**ADDIS ABABA UNIVERSITY**

**COLLEGE OF HEALTH SCIENCE**

**SCHOOL OF ALLIED HEALTH SCIENCES**

**DEPARTMENT OF NURSING AND MIDWIFERY**

# PREVALENCE OF NURSES BURNOUT AND ITS DETERMINANT FACTORS IN PUBLIC HOSPITALS, ADDIS ABABA

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**A Thesis Submitted to School of Graduate Studies of Addis Ababa University in Partial Fulfillment to the Requirements for the Degree of Master of Science in Adult Health Nursing**

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# Prevalence of Nurses Burnout and Its Determinant Factors in Public Hospitals, Addis Ababa, Ethiopia

**MSc. Thesis**

**In Partial Fulfillment to the Requirements for the Degree of Master of Science in Adult Health Nursing**

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## APPROVAL BY THE BOARD OF EXAMINERS

This Thesis by Hrut Adeba is accepted in its present form by the board of examiners as satisfying. Thesis requirement for the degree of Master of Science in Adult Health Nursing.

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| Full Name | Rank | Date |

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# TABLE OF CONTENTS

## Contents Page

APPROVAL BY THE BOARD OF EXAMINERS ..... iii
ACKNOWLEDGMENT ..... iv
TABLE OF CONTENTS ..... v
LIST OF TABLES ..... viii
LIST OF FIGURES ..... ix
LIST OF ANNEXES ..... x
ABBREVIATIONS ..... xi
ABSTRACT ..... xii
CHAPTER ONE ..... 1
1. INTRODUCTION ..... 1
1.1. BACK GROUND OF THE STUDY ..... 1
1.2. STATEMENT OF THE PROBLEM ..... 2
1.2.1. Basic Question of the Study ..... 4
This study was guided by the following basic question ..... 4
1.3. Significance of the study ..... 4
1.4. Delimitation of the Study ..... 5
CHAPTER TWO ..... 6
2. Literature Review ..... 6
2.1. Burnout: Definition and History ..... 6
2.2. Theories and Developmental Models of Burnout ..... 6
2.3. Nursing profession and Burnout ..... 8
2.4. Prevalence and determinant factors of burnout ..... 9
2.4.1. Individual factors ..... 10
2.4.2. Work related factors / Job-characteristics ..... 11
2.4.3. Organizational factors. ..... 12
2.5. Conceptual frame work ..... 12
comes ..... 13
2.6. Coping Strategies ..... 14

CHAPTER THREE ..... 17
3. Aim & Objectives of the Study ..... 17
3.1. General objective ..... 17
3.1.1. Specific Objectives of the study ..... 17
CHAPTER FOUR ..... 18
4. METHODOLOGY ..... 18
4.1. Study area and Period ..... 18
4.2. Study design ..... 18
4.3. Source population ..... 18
4.4. Study population ..... 18
4.5. Inclusion Criteria ..... 19
4.6. Exclusion Criteria ..... 19
4.7. Sample size ..... 19
4.8. Sampling procedure ..... 20
4.9. Data collection tools ..... 22
4.10. Data collection procedures ..... 22
4.11. Study variables ..... 23
4.12. Operational Definitions ..... 23
4.13. Data processing and analysis ..... 24
4.14. Data Quality Control ..... 24
4.15. Ethical consideration ..... 24
4.16. Dissemination of results ..... 25
CHAPTER FIVE ..... 26
5. DATA ANALYSIS AND INTERPRETATION ..... 26
5.1. Results ..... 26
5.1.1. Nurses' characteristics ..... 26
5.1.2. Prevalence of Nurse Professional Burnout ..... 28
5.1.3 Determinants of Nurses Burnout ..... 29
**CHAPTER SIX** ..... 32
**6. DISCUSSION, CONCLUSION AND RECOMENDATION** ..... 32
6.1. Discussion ..... 32
Under Determinants of Nurses Burnout ; ..... 34

6.2. Limitation of the Study........35
6.3. CONCLUSION........35
6.4. RECOMMENDATIONS........36
7. REFERENCES........37
8. ANNEX........40

