DETERMINATION OF PREVALENCE OF FACTORS ASSOCIATED WITH BURNOUT AMONG HEALTH PROFESSIONALS IN MASERU DISTRICT, LESOTHO.

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A research report submitted to the Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, in partial fulfilment of the requirements for the degree of Master of Family Medicine

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DECLARATION

I, Appolinaire TIAM declare that this research report is my own work. It is being submitted for the degree of Master of Family Medicine in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at this or any other University.

5th September 2011

In memory of my late mum Megne Rosalie 1937-1988.

Abstracts

BACKGROUND:

Burnout is a syndrome of emotional exhaustion, depersonalization and a sense of low personal accomplishment that leads to decreased effectiveness at work. The researcher has chosen this particular topic because of recent developments in Lesotho where HIV/AIDS care scale up has been shifted to the clinics. The primary health care staff is requested to take care of very sick patients that need more home care and more social support. This adds to the load of the already overstretched personnel.

METHODS:

A cross-sectional descriptive study was carried out among health professionals (doctors and nurses) working in public health institutions in Maseru district of Lesotho using anonymous self administered questionnaires.

Data were captured electronically into Epi info version 6 and analysed using Stata version 10.0 and Epi info software to generate frequency tables, to test relationship between demographic data and burnout factors.

RESULTS:

200 questionnaire were administered, 155 (77.5%) were filled by health care workers. The age of respondents ranged from 20 to 65 years with 85.6% of them being female, 92.8% were nurses, 11.2% doctors. Working index data analysis showed variable results with 81.8% disagreeing that there were enough staff to provide quality patient care, 78.1% disagreeing that there were enough staff to get the work done and 72.8% that they had opportunity to work on a highly specialized patient care unit. Importantly, 61% of respondents agreed that health care workers had good working relationship. Concerning burnout profile of respondents, 63.3% felt that they were emotionally drained while 79.7% felt used up at the end of work day. 79.3% of respondents obtained satisfaction from working with HIV patients although 60.8% found working with HIV patients emotionally draining. Concerning job satisfaction, 84.2% of respondents were not satisfied with their wage. Considering association between demographics and burnout factors, male respondents were

significantly more worried about the risk of contracting HIV from patients (p-value 0.01). In addition, doctors were also worried about the risk of contracting HIV from patients (p-value 0.02). This same feeling was significant among respondents working in hospitals (p-value 0.00). Hospital based respondents were also significantly more emotionally drained from their work than those in health centres (p-value 0.01).

CONCLUSION:

Key factors associated with burnout in this population include young age, low staffing capacity, low wage and lack of appreciation by managers.
Individuals, health facility managers and government should take necessary steps in addressing these factors and thus preventing further worsening of the situation.

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ACRONYMS

AIDS: Acquired Immune Deficiency Syndrome
ART: Anti Retroviral Therapy
ARV: Anti Retroviral
BOS: Burnout syndrome
CHAL: Christian Health Association of Lesotho
GOL: Government of Lesotho
HIV: Human Immune deficiency Virus
HSA: Health Services Area
MDGs: Millennium Development Goals
MOHSW: Ministry of Health and Social Welfare
NGO: Non Governmental Organization

CHAPTER 1: INTRODUCTION

Adopted by world leaders in the year 2000 and set to be achieved by 2015, the Millennium Development Goals (MDGs) provide concrete, numerical benchmarks for tackling extreme poverty in its many dimensions[1]. The plan was for countries and development partners to work together to reduce poverty and hunger, tackle ill health, gender inequality, lack of education, lack of access to clean water and environmental degradation[1,2]. While some countries have made impressive gains in achieving health-related targets, others are falling behind. Often the countries making the least progress are those affected by high levels of HIV/AIDS, economic hardship or conflict[3]. The achievement of the MDGs by 2015 will only be possible if the capacity of health systems in middle and low-income countries can be successfully strengthened [4]. It is now widely recognized that there are solutions or interventions to address many of the major causes of morbidity and mortality in these countries but the challenge is to find mechanisms and structures that will allow the delivery of these interventions to all, especially the poor and most vulnerable[5].

The World Health Report 2006 states that it is widely accepted that, shortage of health workers in many places is among the most significant constraints to achieving the three health-related MDGs[6]. In sub-Saharan Africa, shortage of health workers at a time of increasing health demands is now reaching crisis point and undermining potential advances in other aspects of healthcare such as ARV roll-out. Ntuli has argued that Human Resource drain from health systems needs to be addressed urgently and possibly reversed in Southern Africa[7]. A range of factors including worsening socio-economic conditions in much of sub-Saharan Africa, increasing mobility and migration of health workers, and the absence of strategies to produce and retain adequate health workers contribute to the resource drain[8]. Health care systems are undergoing major structural and financial changes. Ongoing changes to HIV and other infectious diseases care include an increase in the complexity of cases, available treatment options and better informed patients.

Lesotho a small country land locked within South Africa has the third highest prevalence rate of HIV in the world[2]. This has placed a major strain on the already overstretched health system. The AIDS epidemic in Lesotho has had a devastating impact on the country. Extreme rates of poverty combined with AIDS have caused

average life expectancy to drop to approximately 40 years[1,2]. Immediately after the first reported case of HIV in 1986, the Government of Lesotho organized a national response supported by policies and plans to address the epidemic[9]. Leadership from the top was demonstrated in 2003 when King Letsie III called HIV/AIDS a national disaster and helped to launch the *Know Your Status* campaign, aimed at testing every Basotho over the age of 12[9]. The government launched an ambitious national program in 2004 aiming at providing free antiretroviral therapy (ART) throughout the entire country[9]. Lesotho has very few resident Basotho physicians; the Government of Lesotho has adopted a nurse based care and treatment approach where services are offered to more people through task shifting and decentralization of service provision. This has drastically increased workload for the limited number of health professionals especially coupled with loss of up to 20% health care work force to HIV epidemic[10,11,12]. All these factors are probably expected to add to the already existing stressors in the work place leading to possible burnout.

In Lesotho, public health and social welfare services are administered by the Ministry of Health and Social Welfare (MOHSW). In addition to its own publicly owned health service infrastructure the Government of Lesotho (GOL) also subsidizes the provision of health services supplied by the Christian Health Association of Lesotho (CHAL) and a limited number of Non Governmental Organizations (NGOs). CHAL provides approximately one third of the health care of the country through a network of 8 Health Service Areas (HSA) hospitals, and 73 health centres. CHAL and other NGOs are formally linked to the MOHSW through the principal secretary's office[3, 11].

Burnout is a danger faced by many health professionals. Physicians often do not realise our vulnerability to stress[14]. Burnout, defined as the exhaustion of physical or emotional strength as a result of prolonged stress or frustration, was added to the mental health lexicon in the 1970s, and has been detected in a wide variety of health care providers[15]. A study of 600 American workers indicated that burnout resulted in lowered production, and increase in absenteeism, health care costs, and personnel turnover[16,17]. Burnout produces both physical and behavioural changes, in some instances leading to chemical abuse[16]. The health professionals at risk include physicians, nurses, social workers, dentists, care providers in oncology and AIDS-patient care personnel, emergency service staff members, mental health workers,

and speech and language pathologists, among others[15,18]. Early identification of this emotional disturbance is needed to prevent break down in the provider-patient relationship[19]. Prevention and treatment are essentially parallel efforts, including greater job control by the individual worker, group meetings, better up-and-down communication, more recognition of individual worth, job redesign, flexible work hours, full orientation to job requirements, available employee assistance programmes, and adjuvant activity[20,21]. Burnout should be recognized as a health care professional's occupational disease which must be identified early and treated.[20,22]

Burnout is a syndrome of emotional exhaustion, depersonalization and a sense of low personal accomplishment that leads to decreased effectiveness at work.[23,24] It is associated with decreased job performance and reduced job commitment, and predicts stress-related health problems and low career satisfaction.[25] A broad range of professions (including physicians, nurses and educators) can experience burnout.[19,20,21] Burnout is a prolonged response to chronic job-related stressors. It has a special significance in health care, where staff experience both psychological–emotional and physical stress[26]. Sir William Osler, quoted by Lackritz, recognised that only some physicians were happy in their professional lives: “To each one of you the practice of medicine will be very much as you make it to one a worry, a care, a perpetual annoyance; to another, a daily joy and a life of as much happiness and usefulness as can well fall to the lot of man.”[26] The literature suggests strong interrelationships among low levels of job satisfaction, the burnout syndrome and other organizational factors.[27]

Grol and colleagues have shown that frustrations, tensions, and annoyance with time pressures are linked to giving patients shorter time for consultation while focusing on prescribing several drugs without taking time to listen and explain processes to their patients[28]. Conversely, physician satisfaction is associated with patient adherence to medical regimens and patient satisfaction[29,30]. It is obvious that patients should care if physicians, nurses, and other health professionals, for that matter are discouraged. Physicians and their families should also care because professional experiences and attitudes can affect home life[31]. Policymakers should care because the health of our society depends in part on the health and effectiveness of health professionals[31].

