officers. *Med Journal Armed Forces India*, 60: 329-332

Chen, L.H. (2008). Job satisfaction among information system (IS) personnel: Computers in Human Behaviour. 24: 105-118.

Chiu, C. (1998). Do professional women have lower job satisfaction than professional men? Lawyers as a case study [Electronic version]. *Sex roles*, 38 (7/8): 521-537

Crow, S.M. and Hartman, S.J. (1995). "Can't get no satisfaction ". *Leadership and Organization Development Journal*, 16 (4): 34-38.

Daniel, W.W. (1999). *Biostatistics: a foundation for analysis in the health sciences (Seventh edition)*. New York, John Wiley and Sons.

Deressa, W. and Azazh, A.(2012). Attitudes of undergraduate medical students of Addis Ababa University towards medical practice and migration, Ethiopia. *BMC Medical Education*, 12-68.

Dessler, G. (2000). *Human resource management (Eighth edition).* New Jersey: Prentice-Hall.

DiMatteo, M. R., Donald, S.C., Ron, D.H., Lynn, O., Richard, L.K., Elizabeth, A.M., Sherrie, K., William, H.R. (1993). Physicians' characteristics influence patients' adherence to medical treatment: Results from the medical outcomes study. *Health Psychology,* 12 (2): 93-102.

Drafke, M.W. and Kossen, S. (2002). *The human side of organizations (Eighth edition)*. New Jersey: Prentice-Hall Inc.

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

Dubrine, A. (1981). *Personnel and human recourse management*. NewYork: D.Van Nostrand Co, 9: 121-133.

Edwards, B.D., Bell, S.T., Arthur, W. & Decuir, A.D. (2008). Relationships between Facets of Job Satisfaction and Task and Contextual Performance. *Journal of International Association of Applied Psychology, 57*(3): 441–465.

Faragher, E.B., Cass, M. and Cooper, C.L. (2005). The relationship between job satisfaction and health: A meta-analysis. *Occupational Environment Medicine*, 62: 105-12.

Federal Ministry of Health. (2009). Health and Health Related Indictors. Addis Ababa, Ethiopia.

Federal Ministry of Health. (2009). Human Resource for Health Strategic Plan 2009-2020. Addis Ababa, Ethiopia.

Federal Ministry of Health. (2010). Health Sector Development Plan IV: Annual performance report. Addis Ababa, Ethiopia.

Feinstein, A.H. and Harrah, W.F. (2000). A study of relationships between job satisfaction and organizational commitment among restaurant employees. 5(3): 23 - 27.

Federal Ministry of Finance and Economy Development. (2010). Growth and Transformation Strategic Plan 2011-2015. Addis Ababa, Ethiopia.

Futrell, C.M. (1979). Measurement of salespeople's job satisfaction: Convergent and discriminate validity. *Journal of Marketing Research*, 16(4): 594-598.

Greenberg, J. and Baron, R.A. (1995). *Behavior in organizations: Understanding and managing the human side of work (Fifth edition)*. Trenton: Prentice-Hall.

Haas, J.S., Cook, E.F., Puopolo, A.L., Burstin, H.R., Cleary, P.D. and Brennan, T.A. (2000). Is the professional satisfaction of general internists associated with patient satisfaction? *JGIM*, 15(2): 122-188.

UNIVERSITY of the
WESTERN CAPE

https://etd.uwc.ac.za/

Hackman, J. R. and Oldham, G.R. (1975). Development of the Job Diagnostic Survey. *JAP*, 60(2): 159-170.

Hadley, J., Mitchell, J.M., Sulmasy, D.P. and Bloche, M.G. (1999). Perceived financial incentives, HMO market penetration, and physicians' practice styles and satisfaction. *Health Service Research 34(1/2)*. 307–21.

Hammer, W. C. and Organ, D.W. (1978). *Organizational Behaviour: An applied psychological approach.* Dallas, TX: Business Publication, (2): 216 - 289

Health System Corporation/ the Johns Hopkins Hospital. (2005). Employee satisfaction survey: action planning guide.

Herzberg, F., Mausnes, B., Peterson, R.O. and Capwell, D.F. (1957). *Job attitudes: review of research and opinion.* Oxford, England: Psychological Service of Pittsburgh: 12(279).

Hinshaw, A.S. and Atwood, J.R. (1984). Nursing Staff Turnover, Stress and Satisfaction: Models, Measures and Management. *Annual Review of Nursing Research*, 1: 133-153

Huby, G., Gerry, M., Mckinstry, B., Porter, M., Shaw, J. and Wrate, R. (2002). Morale among general practitioners: qualitative study exploring relations between partnership arrangements, personal style and workload. *British Medical Journal,* 325(140).

UNIVERSITY of the
WESTERN CAPE

Ivanchvich, J. (1998). *Human Resource Management (Seventh edition)*. USA: Irwin McGraw Hill.