# LIST OF TABLES

Table 1. Socio-demographic characteristics of nurses in AA public from , March to April, 2015. .......... 27

Table 2. Description of the three sub-scales of MBI-HSS and nurses burnout ......................................... 28

Table 3. Bivariate and multiple logistic regressions of the selected variables with nurse professional burnout in public hospitals, Addis Ababa . 2015. ........................................................................ 30

# LIST OF FIGURES

Figure 1. The conceptual frame work of the three dimensions of burnout and its out............................... 13

Figure 2. How determinant factors related to burnout - Conceptual framework........................................ 14

Figure 3. A model of perceived occupational stressor, coping strategies, and stress outcomes. ................ 16

Figure 4. Schematic presentation of sampling procedure on Prevalence of Nurses Burnout and its Determinant factors in selected public hospitals in Addis Ababa Ethiopia, 2015. .................................... 21

# LIST OF ANNEXES

Annex 1. Informed Consent ........................................................................ 40
Annex 2. . Questionnaire ........................................................................ 42
Annex 3 Declaration ........................................................................ 46

## ABBREVIATIONS

| | |
|---|---|
| ANA | American Nursing Association |
| AOR | Adjusted Odd Ratio |
| DP | Depersonalization |
| EE | Emotional Exhaustion |
| HSS | Human Service Survey |
| IRB | Institutional Review Board |
| JDCS | Job Demand Control Support |
| MBI | Maslach,s Burnout Inventory |
| PA | Personal Accomplishments |
| PTSD | Post-Traumatic Stress Syndrome |
| PB | Professional Burnout |

# ABSTRACT

***Background***: *Burnout is an important problem in health care professionals and nurses are more exposed to professional burnout due to their exposure to physical, mental, and emotional stressors, which can lead to numerous complications in their personal, social, and organizational life , which is a decrease in occupational well-being and an increase in absenteeism, turnover and illness. *

***Objectives*** - *to find out the prevalence of nurse's burnout and to identify its determinant factors in public hospital Addis Ababa, Ethiopia*

***Methodology -*** *A cross-sectional descriptive study was conducted using structured self-administered questionnaire in different department and with nurses working in 6 (six) public hospitals in Addis Ababa*

***Results:*** *A total of 502 questionnaires were distributed with response rate of 88%, which totals 440 participants. Were included in this study. 241 (54.8%) suffered from professional burnout based on its definition. Among the study participants 271(61.6%) ,114(25.9%) ,55(12.5%) were Emotional Exhaustion( EE) high , moderate ,low respectively .on the other hand the scale of Depersonalization( DP) of nurses were 169 (38.4%), 146(33.2%),125(28.4%) high ,moderate and low respectively .the scale of personal accomplishment( PA) were 74(16.8%),129(29.3%).237(53.9%) ,high ,moderate, low respectively . Individual factors such as demographic variables, sex, health problem (backache) has association with burnout. Work related factors such as work area, service year and organizational factors employment sector (public hospitals) were also found to be determinants of burnout in this population.*

***Conclusions*** *-Burnout rates high in- emergency unit, Gender, services area, service year, current work satisfaction, , health problem are determinants of burnout, as well as organizational variables.*

***Recommendation –****Independent variables which are significant association with burnout Gender-;males, work area- ICU ,Service years-11-15, Job satisfaction, health problem are significantly associated with nurses burnout .So public hospitals administrations and the Federal ministry of health has to plan on coping strategies to prevent burnout.*

# CHAPTER ONE

## 1. INTRODUCTION

### 1.1. BACK GROUND OF THE STUDY

**Nursing** is a profession within the health care sector focused on the care of individuals, families, and communities so they may attain, maintain, or recover optimal health and quality of life.
Nursing is the protection, promotion, and optimization of health and abilities, prevention of illness and injury, alleviation of suffering through the diagnosis and treatment of human response and advocacy in the care of individuals, families, communities, and populations. "American Nursing Associations" (ANA)."[1] Nursing is considered to be one of the most stressful professions among the human services professions.