Maslach and others have demonstrated that burnout in many walks of life happens because of work[32]. Workers are not the culprits; rather, work load, practices, conflicts, and environment are contributing factors[32,33,34]

The researcher has chosen this particular topic because of the recent decision by the government of Lesotho to shift HIV/AIDS care scale up to primary health care clinics. The primary health care staff are requested to take care of very sick patients that need more home visit and more social support. This adds to the load of the already overstretched personnel. More importantly, this decision was not followed by any strengthening of the existing primary health care systems[35].

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This literature review collated findings from previous burnout related research. The researcher searched on the internet, in the University of Witwatersrand's Faculty of Health Sciences library, and in text books, and all relevant articles were put together.

In terms of the internet, searches were conducted using Google scholar, Pubmed and Medscape. The terms for search were Burnout, which was refined to Burnout among health professionals; further refinement was Burnout AND Physicians AND Nurses. In Pubmed especially, the researcher followed links to related articles which led to other journal sites. Later, the search term was refined to become Burnout AND (Physicians AND Nurses) in Africa. Some further searches were carried out using the term Burnout AND HIV Care.

Criteria for selection of articles included: free full-text articles related to the burnout among health professionals. Articles from Africa were also given priority.

2.2 Definition of Burnout syndrome

Burnout syndrome (BOS) was identified in the early 1970s in human service professionals, most notably health care workers[36]. BOS has been described as an inability to cope with emotional stress at work or as excessive use of energy and resources leading to feelings of failure and exhaustion[37,38]. Although depression affects nearly every aspect of the person's life, symptoms of burnout occur only at work and burnout syndrome also decreases overall well-being[39]. Burnout in the life of health care workers is the construct used to describe the psychological state resulting from a prolonged period of high stress levels in their professional lives[40]. Burnout syndrome was originally defined as a syndrome resulting from contact with people who are suffering[41].

Burnout is also viewed as exhaustion of physical or emotional strength or motivation usually as a result of prolonged stress or frustration[42,43,44]. Maslach and Jackson developed the Maslach Burnout Inventory (MBI) for detecting and measuring the severity of BOS. The scale evaluates three domains, namely, emotional exhaustion,

depersonalization (negative or cynical attitudes toward patients), and loss of a feeling of personal accomplishment at work[36,42]. Clinical symptoms of BOS are nonspecific and include tiredness, headaches, eating problems, insomnia, irritability, emotional instability, and rigidity in relationships with other people[41,42].

BOS is characterized by physical and emotional exhaustion, depersonalization and low productivity, and it has been found to be associated with staff intending to leave the stressful work environment[43, 45.] In a South African study Penn-Kekana and colleagues reported a high percentage of nursing staff working in public facilities in Mpumalanga, Kwa-Zulu Natal and Limpopo were demotivated and burnt out, and were considering leaving the facility where they were working. A range of factors, both financial and non-financial, were associated with nurses considering going overseas. Inadequate pay, poor promotion, feeling unsupported by management and having bad relationships at work were all associated with lack of commitment[46].

2.3 Aetiological Factors of Burnout

Burnout syndrome is a well-known psychological reaction among health-care workers[36,47,48]. Triggering factors are personal characteristics such as low sense of coherence, close patient relations, high workload, loss of autonomy, lack of professional development, poor performance feed-back, difficult work environment and interaction of these and other stress related challenges[49,50]. Burnout usually takes some years to develop, but is less common in older employees with several years of experience[51,52].

Wide variations in the prevalence of burnout syndrome in health care professionals have been reported across specialties, both in physicians and in nurses[43,44]. High levels of severe burnout syndrome have been found in oncologists, anaesthesiologists, physicians caring for patients with AIDS, and physicians working in emergency departments[47,48,52,53,54,55,56]. Work-related stress is a factor known to increase the risk of burnout syndrome[57,58]. Workplace climate and workload are determinants of burnout syndrome Burnout syndrome is associated with decreased well-being among nursing staff members, decreased quality of care, and costs related to absenteeism and high turnover[59,60,61].

Research looking at burnout among health care workers in a cancer unit, Grunfeld et al found that the prevalence of emotional exhaustion was significantly higher among physicians (53.3%) than among the allied health professionals (37.1%) and the support staff (30.5%) ; the same was true for feelings of depersonalization (22.1% v. 4.3% and 5.5% respectively)[53] . Feelings of low personal accomplishment were significantly higher among physicians (48.4%) and allied health professionals (54.0%) than among support staff (31.4%) [53]. About one-third of the respondents in each group reported that they had considered leaving for a job outside the cancer care system[53].

In a study among intensive care unit (ICU) nurses Poncet et al found that severe burnout syndrome was identified in 32.8% of respondents, with no significant differences between nurses, nursing assistants, and head nurses[63]. Among the characteristics of the participating ICUs, only the type of hospital was associated with the rate of severe BOS, which was higher in teaching hospitals than in other hospitals (36 vs. 31%, p –value 0.01)[63].

Both personal characteristics and work-related factors have been associated with BOS[64]. These can be grouped as follows:
Individual or personal: young age and inexperience, lack of personal support networks, low perceived self-efficacy/competence, high expectations of the self[43, 64].
Organisational: work overload, dull routine, role conflict or ambiguity, interpersonal conflict, lack of supportive supervision, excessive organisational expectations, arbitrary exercise of authority and punishment[43,44,64].
Client: lack of client cooperation[64].

Poncet et al also reported that both perceived conflicts and perceived poor relationships with other staff members were strong independent risk factors for severe burnout syndreme[63]. Physicians and nurses differ in their perceptions of work relationships[65]. In keeping with this finding, having poor relations with patients was associated with a higher risk of burnout syndrome among physicians[42].

In a cohort prospective study over thirty months, Nordang and colleagues found that at the end, the prevalence of "Satisfaction" had fallen to 36% from 86% and the prevalence of "Burnout" had increased from 0% to 29%, compared with 17% "Burnout" in the Norwegian database during reorganisation of health systems in Norway[70]. Nurses with long experience and working with seriously and incurably ill and dying patients with cancer showed a significant and unexpectedly fast development of burnout. The reorganization was the only likely explanation, but working with seriously and terminally ill patients with cancer might have hastened the development[70].

2.4 Managing Burnout Syndrome

Various approaches have used in managing burnout syndrome in work place. Choosing days off and participating in research groups decreased the risk of severe burnout syndrome and suggested simple preventive strategies in hospital setting[43]. Younger and less experienced staff members might benefit the most from preventive strategies. Job satisfaction is increased when individuals receive positive feedback indicating that their work is valued and significant. Interventions such as research groups, stress management workshops, and training in communication and stress management have been found to decrease stress and BOS[66, 67, 68, 69]. Emotional exhaustion is a direct consequence of conflict that leads to depersonalization and to loss of a sense of personal accomplishment[36].