Josias, B.A. (2005). *The relationship between job satisfaction and absenteeism in selected filed service section within an electricity utility in the Western Cape*. [Online], Available: http://www.studymode.com/ [Downloaded: 06/11/13 8:30 PM]

Julia, E.M., Eric, Williams, E., Mark, D.S., Douglas, J., Kirk, J.V., Konrad, R., Gerrity , M., Bigby, J.A. and Linzer, M. (1997). Physician Job Satisfaction: Developing a Model Using Qualitative Data. *J Gen Intern Med*, 12(11): 711–714.

https://etd.uwc.ac.za/

Kalleberg, A.L. and Grifinon, L.J. (1978). Positional sources of inequality in job satisfaction, work and Occupations. 5: 371- 401.

Kam, L.F. (1998). Job satisfaction and autonomy of Hong Kong registered nurses. *JAN*, 27: 355-363.

Khuwaja, A.K., Qureshi, R., Andrades, M., Fatmi, Z. and Khuwaja, NK. (2004). Comparison of job satisfaction and stress among male and female doctors in teaching hospitals of Karachi. *Ayub medical college Abottabad*, 16(1): 23-27.

Kinicki, A.J., McKee-Ryan, F.M., Schriesheim, C.A. and Carson, K.P. (2002). Assessing the construct validity of the Job Descriptive Index: A review and meta-analysis. *Journal of Applied Psychology*, 87(1): 14-32.

Kreitner, R. and Kinicki, A. (1995). *Organizational behavior (Third edition)*. New York: Irwin.

Kwak,C., Chung, B.Y., Xu, Y. and Eun-Jung, C. (2010). Relationship of job satisfaction with perceived organizational support and quality of care among South Korean nurses: A questionnaire survey. *Int J Nurs Stud*, 47(10):1292–1298.

Lambrou, P., Kontodimopoulos, N. and Niakas, D. (2010). Motivation and job satisfaction among medical and nursing staff in a Cyprus public general hospital. *Human Resources for Health,* 8(26).

Lance, C.E. (1995). Evaluation of a structural model relating job satisfaction, organizational commitment and precursors to voluntary turnover: Multivariate Behavioural Research. 26:137–162.

Lichtenstein, R.L. (1984). The job satisfaction and retention of physicians in organized settings: literature review. *Medical Care Review,* 41(3): 139–179.

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

Linn, L.S., Yager, J., Cope, D. and Leake, B. (1985). Health status, job satisfaction, job stress and life satisfaction among academic and clinical faculties. *Journal of the American Medical Association,* 254(19): 2775–2782.

Lu, K.Y., Lin, P.L., Wu, C.M., Hsieh, Y.L and Chang, Y.Y. (2002). The relationship among turnover intentions, professional commitment and job satisfaction of hospital nurses. *Journal of Professional Nursing,* 18 (4): 214-219.

Luddy, N. (2005). Job satisfaction among employees at a public health institution in the Western Cape. *MA Thesis*.

Luthans, F. (2001). *Organizational behaviour (Ninth edition)*. New York: McGraw-Hill.

Mahdavi, I., Fazlollahtabar, H., Amiri, N.M., Arabmaghsudi, M. and Kolbadinejad, M. (2005). *Design of a Fuzzy Job Satisfaction Matrix with Dynamic Performance Criteria*. Kuala Lumpur, Malaysia. 12 (3):136-285.

Mahmoud, A.H. (2008). A study of nurses' job satisfaction: the relationship to organizational commitment, perceived organizational support, transactional leadership, transformational leadership and level of education. *European Journal of Scientific Research,* 22 (2): 286-295.

Maslow, A.H. (1954). *Motivation and Personality*. New York: Addison-Wesley Educational Publishers Inc.

McCloskey, J.C. and McCain, B. (1987). Satisfaction, commitment, and professionalism of newly employed nurses. *Journal of Nursing Scholarship,* 19 (10): 20-24.

McCoy, D., Bennett, S., Witter, S., Pond, B., Baker, B., Gow, J., Chand, S., Ensor, T. and McPake, B. (2008). Salaries and incomes of health workers in Sub-Saharan Africa. *The Lancet,* 371: 675-681.

Melville, A. (1980). Job satisfaction in general practice: implications for prescribing. *Social Science and Medicine,* 14 (6): 495–499.

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

Merriam Webster Inc. (1961). *Webster's Third New International Dictionary of the English Language*. Merriam Webster Inc. Springfield.

Miller, J. (1980). Individual and occupational determinants of job satisfaction in work and occupations. *Work and Occupation*, 7(3): 337-366.

Ministry of Civil Service. (2011). Ethiopian civil servants' salary scale guideline. Addis Ababa, Ethiopia.

Mowday, R.T. (1993). Organizational behaviour: linking individuals and groups to organizational context. *Annual Review of Psychology*, 195-229.

Mrayyan, M.T. (2005). Nurse job satisfaction and retention: Comparing public to private hospitals in Jordan. *Journal of Nursing Management*, 13: 40-50.