Nurses may be differentiated from other health care providers by their approach to patient care, training, and scope of practice. Nurses practice in a wide diversity of practice areas with a different scope of practice and level of prescriber authority in each. Many nurses provide care within the ordering scope of physicians as well as nurses provide care both interdependently, for example, with physicians, and independently as nursing professionals.

Nurses have been the subject of several studies, because they experience constant stressful labor situations, working in direct contact with patients who have different expectations and degrees of suffering. The experience of constant stressful work lead to job dissatisfaction as well as burn out and the profession is not only physically demanding while dealing with human health and Function, but it also necessitate the use mental energy and leads to mental exhaustion as well as burnout.

Burnout is specific to the work context, in contrast to depression, which tends to pervade every domain of a person's life. According to Maslach and Leiter [2], Burnout is a concept that can be defined differently by different individuals. Before it got standardized definition by Maslach

(1982), different people used the term to mean different things. According to Maslach, burnout is a state of emotional exhaustion, depersonalization and reduced sense of personal accomplishment that occurs among individuals who work with people in some capacity as result of chronic exposure to stress resulting from human interaction. Burnout results from inability to effectively manage chronic stress, which can be defined according to its multiple dimensions: As a human services profession, nursing is among the professions where professionals involved are highly exposed to conditions that cause the experience of burnout.

There are high incidences of burnout in the helping professions due to the establishment of intense interpersonal relationships Also its defined as typically characterized by emotional exhaustion (depletion of emotional resources and diminution of energy), depersonalization (negative attitudes and feelings as well as insensitivity and a lack of compassion towards service recipients) and a lack of personal accomplishment (negative evaluation of one‘s work related to feelings of reduced competence) [These three characteristics emphasize the connection between burnout and working with people.

## 1.2. STATEMENT OF THE PROBLEM

Health care professionals in general are thought to have a high vulnerability to burnout as a result of experiencing high levels of emotional strain, owing to stressful working environments exacerbated by sick and dying patients to whom they provide care. Nurses in particular however, have been found to experience higher levels of burnout compared to other health care professionals owing to the nature of their work.

High levels of burnout among nurses have often been attributed to prolong direct personal contact of an emotional nature with a large number of patients. This, amongst other factors such as prolonged exposure to work related stress as well as low levels of job satisfaction; have also been recognized as factors contributing to high levels of burnout among nurses. Burnout in nurses has been shown to lead to emotional exhaustion as well as a loss of compassion for others (depersonalization) and a sense of low personal accomplishment. These experiences can have very significant implications for the health and wellbeing of nurses.

It has also been associated with insomnia, perceptions of physical exhaustion, and increased Substance abuse (Naude & Rothmann, 2004).[3] This situation can lead to compromised Social interaction, not only at work place but also in the community where the nurses Belong which may negatively impact the social and family lives of the professionals. The impact may lead to harmful consequences in patient care like medication Errors and lack of appropriate attention to the care receivers. Naude & Rothmann (2004)[3], also reported that the negative consequences of burnout are far beyond Personal. Burnout has also been associated with reduced organizational efficiency and Work-related problems such as employee turnover, low morale, poor quality of care, Lowered productivity, absenteeism and interpersonal problems. This means that, the Situation may lead to the extent that can affect the reputation of the health care facilities, because in most cases health care facilities are evaluated by communities through the Quality of health care they provide and the trust that can be placed into its professionals.

Public Hospitals have work load in all areas and also the nurse patient ratio is not proportional. So one nurse has to take care of many patients as well as cannot meet or fulfill all interest of patients. This mismatch brings complain at nurses which manifested by job dissatisfaction causing burnout.

Although work related stressors including nurse physician relationships, management styles and organizational support are related to burnout and job satisfaction. Work related stress is linked to job satisfaction through burnout.

According to Kato G.U(1994) [4], the role of nursing is associated with multiple and conflicting demands imposed by nurse supervisors/managers, as well as medical and administrative staff, which might lead to work overload and or role conflicts.

Despite the existence of numerous studies conducted regarding burnout in Europe, the US, Australia, parts of Africa and Asia, there are no researches conducted on this issue of interest particularly in Ethiopia. Therefore, this study was aimed to assess the prevalence of nurse‘s burnout and its determinant factors in public hospitals.