Thus, it is important to recognize that burnout exists among health care workers and put in place strategies in addressing it.

2.5 Relation between the HIV Epidemic in Africa and Burnout Syndrome

Africa faces a severe human resources crisis in the health sector. World Health Organisation recommends that 15% of the GDP be allocated to health. The continent's economic performance has been poor, which has affected the ability of countries in sub-Saharan Africa (with few exceptions) to sustain credible health services and to train, employ and use health workers most efficiently[71]. Furthermore, over the past two decades the population of countries in the Sub-Saharan African region has increased significantly, with major expansion in the disease burden due to HIV/AIDS, recurring high levels of communicable diseases and recent rises in the

incidence of non-communicable diseases and other diseases related to diet and lifestyle changes. However, in the face of high demand for health services that the foregoing entailed, sub-Saharan Africa has had a low supply of health workers, and this notwithstanding, also experiences significant wastage of its human resources. Deaths of health workers have risen exponentially in some countries in recent years, and many health workers may be leaving the workforce from fear of infection[72]. Burnout, absenteeism and stress among staff are some effects of HIV/AIDS[73].

The burden of HIV/AIDS in areas where its prevalence is high is enormous, and the impact of HIV/AIDS on the society and on health care delivery has been well described[74,75]. The urgent need for treatment, as well as for prevention, has been recognized[76]. Deficits in human resource capacity threaten to undermine the scaling up of treatment. Although concern has been raised about the need for more health care workers, a comprehensive human resource strategy has not been implemented in the countries in southern Africa that are burdened with the highest prevalence of HIV infection[75,76]. As ART provision is scaled up, the critical question of who will do the job becomes paramount[77]. The emotional burden of the HIV/AIDS epidemic on the health care workers who must function in struggling health systems where workloads are high and resources are minimal is significant[77,78,79]. The rollout of ART to large numbers of adults and children, along with the necessary counselling, adherence, and monitoring support that must accompany treatment services, has added to the workload. In some countries, the burden of HIV/AIDS is compounded by a lack of support from senior doctors and administrators. Ambiguity and a lack of political leadership from governments are also problems in some areas[71,75,78].

Uebel et al demonstrated that the tremendous burden of caring for ill individuals under these circumstances has led to a high incidence of compassion fatigue, posttraumatic stress, depression, and burnout[80]. As a result of emotional strain, many health care workers either emigrate to developed nations, where there may be less work-related stress, or leave the profession entirely[77,70].

An anonymous survey involving 595 health care workers across race groups in 4 different provinces in South Africa in 2004 found an overall HIV infection prevalence of 15.7%, compared with an estimated prevalence of 15.5% among adults in South Africa[82]. A survey of HIV prevalence in a cohort of 77 doctors who graduated from

Makerere University in Kampala, Uganda, in 1984 found that by 2004, 11 doctors had died of AIDS, and 5 of 6 suicides were thought to be related to a known or suspected diagnosis of HIV infection[81]. If countries do not implement programs to combat staff burnout and avert deaths due to HIV/AIDS, widespread access to ART will never be achieved[82,83,84].

In a study in Zambia, Dieleman et al demonstrated that 62% of the health workers felt moderate-to-high emotional exhaustion linked to HIV related health care[77]. There were no feelings of indifference to patients and most had feelings of personal accomplishment. Health workers mentioned that due to HIV/AIDS they fear infection at work and an increased workload. The combination of having problems at home and an increased workload potentially increased the risk of stress and injuries. Emotional or technical support to deal with HIV/AIDS patients or one's own status was sparse[85]. In a survey of 512 public health workers in four provinces in South Africa, 16.3% were HIV infected[86]. An HIV prevalence study at Helen Joseph and Coronation Hospitals in Johannesburg found that 13.7 % of 644 nurses tested (91% response rate) were HIV infected[87]. Interestingly, in this survey HIV was not a significant factor in turnover of staff, with salaries, increasing workloads and perceived poor managerial support far more significant as factors causing loss of staff [87].

2.6 Conclusion

Burnout syndrome is caused by many factors that can be personal, organizational and client (patient) related. Features of burnout syndrome should be identified early and possibly, strategies developed to control its negative impact on the health system. In Africa, as HIV care and treatment is being scaled up there is direct impact on the overall health system. Many studies looked at burnout among health professionals in hospital setting but a limited number of previous research considered burnout syndrome in primary health facilities. In addition, most surveys reviewed here were written at a time when HIV care was highly specialized and centralized in secondary level of care. There is thus a need to evaluate burnout syndrome in both primary health care clinics and hospital setting, during this phase of HIV care and treatment rapid expansion. Many studies especially in Southern Africa looked at the impact of HIV on health professionals' burnout and stress in

relation with their own morbidity and mortality. This calls for a research focusing on the prevalence of burnout factors in relation to workload in the clinical setting.

CHAPTER 3: METHODS

3.1. Aim and Hypothesis

3.1.1. Aim

To determine the prevalence of factors associated with burnout among health professionals (doctors and nurses) in public health institutions in Maseru district, Lesotho.

3.1.2. Hypothesis

The hypothesis of this research is that, health care professionals (doctors and nurses) in Maseru do not have factors associated with burnout.

3.2. Objectives

1. To determine the demographic data of study participants such as sex, age, marital status, occupation, professional qualification.
2. To determine the area of activity of each study participant that means in what level of facility s/he is working, and for those in hospital in which department s/he is working.
3. To establish whether there are any associations between demographics, work situation and prevalence of factors associated with burnout

3.3 Study Design

This was a cross-sectional descriptive study among doctors and nurses working in public health institutions in Maseru district of Lesotho.

3.4 Site of study

The study took place in the entire Maseru district of Lesotho. It involved all public health facilities (hospitals and health centres), except Makhonyane military hospital. The exclusion of Makhonyane hospital was due to the fact that access was restricted.

3.5 Study population

The study population was made up of doctors and nurses working in public health institutions in Maseru district, Lesotho.

3.6 Sampling

Knowing that there were 50 doctors and 200 nurses working in public health institutions in Maseru district, the researcher assumed that 80% would be available at the time of this study considering other factors such as those on annual leave and those off duty. This would provide 200 participants which was felt to be adequate

3.7 Data collection

Data collection started on 5th September and ended on 19th November 2010. The researcher visited all public health facilities in the district, to conduct a group discussion with doctors and nurses, explaining the aim and objectives of this research to them and to distribute questionnaire. They were informed that questionnaires were anonymous. They were requested to fill them in and return them to the researcher in a sealed envelope. In the event they did not want to fill the questionnaire, they returned it without responding.

Variables were extracted from the questionnaire and entered into Epi-info. Each questionnaire was given a code and this code linked the data entered into Epi-info and the study participant anonymously so as to keep confidentiality of study participants.

3.7.1 Measuring Instrument

Anonymous self administered questionnaires were given to doctors and nurses in each facility and all questionnaires returned whether filled or not (see Appendix 1). Questionnaires used here were adapted with permission from previously developed questionnaires used in the study "Maximizing human resource capacity in rural district health systems in Lesotho"[35].

The questionnaire assessed work environment, burnout and job satisfaction. It was adapted from Healthcare Providers Work Index (HPWI) which was also adapted from the Revised Work Index (NWI-R) developed by Aiken and colleagues from the Nursing Work Index (NWI) [35]. This questionnaire differed from the HPWI in that the section eliciting issues related to attitudes to migration was deleted while in each portion questions specific to the objectives of this research were added.

3.7.2 Data entry and analysis

Data was entered using the Epi-info version 6 software which generated an excel sheet which was transferred to Stata 10.0 software for analysis. Stata 10.0 was used to generate frequency tables. Epi-info version 6 was used to generate 2X2 tables, Student t-test and chi square statistics were used to test the presence of factors associated with burn out among health professionals and their relationship to demographic variables. A p-value of <0.05 was taken to be significant. The researcher was assisted by a clinical epidemiologist who helped with data analysis.