Nagy, M.S. (2002). Using a single-item approach to measure facet job satisfaction. *Journal of Occupational and Organizational Psychology*, 75(1): 77-86.

Newman, K., Maylor, U. and Chansarkar, B. (2001). The relationship between employee satisfaction and hospital patient experience. [Online], Available:[http://www.marketing.org/files/Hospital] [Downloaded: 07/13/13 8:30 PM]

UNIVERSITY of the
WESTERN CAPE

Newstrom, J.W. and Davis, K., (1989). *Human behaviour at work: organizational behaviour (8th ed.)*. New York. McGraw Hill.

Okaro, A.O., Eze, C.U. and Ohagwu, C.C. (2010). Survey of job satisfaction among Nigerian radiographers in South-Eastern Nigeria. *European Journal of Scientific Research*, 39 (3): 448-456.

Okerlund, V.W., Jackson, P.B. and Parsons, R.J. (1994). Factors affecting recruitment of physical therapy personnel in Utah. *Physical therapy*. 74(2): 177-84.

https://etd.uwc.ac.za/

Okpara, J.O. (2004). Personal characteristics as predictors of job satisfaction: an exploratory study of IT managers in a developing economy. *Information Technology and People,* 17(3): 327-338.

Oshagbemi, T. (2000). Gender differences in the job satisfaction of university students. *Women in Management Review*, 15(7): 331-343.

Oxford Advanced Learner's Dictionary. (2001). Sixth Edition. Oxford University Press.

Palmore, E. (1969). Predicting longevity a follows- up controlling for age. *Gerontology Winter*, 9(1): 247-250.

Penn, M., Romano J.L. and Foat, D. (1998). The relationship between job satisfaction and burnout: a study of human service professionals. *Administration in Mental Health*, 15(3): 157-163.

Peltier, J., Dahl, A. & Mulhern, F. (2009). The relationship between employee satisfaction and Hospital patent experiences. *Forum for People Performance Management and Measurement*, 15-24.

Policy Plan Directorate, Federal Ministry of Health. (2009). Health and Health Related Indicators 2008/2009. Addis Ababa, Ethiopia.

UNIVERSITY of the
WESTERN CAPE

Pathman, D.E., Konrad, T.R., Willams, E.S., Scheckler, W.E., Linzer, M. & Douglas, J. (2002). Physician job satisfaction, job dissatisfaction and physician turnover. *J Fam Pract*, 51(7):593.

Price, J.L. (2001). Reflections on the determinants of voluntary turnover. *International Journal of Manpower*, 22(7): 600-624.

Ramasodi, J.B.R (2010). *Factors influencing job satisfaction among health care professionals at South Rand Hospital.* [Online], Available: http://hdl.handle.net/ [Downloaded: 06/15/13 8:30 PM]

https://etd.uwc.ac.za/

Ranz, J., Stueve, A. and McQuistion, *H.L.* (2001). The role of the psychiatrist: job satisfaction of medical directors and staff psychiatrists. *Community Mental Health Journal*, 37(6).

Rao, V.S.P. and Narayana, P.S. (1996). *Principles and practices of management.* Delhi: Shiba Offset Printing Press.

Robbins, S. P. (1999). *Organisational behaviour: Concepts, controversies, and applications (Fifth edition)*. Englewood Cliffs, NJ: Prentice-Hall.

Ronra, B. and Chaisawat, M. (2009). Factors affecting employee turnover and job satisfaction: a case study of Amari hotels and restaurants. [Online], available: http//manat@phuket.psu.ac.th [Downloaded 6/11/2011 7:30 PM].

Ronen, S. (1978). Job Satisfaction and the Neglected Variable of Job Seniority. *Human Relations*, 31(4): 297-308

Ross, E. (2001). Love the job. *Business Review Weekly*, 23 (4): 56-59.

Sengin, K.K. (2003). Work-related attributes of registered nurse job satisfaction in acute care hospitals. *Journal of Nursing Administration*, 33 (6): 317-320.

Saari, L.M. and Judge, T.A. (2004). Employee attitudes and job satisfaction. *Human Resource Management*, 43 (4): 395-407.

Shah, M.A., Al-Enezi, N., Chowdhury, R.I. and Shah, N.M. (2001). Correlates of job satisfaction among health care professionals in Kuwait. *Medical Principles and Practice,* 10: 156-162.

Simons, T. & Enz, C.A. (1995). Motivating hotel employees: Beyond the carrot and the stick. *Cornell Hotel & Restaurant Administration, Quarterly*, 36(1): 20-27.

Sirin, A.F. (2009). Analysis of relationship between job satisfaction and attitude. *Journal of Theory and Practice in Education*, 5(1): 85-104.

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

Smith, P.C., Kendall, L.M. and Hulin, C.L. (1969). *The measurement of satisfaction in work and retirement: A strategy for the study of attitudes*. Chicago: Rand McNally.