According to my observation there is informal complaining of nurses for par time pay, hazard, shortage of staff, wage, salary, working long hours e.g. .night duty, low income, and the dissatisfaction on their job and they are searching for alternative opportunities of work. There is also no research conducted on the topic prevalence of nurse burnout and its determinant factors

on public hospitals. The study gave clue and hints for other researchers who have interests in the area to farther investigate the study on the given topic. Moreover, this study helped to recognize factors related to burnout in nurses & help them take corrective measures in attempt to improve the health status of their employees as well as to improve efficiency and quality of care rendered to the clients.

### 1.2.1. Basic Question of the Study

This study was guided by the following basic question

1. What was the prevalence of burn out among nurses in public hospitals?

2. What are personals and work area related and organizational factors contributed to burn out of nurses in public hospitals?

## 1.3. Significance of the study

This study was conducted to provide baseline information about prevalence and determinant factors related to burnout among Ethiopian nurses. Its findings was significant venture in promoting psychological heath of nursing staff and thereby delivery of better and more efficient health care by minimizing fatal medication and therapeutic errors, staff turnover, and work area absenteeism and conflict which was in turn believed to contribute to the effectiveness and productivity of heath care facilities in responding to societal needs.

Moreover, results of this study helped health care institutions; particularly hospitals to recognize factors related to burnout in nursing staff & help them take corrective measures in attempt to improve the health status of their employees as well as to improve efficiency and quality of care rendered to win health care market by improving these factors. Patients and service seekers usually choose hospitals that deliver safe & high quality care.

## 1.4. Delimitation of the Study

Even though the levels of burnout and factors related among Ethiopian nurses is nearly uniform, this study designed to assess the prevalence of nurse‘s burnout and its determinant factors that have effect on nurses, patients and organizational performance in six selected government Hospitals in Addis Ababa. The study was focused on the effect of burnout on nurse‘s job satisfaction. The source of primary and secondary data mainly focuses on the management (Head nurses) and nurses of different departments with great emphasis on critical care units and emergency pediatrics. Therefore, the source of information of this study does not include nurses of most regional and other hospitals in Addis Ababa as there is a time and budget constraint.

# CHAPTER TWO

## 2. Literature Review

### 2.1. Burnout: Definition and History

Professional burnout (PB) is negative transformations of attitude, spirit, and behavior in confrontation with mental work related pressures. This is made by severe occupational stress leading to various physical and mental diseases as well as a negative attitude toward professional activities and lack of appropriate communications with the patients. Signs of this syndrome are revealed when individuals' abilities are not enough for the demands in work environment. Burnout is a syndrome containing three dimensions of emotional exhaustion, depersonalization, and reduction of personal accomplishment. Nurses are exposed to professional burnout (PB) due to their exposure to physical, mental, and emotional stressors, which can lead to numerous complications in their personal, social, and organizational life.

The study of burnout had its genesis on the mid-seventies when Freudenberg (1974) [5] Identified >burnout= as a major problem in human service professionals. He described Burnout as a situation whereby clinical hospital staff including himself (a medical doctor), Came to be >inoperative=. Since then there have been in excess of three thousand Publications on the topic, and burnout has been recognized as an occupational hazard for a variety of people-centered professions, such as human services, education and health care(Maslach, Schaufeli, & Leiter, 2001)[6] burnout is frequently studied in populations of nurses for several reasons. These reasons include the fact that nurses are the largest group in the health care system. As professional body, it has been linked to a high incidence of and the very nature of nursing is based on empathy, compassion and humanization of medicine, and nurse.

### 2.2. Theories and Developmental Models of Burnout

Several folk theories about the development of burnout emerged from the interviews of the earliest pioneering phase of research. One theory is that it is the best and most idealistic workers who experience burnout—as captured in the common phrase, ―You have to be on fire in order to burn out." The notion here is that such dedicated People end up doing too much in support of

their ideals, thus leading to exhaustion and eventual cynicism when their sacrifice has not been sufficient to achieve their goals.