3.8 Pilot study

A pilot study was undertaken six weeks before the main study at Matukeng health centre and Saint Joseph's hospital in Roma. The aim of the pilot study was to test the questionnaire to be sure the respondents understood and check the ease of data extraction. Ten questionnaires were administered and all were returned with eight of them filled. Of the 8 who filled the questionnaire 7 were female nurses and 1 was a male doctor. Participants in this pilot did not have difficulty filling the questionnaire, response to questions was appropriate. The questionnaire was thus not changed.

3.9 Ethics

Approval for this study was obtained from the Human Research Ethics Committee (Medical) of the University of the Witwatersrand, Johannesburg. Ethics clearance number is M10413 (see appendix 2).

The protocol for this study also received the approval from the Ethics clearance Committee of the Lesotho Ministry of Health and Social Welfare (appendix 3).

Approval was sought and obtained from the Director General of the Lesotho Ministry of Health and Social Welfare (appendix 4) and the Christian Health Association of Lesotho Executive Secretary (appendix 5) who also wrote a letter of introduction to various health facilities (appendix 6).

Questionnaires were anonymous and information gathered was kept confidential.

CHAPTER 4: RESULTS

4.1 Response rate

200 hundred questionnaires were administered. All were returned with 155 filled by respondents giving a response rate of 77.5%. No characteristic was obtained from those who did not fill in the questionnaires because the latter was self administered and anonymous.

4.2 Socio-Demographic information

The demographic characteristics of the study participants are presented in Table 4.1. Overall age of respondents ranged from 20 years to more than 65 years with 51.8% of the participants aged less than 35 years. In terms of marital status, 64.9% of participants were married, 29.2% single. In terms of qualification 53.6% had a diploma. 33.8% had an in-service training in the past year while 34.6% had no training at all.

Table 1: Socio-demographic characteristics of the study population (N=155)

Variables	Proportion	Percentage
Age group		
20-25	30	19.4
26-30	25	16.2
31-35	25	16.2
36-40	24	16
41-45	22	14.3
46-50	12	7.8
51-55	3	2.0
56-60	7	4.5
60-65	6	4.0
Sex		
Female	131	85.6
Male	22	14.4
Marital status		
Married	100	64.9
Separated	1	0.7
Single	45	29.2
Single mother	8	5.2
Occupation		
Nurses	142	92.8
Doctors	11	7.2
Professional Qualification		
Diploma	83	53.6
First degree	34	21.9
MBBS	9	5.8
Post graduate	10	6.5
Certificate	18	11.6
Others	1	0.7
In-service training		
1-2 training	45	33.8
3-5 training	37	27.8
>greater than 5 training	5	3.7
None	46	34.6

4.3 Health facility setting

Table 2 shows the distribution of study participants with respect to their place of work. 64% were employed by the government of Lesotho while 36% of participants were working in the employ of Christian health association of Lesotho (CHAL) with 92.8% working full time and 73.8% working within hospitals.

Table 2: Place of work and working status (N=155)

Variables	Proportion	Percentage
Employer		
Government	96	64
CHAL	54	36
Working status		
Full time	143	92.8
Part-time	7	4.6
Others	4	2.6
Health facility		
Hospital	110	73.8
Health centre	39	26.2

4.4 Work index

Table 3 shows the distribution of participants with respect to work index. Work index is a scale used to measure health care workers' satisfaction with their work environment. To facilitate analysis of the findings, the researcher combined strongly agree and somewhat agree to become agree while strongly disagree and somewhat disagree were combined to become disagree.

81.8% felt there were not enough staff to provide quality service to patient care and close to the same percentage disagreed that there were enough staff to get the work done. 58.6% felt they were not supported and valued by their managers. 61% of respondents agreed that there was good working relationship between doctors and nurses.

Table 3: Responses to Work index of Questions (N=155)

Factors	Agree	Percentage	Disagree	Percentage
Enough staff to provide quality patient care	28	18.2	126	81.8
Enough staff to get the work done	34	21.9	121	78.1
Opportunity to work on a highly specialized patient care unit	41	27.2	110	72.8
Enough time and opportunity to discuss patient care problem with other staff	81	52.3	74	47.7
A manager who is a good manager and leader	81	53.3	71	46.7
Hospital/clinic managers support and value health workers	63	41.4	89	58.6
Doctors, nurses and other health workers have good working relationships.	94	61.0	60	39.0
A lot of team work between different cadres of health workers	78	51.7	73	73
Adequate support services allow health workers to spend time with patient	56	36.6	97	63.4
Freedom to make important patient care and work decisions	79	51.0	76	49.0
Health professionals control their own practice	79	51.6	74	48.4

4.5 Significance of factors associated with burnout profile of respondents

Table 4 shows burnout profile among respondents in relation to each indicator. Burnout was considered significant when a particular factor was present from few times a month to everyday that is a score ranging from 3-6.

Considering being emotionally drained from work, 63.6% of respondents felt that way while 74.6% felt used up at the end of work day. 70.7% felt fatigued or tired when they got up in the morning. 64.5% of respondents felt burnout from their work. 45.6% felt their work was hardening them.

Table 4: Significance of factors associated with burnout profile of the respondents (N=155)

Burnout Frequency (Score)	Never (0)	A few times per year (1)	Once a month or less (2)	A few times per month (3)	Once a week (4)	A few times per week (5)	Every day (6)	Total % score 0-2	Total % score 3-6
I feel emotionally drained from my work	11.2%	13.9%	11.3%	14.6%	9.3%	21.8%	17.9%	36.4%	63.6%
I feel used up at the end of the work day	10.7%	8.7%	6.0%	13.6%	17.0%	24.0%	20.0%	25.4%	74.6%
I feel fatigued or tired when I get up in the morning and have to face another day on the job	7.3%	11.3%	10.6%	24.5%	8.6%	17.9%	19.8%	29.3%	70.7%
I can easily understand how my patients feel about things	3.4%	6.8%	5.4%	16.2%	4.7%	28.3%	35.2%	15.6%	84.4%
I feel I treat some patients as if they were impersonal objects	53.6%	11.8%	7.8%	12.4%	7.2%	3.9%	3.3%	73.2%	26.8%
Working with people all day is really a strain for me	36.4%	18.5%	12.6%	13.9%	6.6%	9.3%	2.7%	67.5%	32.5%
I deal very effectively with the problems of my patients	2.7%	4%	4.7%	14%	5.3%	28.7%	40.6	11.4%	88.6%
I feel burned-out from work	12.7%	12.7%	10.1%	17.5%	12.1%	16.1%	18.8%	35.5%	64.5%
I feel I am positively influencing other people's lives.	7.2%	2.6%	7.2%	7.8%	4.6%	29.4%	41.2%	17.0%	83.0%
I have become more hardened toward people since I took this job	42.8%	10.4%	13.8%	10.4%	9.0%	6.8%	6.8%	67.0%	33.0%
I worry this job is hardening me emotionally	24.8%	17.5%	12.1%	12.8%	10.7%	6.7%	15.4%	54.4%	45.6%
I feel very energetic	10.7%	6.7%	6.7%	9.5%	15.4%	25.5%	25.5%	24.1%	75.9%
I feel I am working too hard on my job	4.8%	4.1%	6.9%	12.4%	9.7%	15.4%	46.7	15.8%	84.2%
I feel frustrated by my job	19.9%	9.9%	12.6%	17.2%	11.9%	12.6%	15.9%	42.4%	57.6%
I don't really care what happens to some patients	76.0%	10.0%	2.0%	4.7%	3.3%	2.7%	1.3%	88.0%	12.0%
Working directly with people puts too much stress on me	30.5%	15.9%	14.5%	14.5%	8.0%	13.3%	3.3%	60.9%	39.1%
I can easily create a relaxed atmosphere with my patients	4.0%	4.6%	10.5%	10.5%	9.2%	18.4%	42.8%	19.1%	80.9%
I accomplish many worthwhile things in this job	7.0%	4.3%	5.6%	19.7%	9.9%	31.0%	22.5%	16.9%	93.1%
I feel exhilarated after working closely with patients	8.8%	7.4%	11.8%	16.2%	12.5%	24.3%	19.0%	28.0%	72.0%
I feel I am at the end of my rope.	45.1%	11.1%	6.9%	8.4%	8.4%	9.7%	10.4%	63.1%	36.9%
In my work I deal with emotional problems very calmly	6.4%	4.3%	3.6%	14.9%	7.1%	25.5%	38.2%	14.3%	85.7%
I feel patients blame me for some of their problems	32.7%	19.8%	10.9%	11.5%	7.5%	10.8%	6.8%	63.4%	36.7%