Sonmezer, M.G. and Eryaman, M.Y. (2008). A comparative analysis of job satisfaction levels in public and private schools. *Journal of Theory and Practice in Education, 4(2): 189-212.*

Speakman, H.G., Pleasant, J.M. and Sutton, G.B. (1996). The job satisfaction of physical therapists. *Research international*, 1(4): 247-54.

Spector, P.E. (1997). *Job satisfaction: application, assessment, causes, and consequences.* Thousand Oaks CA, Sage Publications Inc.

Spector, P.E. (2000). *Industrial and organizational psychology (Fifth edition): research and practice*. New York. John Wiley and Sons.

Stevens, P. (2005). *The job satisfaction of English academics and their intentions to quit academia*. [Online], available: http://129.3.20.41/eps/lab/papers/.pdf [Downloaded 6/11/11 1:30 PM]

Sundquist, J. and Johannson, S.E. (2000). High demand, low control and impaired general health working conditions in a sample of Swedish general practitioners. *Scandinavian Journal of Public Health*, 28(2): 123-31.

Shakir, S., Ghazali, A., Shah, I.A., Zaidi, S.A. and Tahir, M.H. (2007). Job satisfaction among doctors working at teaching hospitals in Bahawalpur, Pakistan. *Department of Community Medicine, Quaid-e-Azam Medical College Bahawalpur, PAKISTAN,* 19(3): 42-5.

Tummers, L.G., Steijn, A.J. and Bekkers, V.J.J.M. (2011). *Explaining job satisfaction of public professionals: Policy alienation and politicking in organizations.* EUR-FSW.

Ugandan Ministry of Health (2007). Health workforce study, satisfaction and intent to stay among current health workers.

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

University of Minnesota, Vocational Psychology Research (1977). Minnesota Satisfaction Questionnaire [Online], Available: http://www.psych.umn.edu/psylabs/vpr/default.htm./ [Downloaded 5/11/11]

Walker, C.R and Guest, R.H. (1952). *The man on the assembly line*. Cambridge: Harvard University Press.

Weiss, D.J., Dawis, R.V., England, G.W. and Lofquist, L.Y. (1967). *Minnesota studies in vocational rehabilitation: manual for the Minnesota Satisfaction Questionnaire*.

Wheaton, B. (1990). Life transitions, role histories, and mental health. *American Sociological Review*, 55(2): 209-223.

Wiener, Y. (1982). Commitment in organizations: A normative view. *Academy of Management Review*, 7(3):418-428.

Williams, E.S. and Skinner, A.C. (2003). Outcomes of physician job satisfaction: A narrative review, implications and directions for future research. *Health Care Management Review*, 28(2): 119-39.

Worrell, T.G (2004). School psychologists' job satisfaction: Ten years later. PhD Dissertation, State University.

Yami, A., Hamza, L., Hassen, A. , Jira, C. and Sudhakar, M. (2011). Job Satisfaction and Its Determinants Among Health Workers in Jimma University Specialized Hospital, Southwest Ethiopia. *Ethiop Journal of Health Sci*, 21(1): 19–27.

Zuger, A. (2004). Dissatisfaction with medical practice. *New England Journal of Medicine*. 350(1): 69-75.

UNIVERSITY of the
WESTERN CAPE

https://etd.uwc.ac.za/

XI. Annexures

Information sheet

Project Title: Assessment of job satisfaction among physicians working in hospitals in Addis Ababa, Ethiopia

My name is Tesfaye Gudeta and I am a Master's student at the University of the Western Cape. This research project is being conducted to fulfil my master's degree in public health (MPH). I am inviting you to participate in this research project because you have experience of working in this hospital. The aim of the project is to assess the levels of job satisfaction, the factors influencing job satisfaction and the consequences of job satisfaction among physicians in public hospitals in Addis Ababa, Ethiopia.

You will be expected to complete a self administered questionnaire about job satisfaction. I am requesting you to participate in this study as your perceptions, experiences and insights are extremely important to this study.

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, it will not affect your working conditions in any way.

UNIVERSITY of the WESTERN CAPE

No names will be recorded except on the consent form and your participation in this study is completely anonymous. There are no direct benefits to you. However, information you provide will help to shed light on factors that influence job satisfaction and the consequences of job satisfaction among physicians, which could be used to improve factors affecting the job satisfaction of all physicians.

If you have any questions about the research study, please contact me.

Tesfaye Gudeta

P. O. Box 1234,

https://etd.uwc.ac.za/

Telephone number, +251-911422542 cell, Email <tgbgag@yahoo.com>

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact any supervisor.

Dr. Gavin Reagon

School of Public Health

University of the Western Cape

Private Bag X17

Bellville

South Africa

Telephone: +272119592809

Fax: +27 219592872

E-mail: greagon@uwc.az.za

https://etd.uwc.ac.za/

Consent form

Date: _____

Data collector:_____

Tel: _____

Fax: _____

Email: _____

Institution: _____

Participant code number: _____

Thank you for agreeing to complete the self administered questionnaire. The questionnaire has three sections. I will give you a clear explanation on how to complete them. After completing the questionnaire you will put it into this envelope, seal it and deposit it into a sealed box.