A second theory is that burnout is the end result of long exposure to chronic job stressors. Consequently, burnout ought to occur later in people‘s careers, rather than earlier, and it should be relatively stable over time if people stay in the same job. There has also been debate about whether burnout results from overload (i.e. too many demands with too few resources) or from under load that is tedium and monotony (Maslach, Schaufeli, & Leiter, 2001[ 6 ]

The most recently developed and proposed as an alternative scale for Maslach‘s Burnout Inventory (MBI) is the Oldenburg Burnout Inventory (OLBI) by Demerouti & Bakker (2007).[7] The Maslach‘s Burnout Inventory assesses all three core dimensions; exhaustion, Cynicism and inefficacy. The instrument is designed for three different occupational Categories; MBI-HSS, the human services survey which developed to assess burnout in professionals in human services such nursing; MBI-ES, educational survey which designed to assess burnout in educational professionals and MBI-GS, general survey which is designed to assess burnout in general working populations. In both MBI-HSS & MBI-ES, the labels for the three dimensions reflect the focus on occupations where the workers interact extensively with people such as patients, clients, students, etc. The MBI-HSS consists of 22 items that are subcategorized into the three dimensions (Maslach, Schaufeli, & Leiter, 2001)[6].

After the identification of the three dimensions of burnout syndrome, several developmental models were presented in these dimensional terms. The phase model Proposed that each of the three dimensions can be split into high and low scores, that all possible combinations of the three dimensions resulted in eight patterns, or Phases, of burnout (Golembiewski & Munzenrider, 1988)[8]. Research based on the phase model has established that the progression of phases from low to high burnout is correlated with worsening indices of both work and personal wellbeing (Maslach, Schaufeli, & Leiter, 2001)[6] over time, in which the occurrence of one dimension precipitates the development of another. According to this model, exhaustion occurs first, leading to the development of cynicism, which leads subsequently to inefficacy. For example, a study of hospital nurses yielded the following sequence:

1) Stressful interactions with supervisors increase the workers' feelings of exhaustion;
2) High levels of exhaustion lead to cynicism, especially if workers lack supportive contact with their coworkers;
3) As cynicism persists, the workers' feelings of efficacy diminish, although supportive Contact with coworkers may help to decelerate this process (Leiter & Maslach, 1988).[9]. Another and the most popular theoretical occupational stress model is the Job Demand Control Support Model (JDCS), developed by Karasek and Theorell (1990) [10]. This model defines three dimensions as predictors of occupational stress: ‗job demand' as a burden and ‗job control' and ‗social support' as potential resources or buffers. Job demand is defined as the psychological work load in terms of time pressure, role conflict and quantitative workload. Job control, also called decision latitude, is the amount of freedom that a worker has, to control and plan his/her work activities. This dimension has in turn two sub-dimensions that are however interrelated: skill discretion and decision authority. Skill discretion is the range of skills and competences that a worker needs to fulfill his working tasks and is also related to the (future) opportunities of the worker to acquire new skills, expand his/her knowledge in the job or get promotion.

Decision authority, or autonomy, is the amount of freedom that a worker has, to choose and to plan his tasks and is closely related to participation and involvement. The third dimension of the JDCS-model, social support, is defined as the amount of psychological and instrumental help and support that a worker can count on at work. It also has two sub-dimensions: social support provided by the colleagues or co-workers and social support provided by the supervisor.

## 2.3. Nursing profession and Burnout

Nursing is a caring profession, and the caring encompasses empathy for and connection with people. Caring is best demonstrated by a nurse's ability to embody the five core values of professional nursing [11,12]- human dignity, integrity, autonomy, altruism and social justice. The caring professional nurse integrates these into in clinical practice.

Each nurse is considered to be committed to professional core values by aspiring to be an ideal nurse, always being patient and kind. However, the need to deal with patients' needs (especially

those of non-compliant patients), upset family members and other staff members sometimes poses a great challenge. Hence, nursing is a challenge!, that is why they are prone to burn out. Nurses understand that ongoing changes in the healthcare system demand the application of professional core values, as well as the need for life-long learning to keep their knowledge and skills up to date[11,12].