Table 5 shows burnout profile in relation to working with HIV. When respondents demonstrated a particular characteristic for a period ranging from a few times a month to everyday (score 3-6), this was considered significant. 79.2% of

respondents obtained satisfaction from working with HIV patients while 45.9% found working with HIV patients physically tiring. 60.9% of respondents found working with HIV patients emotionally draining. 54.8% worried about the risk of contracting HIV from patients and 13.9% thought of leaving their job because of HIV risk. 55.1% were worried about the effect of HIV on staff performance.

Table 5: Burnout profile with respect to working a HIV setting (N=155)

Working with HIV (Score)	Never (0)	A few times per year (1)	Once a month or less (2)	A few times per month (3)	Once a week (4)	A few times per week (5)	Every day (6)	Total % score 0-2	Total % score 3-6
I obtain satisfaction from working with HIV patients	10.7%	5.4%	4.7%	10.1%	3.4%	17.5%	48.3%	20.8	79.2
I find working with HIV patients physically tiring	32.2%	10.3%	11.6%	11%	11.0%	15.7%	8.2%	54.1	45.9
I find working with HIV patients emotionally draining	18.9%	10.1%	10.1%	14.2%	8.1%	16.2%	22.3%	39.1	60.9
I think with pride of the good work I am doing with HIV patients	4.9%	3.5%	6.3%	11.1%	9.0%	21.5%	43.8%	14.7	85.3
I worry about the risk of contracting HIV from patients	21.3%	16.0%	8.0%	10.7%	4.0%	8.7%	31.3%	45.2	54.8
I think about leaving this job because of HIV risks	78.2%	5.3%	2.7%	2.0%	1.3%	3.3%	7.3%	86.2	13.9
I worry about the effect of HIV on the staff performance	18.4%	16.3%	10.2%	11.6%	6.1%	9.5%	27.9%	44.9	55.1
I worry about being unable to treat other patients because of the amount of time I spend working with HIV patients	31.0%	9.3%	10.0%	11.3%	10.0%	14.0%	14.3%	50.3	49.7

4.6 Job satisfaction

Table 6 shows job satisfaction. Responses have been grouped into three categories: disagree (combining strongly disagree and disagree), agree (combining strongly

agree and agree) and a neutral group (made of respondents who neither agreed nor disagreed). 56.9% disagreed that most people were satisfied with their job while 51% were not satisfied with the recognition they got for the work they did. 84.2% were not satisfied with their pay check and 52% were not satisfied with the way their manager handled staff.

Table 6: Job satisfaction profile of respondents (N=155)

	Disagree	Percentage	Neutral	Percentage	Agree	Percentage
In general I am satisfied with this job	68.0	42.5	20.0	13.1	65.0	44.4
I find that my opinions are respected at work	53.0	34.9	34.0	22.4	65.0	42.9
Most people in this job are very satisfied with it	87.0	56.9	34.0	22.2	32.0	20.9
I am satisfied with the recognition I get for the work I do	76.0	51.0	17.0	11.4	56.0	37.6
I am satisfied with the way my pay compares with that for similar jobs in other organisations	128.0	84.2	8.0	5.3	16.0	10.5
I am satisfied with the personal relationship between my manager and his/her staff	67.0	44.1	33.0	21.7	52.0	34.2
I am satisfied with the way my manager handles staff	79.0	52.0	33.0	21.7	40.0	26.3

4.7 Testing association between demographics and burnout factors.

Using Pearson chi square test, the researcher sought to establish whether there were any association between demographics and some selected burnout factors.

4.7.1 Testing association between gender and burnout factors

Table 7 summarises test of association between gender and six key burnout factors selected from general burnout factors. Male participants were statistically more worried over the risk of contracting HIV from patients (p-value 0.01). Female respondents were significantly less satisfied with the way managers handle staff (p-value 0.02).

Table 7: Association between Gender and burnout factors

Burnout Factors	**Gender**	**agree**	**disagree**	**Chi square**	**P value**
		Burn out	Not burn out		
Feel emotionally drained from work	female	80(63.00%)	47(37.00%)	0.00	0.95
	male	14(63.60%)	8(36.40%)		
Feel burn-out from work	female	85(66.40%)	43(33.60%)	1.37	0.24
	male	10(52.30%)	9(47.70%)		
Worry about the risk of contracting HIV from patients	female	64(50.40%)	63(49.60%)	6.79	0.01
	male	17(81.00%)	4(19.00%)		
Worry about effect of HIV on the staff performance	female	72(58.10%)	52(41.90%)	2.90	0.08
	male	8(38.10%)	13(61.90%)		
In general satisfied with job	female	59(54.10%)	50(45.90%)	1.06	0.30
	male	6(40.00%)	9(60.00%)		
Satisfied with the way my manager handles staff	female	30(29.40%)	72(70.60%)	5.51	0.02
	male	9(60.00%)	6(40.00%)		

Table 8 summarises sub-analysis testing association between male nurses and females nurses and selected key burnout factors. Of the factors considered, there was no statistically significant association.

Table 8: Sub analysis of association between male and female nurses and Burnout factors

Burnout Factors	Job tile	agree	disagree	Chi square	P value
		Burn out	Not burn out		
Feel emotionally drained from my work	Male Nurses	8	5	0.02	0.89
	Female nurses	80	46		
Feel burn out	Male Nurses	7	5	0.41	0.52
	Female nurses	85	41		
Worry about the risk of contracting HIV from patients	Male Nurses	9	3	2.66	0.10
	Female nurses	63	62		
Worry about the effect of HIV on the staff performance	Male Nurses	4	8	2.55	0.11
	Female nurses	70	52		
In general satisfied with this job	Male Nurses	3	5	0.40	0.52
	Female nurses	56	58		
Satisfaction with the way my manager handles staff	Male Nurses	3	6	0.50	0.82
	Female nurses	30	71		

4.7.2 Association between profession and burnout factors

Table 9 summarises association between profession and burnout factors. Considering respondents' worry about the risk of contracting HIV from patients, doctors were significantly more worried about the risk of contracting HIV from patients (p-value 0.02) Doctors were significantly more satisfied with the way their managers handled staff (p-value 0.00).