I understood all the information and my participation is completely voluntarily.

Name of participant _____ Signature of participant_____

Date_____

Name of data collector _____ Data collector signature_____

Date_____

UNIVERSITY of the
WESTERN CAPE

https://etd.uwc.ac.za/

Questionnaire

Dear physicians, this research is intended to assess the job satisfaction levels of physicians and its determinant factors. The findings will be used as inputs for a health workforce strategy development. The document aims to assist with relieving physicians' attrition and brain drain problems in a sustainable manner. So, your genuine, complete and timely responses are valuable for the study. Your answers to the questions and all other information you give us will be anonymous.

I thank you for your time.

I. Socio-demographic profile

Please answer the questions below with a short written answer or by circling one of the options listed.

1. What is your sex? ___ Male ___ Female
2. What is your age? ___
3. Marital Status: a) Married b) single c) Divorce d) widowed e) living together as married
4. When did you receive your undergraduate degree? ----------
5. Years of service in the private health sector
6. Years of service in the public health sector
7. Years of service in your current hospital _____
8. Do you provide any private practice service? _____ yes _____ no

If yes, then where private clinic/hospital _____

9. What is your current professional (academic) status

a. GP_____ b. Specialist_____(please, specify)_____

10. Do you plan to remain in your current profession for 5 or more years? ___ yes ___ no
11. Do you plan to remain in the public health sector for 5 or more years?
12. Do you plan to remain in your current hospital for 5 or more years? ___ yes ___ no
13. Are you interested in promotion to a management position? ___ yes ___ no

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

14. Do you have a postgraduate degree? _____ yes _____ no, If yes specify name of degree _____, year obtained_____

15. Do you plan to emigrate within the next 5 years? _____ yes _____ no, if yes then please state why you wish to emigrate

16. Do you plan to join the private health sector in Ethiopia within the next 5 years?

____ yes ____ no

If yes, state why you wish to join the private health sector.

_____

_____

II. Rating level of satisfaction

The purpose of this section of the questionnaire is to give you a chance to tell us how you feel about your present job, what things you are satisfied with, and what things you are not satisfied with. On the following page, you will find statements about your present job. Please read each statement carefully, and decide how satisfied you are with that aspect of your job. Keeping the statement in mind:

_ If you feel the job gives you more than you expected, check the block under "VS" (Very Satisfied)

_ If you feel the job gives you what you expected, check the block under "S" (Satisfied)

_ If you feel indifferent to the job expectation, check the block under "N" (Neutral)

_ If you feel the job gives you less than what you expected, check the block under "DS" (Dissatisfied)

_ If you feel the job gives you much less than what you expected, check the block under "VDS" (Very Dissatisfied)

- Please do this for all statements, and please answer every item.
- Be frank and honest. Give a true picture of your feelings about your present job.

Dimension 1: Overall Job Satisfaction (overall perspective of the job, morale)	VDS	DS	N	S	VS
My job measures up to what I thought it would be when I took it.					
This hospital is a good place to work.					

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

I would proudly recommend this hospital as a good place to work to a friend or relative.					
Compared to similar health facility workplaces in Addis Ababa this hospital is a good place to work.					
All in all, I am satisfied with my job.					
Dimension 2: Satisfaction with the work (satisfaction from performing the duties of the job, is the work interesting/challenging/pleasant)	VDS	DS	N	S	VS
My job makes good use of my skills and abilities.					
My job gives me an opportunity to learn new skills.					
My work is personally rewarding.					
My job gives me an opportunity to do the things that I do best.					
I find my work interesting.					
I leave work often with a good feeling of accomplishment about the work I did that day.					
Dimension 3: Pay and Benefit Satisfaction (reward dimension, satisfaction and perceived equity)	VDS	DS	N	S	VS
I am paid fairly for the work I do.					
My pay reflects the effort I put into doing my work.					
The difference in pay between new and experienced employees doing the same job.					
The benefits I receive (health insurance, vacation, etc.) are adequate.					
Compared to colleagues in the private sector I am satisfied with the pay and benefit package					
Dimension 4: Promotions/Career Advancement & Training (reward dimension, satisfaction and perceived equity)	VDS	DS	N	S	VS
This hospital provides me the opportunity to improve my professional knowledge and job skills.					
The hospital provides effective on-the-job training					
Job promotions in this hospital are fair and objective.					
Promotions at this hospital are based on performance.					
I am satisfied with the past job promotions I have received.					
If I had the skills required for some other job in the hospital, I know that I would be considered for transfer to that job.					
Dimension 5: Supervisory (immediate boss) Consideration (satisfaction	VDS	DS	N	S	VS

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

with employee's immediate supervisor, is he/she considerate/friendly/helpful/supportive/fair)					
Assignments of working are made fairly.					
My immediate supervisor is friendly and helpful.					
My supervisor supports employee suggestions that are meant to correct existing problems. (if it is done)					
The evaluation of my job performance by my supervisor(s) is fair and objective. (if it is done)					
My supervisor encourages my work group to work as a team.					
I have an opportunity to participate in decisions made by my supervisor that affect my work environment.					
My supervisor encourages me to try new ways of doing my job.					
My supervisor regularly gives me valuable feedback on my work performance.					
I get clear directions from my supervisor.					
My immediate supervisor has enough job knowledge to make decisions about my work.					
Dimension 6: Hospital Policies and Implementation (satisfaction with p & p, are they clear/well understood/consistent)	VDS	DS	N	S	VS
Hospital policies are clearly communicated.					
The orientation for new employees is adequate. (if it is provided)					
Senior management responds to employees problems in a fair manner					
There is reasonable consistency between departments in how human resource/personnel policies are administered/ followed.					
I am satisfied with this hospital's human resource/personnel policies.					
I feel I have job security.					
Dimension 7: Productivity/Efficiency (satisfaction with efficiency, workflow, availability of supplies and equipment, acceptance of innovation, interdepartmental cooperation)	VDS	DS	N	S	VS
This organization has realistic goals and objectives.					
Managers of this hospital are appropriately concerned with accomplishing the hospital's goals and objectives.					

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

There is good cooperation between my department and other departments.					
Much of my job effort is productive because of things in the hospital over which I have control.					
This organization makes the best use of new work methods and technological advances.					
I have enough authority to accomplish the work that is expected of me.					
Employees who work here understand the hospital's strategy and mission.					
Availability of functional medical equipment.					
Satisfaction with the availability of drugs.					
Satisfaction with the availability of supplies.					
Dimension 8: Physical Working Conditions (satisfaction with work space, parking)	VDS	DS	N	S	VS
My physical working conditions are comfortable.					
I am satisfied that I can perform my job without serious risk of injury or illness due to unsafe working conditions.					
Satisfaction with cleanliness of the facility.					
Dimension 9: Concern for Patient Care/Customer Service (employee's perception of service quality and clinical quality)	VDS	DS	N	S	VS
This hospital's policies and practices promote the most effective patient/customer care.					
This hospital is committed to quality service for the patient/customer.					
Employees of this hospital show an attitude of genuinely caring about the patients/customers.					
If I was in need of medical care, I would want to be treated at this hospital					
Dimension 10: Co-workers Performance/Cooperation (satisfaction with employee's immediate work group, does employee value and receive pleasure from working with fellow employees)	VDS	DS	N	S	VS
The people I work with are friendly and helpful.					
There is good cooperation among the members of my work group.					
I am satisfied with the work performance of the people with whom I work.					
Dimension 11: Concern for Employees (does organization see the	VDS	DS	N	S	VS

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

employees as a valued resource)					
This organization provides me the opportunity to improve my professional knowledge and job skills					
Senior managers frequently visit my department					
Senior management of this hospital is concerned about the employees					
I feel I have job security					
Senior management responds to my problems in a fair manner					
Dimension 12: Job Stress	VDS	DS	N	S	VS
I have authority to accomplish the work that is expected of me					
Enough people are available in my physician teams to accomplish the necessary workload					

This question has a different format. It requires you to rank the options provided from 1 to 6, with 1 being the variable among those listed below which exerts the greatest importance on your own job satisfaction and 6 exerts the least. Please rank each of the six variables below. You can only rank each variable once.

Dimension 13: Importance to Job Satisfaction	Rank the variables from 1 (for lowest) through 6 (for highest) as to their importance to job satisfaction
Opportunity for additional training	
Career advancement and promotions	
Supervision	
Pay	
Employee benefits	
Organizations policies and procedures	

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

III. Consequences

(This section will help to explore detailed feelings about job satisfaction to supplement above responses)

1. I have thought seriously of resigning in the last six months. Yes _____ No _____

2.

If yes for Question 1 above, then possible best reasons are	Rank the variables from 1 (for lowest) through 4 for (highest) as to importance to job satisfaction
My supervisor/manger	
Pay	
Benefit	
Career advancement	

3A. Diverse clients/patients (differences in race, gender, age, religion, sexual orientation, and family/relative) are treated fairly at this hospital. Yes _____ No _____

3B. Diverse staff are treated fairly. Yes _____ No _____

UNIVERSITY of the
WESTERN CAPE

4. Do you find any discrepancy between your prior expectation and the current status of your job? a) Yes_____ b) No_____

5. Do you want to change your job within this hospital? a) Yes_____ b) _____

Why? Please explain_____

_____

_____

5. Do you want to be transferred to a different hospital? a) Yes b) No

Why? Please explain

_____

6. Have you been assigned to do routine works such as coordinating teams, participating in committee works in addition to professional works?

https://etd.uwc.ac.za/

Yes_____ No_____

If yes, please tell us its effect on your job satisfaction

_____

_____

_____

7. Would you tell us any changes you think should be made to your work circumstances that would affect your satisfaction?