Table 9: Association between profession and Burnout factors

Burnout Factors	**Job tile**	**agree**	**disagree**	**Chi square**	**P value**
		Burn-out N (%)	Not burn-out N (%)		
Manager who is a good manager and leader	Nurses	72 (51.40%)	68 (48.60%)	0.61	0.44
	Doctors	7 (63.60%)	4 (36.40%)		
Feel emotionally drained from my work	Nurses	89 (63.60%)	51 (36.40%)	0.05	0.82
	Doctors	6 (60.00%)	4 (40.00%)		
Feel burn out	Nurses	92 (66.20%)	47 (33.80%)	2.72	0.09
	Doctors	3 (37.50%)	5 (62.50%)		
Worry about the risk of contracting HIV from patients	Nurses	72 (52.20%)	66 (47.80%)	5.53	0.02
	Doctors	9 (90.00%)	1 (10.00%)		
Worry about the effect of HIV on the staff performance	Nurses	74 (54.80%)	61 (45.20%)	0.09	0.77
	Doctors	5 (50.00%)	5 (50.00%)		
In general satisfied with this job	Nurses	59 (48.80%)	63 (51.20%)	0.17	0.68
	Doctors	4 (50.00%)	4 (50.00%)		
Satisfaction with the way my manager handles staff	Nurses	34 (30.60%)	77 (69.40%)	10.32	0.00
	Doctors	6 (100.00%)	0 (0.00%)		

Table 10 summarises sub-analysis to test association between male respondents (doctors and nurses) and burnout factors. Male doctors are more satisfied with their manager (p-value 0.02)

Table 10: Sub analysis of association between male Doctors and Male nurses and Burnout factors

Burnout Factors	Profession	agree	disagree	Chi square	P value
		Burn out	Not burn out		
Feel emotionally drained from my work	Male Doctors	6	3	0.06	0.81
	Male Nurses	8	5		
Feel burn out	Male Doctors	3	4	0.42	0.52
	Male Nurses	7	5		
Worry about the risk of contracting HIV from patients	Male Doctors	8	1	0.64	0.42
	Male Nurses	9	3		
Worry about the effect of HIV on the staff performance	Male Doctors	4	5	0.27	0.60
	Male Nurses	4	8		
In general satisfied with this job	Male Doctors	4	4	0.25	0.61
	Male Nurses	3	5		
Satisfaction with the way my manager handles staff	Male Doctors	6	0	5.83	0.02
	Male Nurses	3	6		

4.7.3 Association between health facility level and burnout factors

Table 11 summarises association between facility level (hospital and health centres) and burnout factors. Hospitals based respondents were significantly more emotionally drained from work (p-value 0.01), were significantly more worried about the risk of contracting HIV from patients (p-value 0.00) and the effect of HIV on the

staff performance (p-value 0.03). However, hospital based respondents were not satisfied with their managers' way in handling staff (p-value 0.00).

Table 11: Relationship between health facility level and burn-out factors

Burnout Factors	Facility level	Agree	Disagree	Chi square	P value
Feel emotionally drained from my work	Hospitals	70(68.00%)	33(32.00%)	7.16	0.01
	Health centres	17(44.70%)	21(55.30%)		
Feel burn out	Hospitals	71(68.30%)	33(31.70%)	2.57	0.11
	Health centres	21(53.80%)	18(46.20%)		
Worry about the risk of contracting HIV from patients	Hospitals	66(61.70%)	41(38.30%)	8.53	0.00
	Health centres	13(34.20%)	25(65.80%)		
Worry about the effect of HIV on staff performance	Hospitals	63(60.00%)	42(40.00%)	4.74	0.03
	Health centres	15(39.50%)	23(60.50%)		
Generally satisfied with this job	Hospitals	41(45.60%)	49(54.40%)	0.37	0.54
	Health centres	23(51.10%)	22(48.90%)		
Satisfied with the way my manager handles staff	Hospitals	18(23.10%)	60(76.90%)	16.72	0.00
	Health centres	22(62.90%)	13(37.10%)		

CHAPTER 5: DISCUSSION

5.1 Socio-Demographic information

85.6% of health workers (doctors and nurses) interviewed were females. This picture can be explained by the fact that Lesotho being landlocked within South Africa, most indigenous male are trans-border migrant workers in the mines in the Republic while female stay home[1,3.35].

Considering age distribution, 51.8% of study participants were aged less than 35 years with almost 20% within 20-25 years age interval. This shows a very young workforce in the health sector. Several reasons can be advanced to explain this finding. With a national prevalence rate of 23.6% per cent Lesotho remains the third nation hardest hit by HIV pandemic. This has reduced the life expectancy to 37 years of age[11]. This pandemic has claimed the lives of several health care workers in countries with high prevalence such as Lesotho, Zambia, Botswana, South Africa[77, 78, 79]. This is coupled with migration of older and more experienced physicians and nurses to South Africa and developed countries. This has been a general problem across sub-Saharan African country as described by Hagopian and colleagues[4].

In terms of cadre of respondents, 92.8% were nurse and the remainder doctors. There is a considerable amount of up-to-date information available on Lesotho's health system and in particular the human resources problems. The human resource crisis in Lesotho is significant. According to Schwabe et al in 2004 there were 89 doctors countrywide, and 80% of these were foreigners from other African countries, most of whom were awaiting certification in South Africa where they can get higher paying jobs[3]. This trend continues to affect the Lesotho health sector. The few doctors in the country tend to be overworked. This has created a vicious cycle in such a way that physicians come in and leave within a short period because of the limited number available to take care of patients.

In terms of employer, 64% of study population were employed by the government of Lesotho while 36% were employed by Christian Health Association of Lesotho

(CHAL). This is keeping with provision of public health services which CHAL provides about one third.

This study was carried out in Maseru district which has two secondary level hospitals and the only tertiary institution (Queen Elizabeth II hospital). 73.8% of study participants were working in hospital with only 26.2% working in health centres. Although over 60% of Lesotho's health care is supplied at the primary care level, less than 20% of the formal sector labour supply works at this level[3]. The findings are thus in keeping with other reports which showed that the largest share of the total health sector labour supply (46%) is engaged at the secondary service level while a further 24% is employed at the tertiary care level[3,10,11]. This may have huge implications in the amount of work faced by physicians and nurses in health centres and secondarily impacting on the quality of care offered to patients. It also raises many questions considering the decentralization of HIV services to health centre. There is need for human resource strengthening in terms of numbers to health centres.

5.2 Work index

81.8% of participants strongly disagreed that there were enough staff to provide quality patient care. This finding is in keeping with the fact that there is a severe human resources shortage in Lesotho. Some of the reasons have been elucidated in the socio-demographic section of this report. This finding raises the fact that, the shortage of health professionals in Lesotho is in term of quality and quantity. The Majority of facilities in the country still rely on trained nurse-assistants who ought to work under the supervision of the professional nurse[2,3,6]. This is recognized by health care providers themselves as a problem and a contributing factor to burnout. The quality of care offered to patients is very important and there are enough physicians and nurses to do this, there might be loss of confidence in the public health services. It creates a vicious cycle in country with high disease burden, high mortality, limited number of health care workers and patients who do not believe in the health care system.

Regarding profession and relationships in the work place, 44.8% of participants strongly agreed that doctors, nurses and other health care workers had good

working relationships. This is an important finding in a situation of severe human resource shortage like in this context poor working relationship among staff will only worsen situation for the whole team[40,43,44]. Good working relationship creates good atmosphere among health professionals. This may help in coping with the amount of work reducing unnecessary frustrations among colleagues in health facilities.

5.3 Significance of factors associated with Burnout profile

63.6% of participants felt emotionally drained from their work while 74.6% felt used up that is exhausted at the end of the work day. These are important indicators of stressful working situation. This may also lead to recurrent mistakes which further creates frustration in the mind of health professionals. It is important to explore how respondents could be helped to deal with the situation, in order to improve their overall interest to their work. It is important to add that 70.7% of study participants also felt fatigued or tired when they got up in the morning and had to face another day on the job. These findings are in keeping with clinical symptoms of burnout as described by Ramirez et al. These include but are not limited to tiredness, headaches, irritability, insomnia and emotional instability[42]. Health care workers or any worker for that matter needs to feel motivated to face new challenges at work. The fatigue as experienced by respondents may affect the quality of work they offer to patients and their relationship with their patients.

On the question of feeling burnout, 64.5% of respondents felt burnout. This does not come as a surprise considering the limited number of health care workers and the difficult situation in which they work. There is need to see this as a major problem and address it urgently to avoid more health care workers leaving the system. It is re-assuring to note however that 76% never had the attitude “I don’t care what happens to some patients” although the 10% who had this feeling a few times a week and every day combined is still very important because burnout affects both the health system and the individual. If these 10% are working in certain services such as emergency room, operating theatre and ICU, mortality can be high. For those working in chronic care of patients such as HIV infected individuals, attitude may be very important to support patients to be adherent to their treatment.

5.3.1. Working with HIV

Obtaining satisfaction from working with HIV patients, 79.2% obtained satisfaction from working with HIV patients. Considering the burden of HIV disease in Lesotho, this is very important because more than 50% of daily consultations in the primary health clinic are HIV related[3]. In terms of thinking about leaving their job because of HIV risks, 78.2% never thought of leaving. This is keeping with findings by Dieleman et al in Zambia where health workers seemed relatively motivated in district hospitals[87]. The implication may be that, health professionals in Lesotho do not discriminate against HIV patients. It is re-assuring as decentralization of HIV care and treatment is being scaled up to health centres.

In this research, it was also found that, 54.8% were worried of contracting HIV from patients. Sub-analysis showed that this fear was expressed by 90% of doctors. Although the sample size was only 10, the research could still infer that, the reason might be due to the fact doctors are the ones carrying out extensive procedures such as general surgeries and caesarean sections.

5.4. Job satisfaction

44.5% of respondents were not satisfied with their job while 42.5% agreed they were satisfied. It is interesting to note this finding as it may demonstrate a lot of commitment on the part of health professionals working in Lesotho so that despite heavy workload with limited number of physicians and nurses available in the country, the few who are there are ready to sacrifice to offer quality services to their patients.

84.3% were dissatisfied with wage. This has been found in previous studies to be one of the key elements that make people to leave their current job. Currently, Lesotho has the lowest pay package among countries of same status in Southern Africa. The dissatisfaction over pay check can explain continuous migration of health care workers from Lesotho to countries such as South Africa, Namibia and Swaziland[34, 35]. This needs to be looked upon with a lot of seriousness, as health professionals migration to other countries leaves behind a vacuum in terms of number and experience.

5.5. Association between demographics and burnout factors

Selected burnout factors were tested against demographics such as gender, job title and health facility level where respondents worked showed variable findings.

Considering gender and burnout factors, worry over the risk of contracting HIV from patients was more significant among male respondents. Some reasons that can be inferred from this finding, was the fact that all doctors who took part as respondents were male. Doctors in Lesotho are the ones who carry out surgeries with extensive exposure to blood. This is further supported by the fact that this factor tested against job title showed a significant association with doctors. Furthermore, considering that doctors work mainly in hospital, the same factor tested against level of health facility showed an association with hospital respondent more worried about the risk of contracting HIV from patients. This last finding may be explained by the fact that apart from the earlier reasons, major procedures take place mainly in hospitals. This finding was in keeping with that described by Poncet et al[63].

A sub-analysis of the above mentioned burnout factors, considering male nurses and female nurses, showed no significant association. This further confirmed the fact that profession was the variable that affected association with burnout factors.

In terms of satisfaction with manager, it is important to note that female respondents were significantly not satisfied with the way their managers handled staff. This is an important finding as arbitrary exercise of authority may be a predictor of burnout[43, 44]. However, satisfaction with the way manager handled staff when tested against job title, 100% of doctors were satisfied. Although the sample size was quite small, this may be explained by the fact that in Lesotho, doctors are managers in hospitals. This was further confirmed by the fact a sub-analysis considering male doctors and male nurses showed that male doctors were significant satisfied with their manager.

This may call for further study to understand why nurses were not satisfied with doctors as managers.

5.6 Limitations of this study

There might well be non-response bias; those who were much stressed may not have filled in the questionnaire or they may have been ill/absent from work when the researcher visited the facility.This study was a cross sectional study and could only

measure a once off event. This kind of measurement could be influenced by recent events. Although the study participants worked across the whole of Maseru district thereby covering both rural and urban settings, because of confidentiality, the researcher could not separate the analysis based on different setting.

CHAPTER 6 CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

In this study, the researcher has attempted to determine the prevalence of factors associated with burnout among doctors and nurses working in public health institutions of Maseru district in Lesotho.

Key factors associated with burnout in this population included:

- Age: respondents were generally young in age and career.
- Low staffing capacity both in quantity and quality especially in primary health centres where the majority of patients are seen.
- Lack of motivation.
- Lack of appreciation from managers.
- Low salary which has made health care workers feel that they were not valued by their employers.
- The additional impact of HIV pandemic which has added to overall health professionals' workload. This has also instilled in health care workers the perceived risks of HIV transmission at work place.

6.2 Recommendations

The researcher recommends:

- That health care workers need to institute activities in the health facilities that will help in reducing stress such as sports days, games and social clubs. They should continue to keep good relationship in the team and positive attitude toward their patients.
- Each facility should have a clear strategy in addressing stress reduction at work place.
- Managers should be trained on giving feedback to their staff including positive feedback.
- Employers should hire more health care workers and should see to the appropriate allocation of health professionals to rural clinics.
- The country should develop a clear strategy package to retain experienced health care workers in service.

- There may be a need to have a regional harmonization of wages.

Appendix 1: Questionnaire

LETTER OF INTRODUCTION:

I am Dr. Appolinaire TIAM a Postgraduate student at the University of Witwatersrand in Johannesburg in the Department of Family Medicine.
As a requirement to complete the Master Degree in Family Medicine, I need to carry out this research which has been approved by the Human Ethics Research Committee (HERC) of Wits University. The following questionnaire is anonymous and is aimed at determining the prevalence of factors determining burnout. No part of answer to this questionnaire or any other activity related to this research will be used against study participant. You are free to take part in this research or to decline. If you accept, kindly fill in the following questionnaire and return it sealed in the provided envelop. However, if you decline, you can return the questionnaire unfilled, sealed in the provided envelop.

QUESTIONNAIRE:

Section A: DEMOGRAPHIC AND EMPLOYMENT CHARACTERISTICS

This section asks general questions about you, your background and your employment. Please circle the number corresponding to your response to each question or, where indicated fill in the blanks.

1. What is your job title?
2. What is your gender?
    a) Male
    b) Female
3. What is your age? Please tick appropriate age-range box.

<20	20-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	>60

4. What is you marital status?

a) Married
b) Single
c) Separated
d) Divorced
e) Single mother

5. Who is your employer?
    a) Government
    b) CHAL

6. Are you currently working full or part time?
    a) Full time
    b) Part time
    c) Other (please specify)

7. What is your health facility level? a) hospital b) Health centre

8. What is the highest level of education completed?
    a) Certificate
    b) Diploma
    c) First degree
    d) Bachelor of Medicine
    e) Post-Graduate
    f) Other (specify)
9. How many years have you worked in the health service?

10. In the last one year, how many in-service trainings/workshop have you received?
11. Would you recommend your career to a friend or family member
    a) No
    b) Yes with reservations
    c) Yes without reservations

SECTION B: WORK INDEX

For each item in this section, please indicate the extent to which you agree that the following items ARE PRESENT IN YOUR CURRENT JOB. Indicate your degree of agreement by encircling the appropriate number.

	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree
1.Enough staff to provide quality patient care	1	2	3	4
Enough staff to get the work done	1	2	3	4
Opportunity to work on a highly specialized patient care unit	1	2	3	4
Enough time and opportunity to discuss patient care problem with other staff	1	2	3	4
A manager who is a good manager and leader	1	2	3	4
Hospital/clinic managers support and value health workers	1	2	3	4
Doctors, nurses and other health workers have good working relationships.	1	2	3	4
A lot of team work between different cadres of health workers	1	2	3	4
Adequate support services allow health workers to spend time with patient	1	2	3	4
Freedom to make important patient care and work decisions	1	2	3	4
Health professionals control their own practice	1	2	3	4

SECTION C: BURNOUT INVENTORY

This section contains statements on JOB RELATED FEELINGS. If you have never had this feeling, circle "0" after the statement. Otherwise indicate how often you feel like this by circling the number (1-6) that best describes how frequently you feel that way.