_____

_____

_____

8. How is your workload?

a) Very high b) High c) Moderate d) Low e) Very low

9. To what extent do you feel stressed at work?

a) Very high b) High c) Medium d) Low e) Very low

10. How many days of sick leave have you taken in the last six months? _____

11 How could you rate your own health on a scale of 1 to 10, with 1 being extremely poor health and 10 being excellent health? _____

12. My level of satisfaction with the job affects the quality of care I provide to my patients

a) Strongly agree b) Agree c) Disagree d) Strongly disagree

UNIVERSITY of the
WESTERN CAPE

https://etd.uwc.ac.za/

UNIVERSITY of the
WESTERN CAPE

https://etd.uwc.ac.za/

UNIVERSITY *of the* WESTERN CAPE
DEPARTMENT OF RESEARCH DEVELOPMENT

UWC RESEARCH PROJECT REGISTRATION AND ETHICS CLEARANCE APPLICATION FORM

This application will be considered by UWC Faculty Board Research and Ethics Committees, then by the UWC Senate Research Committee, which may also consult outsiders on ethics questions, or consult the UWC ethics subcommittees, before registration of the project and clearance of the ethics. No project should proceed before project registration and ethical clearance has been granted

A. PARTICULARS OF INDIVIDUAL APPLICANT

NAME: Tesfaye Gudeta TITLE: Mr.

DEPARTMENT: School of Public Health FACULTY: Health Science

FIELD OF STUDY: Masters Degree in public health

ARE YOU:				
A member of UWC academic staff?	Yes	☐	No	☒
A member of UWC support staff?	Yes	☐	No	☒
A registered UWC student?	Yes	☒	No	☐
From outside UWC, wishing to research at or with UWC?	Yes	☐	No	☒

UNIVERSITY of the WESTERN CAPE

B. PARTICULARS OF PROJECT

PROJECT NUMBER: TO BE ALLOCATED BY SENATE RESEARCH COMMITTEE:

EXPECTED COMPLETION DATE: march 2013

PROJECT TITLE: Assessment of job satisfaction amongst physicians working in hospitals in Addis Ababa, Ethiopia

THREE KEY WORDS DESCRIBING PROJECT: Job satisfaction, job satisfaction factors, work environment condition

PURPOSE OF THE PROJECT: The aim of the study is to assess the levels of job satisfaction, the factors influencing job satisfaction and the consequences of job satisfaction among physicians in public hospitals in Addis Ababa, Ethiopi

M-DEGREE: MPH D-DEGREE:

POST GRADUATE RESEARCH:

https://etd.uwc.ac.za/

C. PARTICULARS REGARDING PARTICULAR RESEARCHERS

	FAMILY NAME:	INITIALS:	TITLE:
PRINCIPAL RESEARCHER:	Gudeta	Tesfaye	Mr.

OTHER RESEARCH PROJECT LEADERS:

OTHER CO-RESEARCHERS.

THESIS: STUDENT RESEARCHER:	Gudeta	Tesfaye	Mr
THESIS: SUPERVISOR:	Reagon	Gavin	Dr.
Co-supervisor:	Haile Mariam	Damen	Prof.

C. GENERAL INFORMATION

STUDY LEAVE TO BE TAKEN DURING PROECT (days): No

IS IT INTENDED THAT THE OUTCOME WILL BE SUBMITTED FOR PEER REVIEWED PUBLICATION?
YES ☒ NO ☐

COMMENTS: DEPARTMENTAL CHAIRPERSON:

SIGNATURE OF THESIS STUDENT RESEARCHER – WHERE APPROPRIATE:

DATE Sept 10, 2013

SIGNATURE OF THESIS SUPERVISOR – WHERE APPROPRIATE:

DATE

SIGNATURE OF PRINCIPAL RESEARCHER - WHERE APROPRIATE

DATE:

SIGNATURE OF DEPARTMENTAL CHAIRPERSON:

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

DATE:

NOTE: THESE SIGNATURES IMPLY AN UNDERTAKING *BY THE RESEARCHERS*, TO CONDUCT THE RESEARCH ETHICALLY, AND AN UNDERTAKING BY THE THESIS SUPERVISOR (WHERE APPROPRIATE), AND THE DEPARTMENTAL CHAIRPERSON, TO MAINTAIN A RESPONSIBLE OVERSIGHT OVER THE ETHICAL CONDUCT OF THE RESEARCH.

E. DESCRIPTION OF PROJECT AND RESEARCH ETHICS STATEMENT

The study will describe job satisfaction levels, factors affecting job satisfaction and the consequences of job dissatisfaction amongst physicians within Ethiopian health delivery system, and thereby assist health policy makers to address these issues.

Data collection will be carried out only on those who have been fully informed about the study and have signed consent forms after carefully reading and understanding the purpose and contents of the study. The ethical principles such as autonomy, justice, beneficence and non-maleficence will be fully implemented with respect to study participants and study hospitals. The study participants will be told that they will not face any harm if they do not participate in the study. Furthermore, the study will be completely anonymous.