	Never	A few times per year	Once a month or less	A few times per month	Once a week	A few times per week	Every day
I feel emotionally drained from my work	0	1	2	3	4	5	6
I feel used up at the end of the work day	0	1	2	3	4	5	6
I feel fatigued or tiered when I get up in the morning and have to face another day on the job	0	1	2	3	4	5	6
I can easily understand how my patients feel about things	0	1	2	3	4	5	6
I feel I treat some patients as if they were impersonal objects	0	1	2	3	4	5	6
Working with people all day is really a strain for me	0	1	2	3	4	5	6
I deal very effectively with the problems of my patients	0	1	2	3	4	5	6
I feel burned-out from	0	1	2	3	4	5	6

work							
I feel I am positively influencing other people's lives.	0	1	2	3	4	5	6
I have become more hardened toward people since I took this job	0	1	2	3	4	5	6
I worry this job is hardening me emotionally	0	1	2	3	4	5	6
I feel very energetic	0	1	2	3	4	5	6
I feel I am working too hard on my job	0	1	2	3	4	5	6
I feel frustrated by my job	0	1	2	3	4	5	6
I don't really care what happens to some patients	0	1	2	3	4	5	6
Working directly with people puts too much stress on me	0	1	2	3	4	5	6
I can easily create a relaxed atmosphere with my patients	0	1	2	3	4	5	6
I accomplish many worthwhile things in this job	0	1	2	3	4	5	6
I feel exhilarated after working closely with patients	0	1	2	3	4	5	6
I feel I am at the end of my rope.	0	1	2	3	4	5	6
In my work I deal with emotional problems very calmly	0	1	2	3	4	5	6
I feel patients blame me	0	1	2	3	4	5	6

for some of their problems							
Working with HIV	**Never**	**A few times per year**	**Once a month or les**	**A few times per month**	**Once a week**	**A few times per week**	**Every day**
I obtain satisfaction from working with HIV patients	0	1	2	3	4	5	6
I find working with HIV patients physically tiring	0	1	2	3	4	5	6
I find working with HIV patients emotionally draining	0	1	2	3	4	5	6
I think with pride of the good work I am doing with HIV patients	0	1	2	3	4	5	6
I worry about the risk of contracting HIV from patients	0	1	2	3	4	5	6
I think about leaving this job because of HIV risks	0	1	2	3	4	5	6
I worry about the effect of HIV on the staff performance	0	1	2	3	4	5	6
I worry about being unable to treat other patients because of the amount of time I spend working with HIV patients	0	1	2	3	4	5	6

SECTION D: JOB SATISFACTION

With regard to your job indicate the extent to which you agree or disagree with the following statements. Please answer every question by marking X in the space provided, not leaving any blank.

	Strongly disagree	Disagree	Neither agree nor Disagree	Agree	Strongly agree
In general I am satisfied with this job					
I find that my opinions are respected at work					
Most people in this job are very satisfied with it					
I am satisfied with the recognition I get for the work I do					
I am satisfied with the way my pay compares with that for similar jobs in other organisations					
I am satisfied with the personal relationship between my manager and his/her staff					
I Am satisfied with the way my manager handles staff					

Appendix 2: Ethical approval Wits

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG
Division of the Deputy Registrar (Research)

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)
R14/49 Dr Tiam Appolinaire

CLEARANCE CERTIFICATE	**M10413**
PROJECT	Determination of Prevalence of Factors Associated with Burnout among Health Professionals in Maseru District Lesotho
INVESTIGATORS	Dr Tiam Appolinaire.
DEPARTMENT	Department of Family Medicine
DATE CONSIDERED	30/04/2010
DECISION OF THE COMMITTEE*	Approved unconditionally

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

DATE 11/06/2010 **CHAIRPERSON** .....
(Professor PE Cleaton-Jones)

*Guidelines for written 'informed consent' attached where applicable
cc: Supervisor : Prof I Couper

UNIVERSITY OF THE WITWATERSRAND
PROF AJ WOODIWISS
Co - Chair
2 JUL 07 2 1
HREC (Medical)
JOHANNESBURG

DECLARATION OF INVESTIGATOR(S)

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

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES...

Appendix 3: Ethical approval Lesotho MOH

ID 31-2010

LESOTHO

Ministry of Health
and Social Welfare
PO Box 514
Maseru 100

18 May 2010

Dr. Appolinaire Tiam
Department of Family Medicine
University of Witwatersrand, Johannesburg

Dear Dr. A. Tiam

Re: Determination of prevalence of factors associated with burnout among health professionals in Maseru district, Lesotho

Thank you for submitting the protocol. The Ministry of Health and Social Welfare Research and Ethics Committee having reviewed your protocol hereby authorizes you to conduct this study among the specified population. The study is authorized with the understanding that the protocol will be followed as stated. Departure from the stipulated protocol will constitute a breach of the permission.

We are looking forward to have a progress report and final report at the end of your study.

Sincerely,

Dr.M. M. Motcetee
Chairperson Research and Ethics Committee
Director General
Health Services

Appendix 4: Memo to Health facilities from DG

MEMORANDUM

TO:	MEDICAL SUPERINTENDENT QE II HOSPITAL
	DHMT FOCAL PERSON MASERU
	HEALTH CENTER IN CHARGE MASERU DISTRICT
FROM:	DIRECTOR GENERAL OF HEALTH SERVICES
REF:	H/ADM/24
NAME:	DR. M.M. MOTEETEE
SIGNED:	.....
DATE:	19TH AUGUST 2010

RE: RE: RESEARCH AT QE II, ST.JOSEPH'S AND SCOTT HOSPITALS AS WELL AS THEIR AFFILIATED HEALTH CENTERS

The Research and Ethics Committee of the MOHSW has approved that Dr. Appolinaire Tiam conduct a study, in lieu of his Masters in Family Medicine titled "Determination of Prevalence of Factors Associated with Burnout among Health professionals in Maseru District, Lesotho".

Dr. Tiam has selected the above mentioned study sites.

Please assist facilitate his access to the sites.

Appendix 5: Letter from DG to CHAL executive Secretary

RECEIVED 1 3 SEP 2010

LESOTHO

Ministry of Health & Social Welfare
P.O. Box 514
MASERU. 100
LESOTHO

August 19, 2010

REF: H/ADM/24

Mrs. A.M. Ntholi
Executive Secretary CHAL
Maseru

Dear Mrs. Ntholi,

RE: RESEARCH AT ST.JOSEPH'S AND SCOTT HOSPITALS AS WELL AS THEIR AFFILIATED HEALTH CENTERS

The Research and Ethics Committee of the MOHSW has approved that Dr. Appolinaire Tiam conduct a study, in lieu of his Masters in Family Medicine titled "Determination of Prevalence of Factors Associated with Burnout among Health professionals in Maseru District, Lesotho".

Dr. Tiam has selected the above mentioned study sites.

Please assist facilitate his access to the sites.

Yours sincerely,

DR. M. M. MOTEETEE
DIRECTOR GENERAL OF HEALTH SERVICES

Page 1 of 1

Appendix 6: Letter from CHAL to its facilities

Christian Health Association of Lesotho
P.O. Box 1632, Maseru 100, Lesotho
Telephone: +266 2231 2500, Fax: +266 2231 0314
e-mail: chal@lesoff.co.za

13th September 2010

Medical Superintendents
St. Joseph's Hospital
Scott Hospital

Dear Sir/Madam,

RE: **RESEARCH AT ST. JOSEPH'S AND SCOTT HOSPITALS AS WELL AS THEIR AFFILIATED HEALTH CENTRES**

Enclosed herewith please find self explanatory letter from the Director General of Health Services of the Ministry of Health and Social Welfare.

We humbly request your institution to kindly assist Dr. Tiam to access the sites for his study.

Yours sincerely,

A.M. Ntholi
EXECUTIVE SECRETARY

cc: SNO
cc: Hospital Administrator

Enclosure

Registered as No. 74/12 under Society's Act of 1967

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