The results from this study will be made available to the physicians at the hospitals, the management of the hospitals, the Ministry of Health and anybody who needs it.

UNIVERSITY of the
WESTERN CAPE

https://etd.uwc.ac.za/

Operational Definitions

Job satisfaction: Satisfaction is the function of the correspondence between the individual need and the reinforcement system of the job

Job satisfaction factors: Variables that affect job satisfaction such as type of work, pay and benefit, promotion, career advancement, work policies, supervisory issues, productivity, work conditions, concern for patient care, co-worker performance, concern for employees, and job stress.

Job satisfaction consequence: Positive or negative consequences due to job satisfaction that affect organizations' performance and employees' personal lives. These are staff turn over, absenteeism, quality of care, physical and psychological well-being.


UNIVERSITY of the
WESTERN CAPE

https://etd.uwc.ac.za/

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959, Fax: 27 21-959

UNIVERSITY OF THE WESTERN CAPE

School of Public Health

Private Bag X17 • BELLVILLE • 7535 • South Africa

Tel: 021- 959 2809, Fax: 021- 959 2872

Project title: Assessment of job satisfaction among physicians working in hospitals in Addis Ababa , Ethiopia

UNIVERSITY of the
WESTERN CAPE

https://etd.uwc.ac.za/

UNIVERSITY of the
WESTERN CAPE

OFFICE OF THE DEAN
DEPARTMENT OF RESEARCH DEVELOPMENT

14 February 2013

To Whom It May Concern

I hereby certify that the Senate Research Committee of the University of the Western Cape has approved the methodology and ethics of the following research project by:
Mr T Cheru (School of Public Health)

Research Project:	Assessment of job satisfaction among physicians working in hospitals in Addis Ababa, Ethiopia.
Registration no:	13/1/5

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

The Committee must be informed of any serious adverse event and/or termination of the study.

UNIVERSITY of the
WESTERN CAPE

Ms Patricia Josias
Research Ethics Committee Officer
University of the Western Cape

Private Bag X17, Bellville 7535, South Africa
T: +27 21 959 2988/2948 F: +27 21 959 3170
E: pjosias@uwc.ac.za
www.uwc.ac.za

A place of quality,
a place to grow, from hope
to action through knowledge

https://etd.uwc.ac.za/

Reference A448/4390/227
Date 27.03.2013

The Addis Ababa City Administration Health Bureau

To Minilik Memorial Hospital
To Ras Desta Memorial Hospital
To Zewditu Memorial Hospital
To Yekatit 12 Memorial Hospital
To Gandi Memorial Hospital
To Tirunesh Beijing Hospital
Addis Ababa

Subject; Request to access Health Facilities to conduct approved research

This letter is to support Tesfaye Gudeta to conduct research, which is titled as "Assessment of Job satisfaction amongst physicians working in Hospitals in Addis Ababa. Ethiopia".
The study proposal was duly reviewed and approved by University Western cap IRB, subsequently reviewed and approved by Addis Ababa Health Bureau REC, the principal investigator is informed with a copy of this letter to report any changes in the study procedures and submit an activity progress report to the Ethical Committee as required.
Therefore we request the health facility staff to provide support to the principal investigator.

With Regards

Dr Tadesse Ayalew
Head. Ethical Clearance committee

Cc: - Tesfaye Gudeta
Addis Ababa
Ethical Clearance Committee
Addis Ababa

UNIVERSITY of the WESTERN CAPE

https://etd.uwc.ac.za/

የኢትዮጵያ ፌዴራላዊ ዴሞክራሲያዊ
ሪፐብሊክ
የጤና ጥበቃ ሚኒስቴር

Federal Democratic Republic of
Ethiopia
Ministry of Health

ቀን 12. 02. 2013
Date
ቁጥር FMOH/ S349 / 489
Ref. No.

To: **Alert Hospital**
St. Paul Hospital Millenium Medical College
St. Peter Specialized Hospital
Amanueal Mental Health Specialized Hospital
Black Lion Specialized Hospital
Addis Ababa

Subject: **Request to participate in physician satisfaction assessment**

Our staff, Mr. Tesfaye Gudeta is an MPH student at the University of the Western Cape. As partial fulfillment of masters degree on human resource for health the student got an ethical clearance on title "Assessment of job satisfaction amongst physicians working in hospitals in Addis Ababa, Ethiopia". The purpose of this research project is to assess the levels of job satisfaction, the factors influencing job satisfaction and the consequences of job satisfaction among physicians.

We believe the research will help the health sector to take strategic action towards human resource package and fill the gap around physician's job satisfaction.

Therefore we request your esteemed office to facilitate data collection and would like to thank you for participating in this endeavor.

With Regards,

Dr. [illegible]
Human Resource Development &
Administration Directorate A/Director

UNIVERSITY of the
WESTERN CAPE

CC:

- Human resource Development case team
MOH

https://etd.uwc.ac.za/