## 2.4. Prevalence and determinant factors of burnout

Prevalence burnout among nurses has been estimated between 2% and 10% (Pisanti, Lombardo, Lucidi, Violani, & Lazzari, 2013)[13]. Categorized these determinants in terms of _individual factors' and _job related factors', based on an overview of burnout by Maslach et al. (2001)[6].. Nurses are found to be vulnerable to burnout, but emergency nurses are even more so, since emergency nursing is characterized by unpredictability, overcrowding and continuous confrontation with a broad range of diseases, injuries and traumatic events.

.

Burnout among Lebanese nurses: Psychometric properties of the Maslach Burnout Inventory-Human Services Survey (MBI-HSS , nurses in this study reported moderate level of burnout. They reported mostly high levels of emotional exhaustion (77.5%), high levels of depersonalization (36.0%), and low levels of personal achievement (33.0%) . Sabbah *et al.* / Health 4 (2012) [14]

Previous research has shown that demographic variables and personality characteristics (Ebling & Carlotto, 2012; Maslach, Schaufeli, & Leiter, 2001),[15 ,6] combined with work characteristics, job in satisfaction and negative work-family interaction (Geurts & Demerouti,[16] are related to burnout among nurses. Particularly, in line with findings from previous empirical research, males show higher levels of cynicism than females , single people are more prone to burnout than married people ,. Professionals with low levels of Hardiness (Maslach et al., 2001),[6] who are younger , and who are more dissatisfied with their work are also more likely to experience burnout (Kalliath & Moris, 2002).[17] Finally, negative work-family interaction correlates with higher levels of exhaustion and depersonalization (Burke & Greenglass, 2001).[18]

Burnout among Lebanese nurses: Psychometric properties of the Maslach Burnout Inventory-Human Services Survey (MBI-HSS , nurses in this study reported  results provide strong evidence that older age and experience are important predictors of burnout. In contrast with our results, several studies had found that young nurses are most enthusiastic about nursing, and then are likely to fall prey to nursing burnout as a result of role conflict..[19]
In the Philippines, Cecilia [20] discussed an expert-based classification of burnout into three levels or degrees. In this classification, first-degree burnout is described as a feeling of tiredness, exhaustion or fatigue. On the other hand, irritation, resentment, sarcasm and cynicism characterized second-degree burnout. Lastly, third-degree burnout was described as loss of self-esteem, sense of achievement, and desire to work. Compassion fatigue, a form of burnout that results in impaired caregiving and poor quality of care, could also occur in nurses .

Lee, Song, Cho, et al. [21] conducted a study to form a comprehensive model of burnout among Korean nurses in light of the lack of literature on the subject in Asia. They found that Korean nurses had higher levels of burnout compared to those in western countries such as Germany Canada, the United Kingdom and the USA. Furthermore, those who experienced higher job stress, showed lower cognitive empathy and empowerment, and those who worked on night shifts at tertiary hospitals were more likely to experience burnout.

### 2.4.1. Individual factors

Demographic characteristics, in general populations, younger age was found to be related to a higher risk of burnout. Gender was also found to be predictive of burnout in several studies but the results were not uniform. Some studies found higher levels of burnout in women, others found the opposite and some studies did not find a difference. Higher levels of education were related to higher levels of burnout but the link is still unclear, people with certain personality characteristics (e.g., low self-esteem, higher vulnerability, competitiveness, excessive need for control) and job attitudes (i.e., higher job expectations) tend to have a higher burnout potential (Maslach et al., 2001).[6]

A number of personal factors have also been associated with burnout. These include perfectionism, over-involvement with patients, self-esteem, sense of mastery and purpose in life , low education level, low work experience, low status, economic hardships, difficulty in childcare and doing house chores, and personal and family health problems . Interpersonal variables such patient and family stressors and stressful interactions with colleagues have also been found to be involved.

### 2.4.2. Work related factors / Job-characteristics.

Nurses are considered to be particularly susceptible to the danger of burnout, due to the very stressful nature of their work, which has a negative impact on their mental and physical productivity (Gil-Monte, 2005;[22] Hudek-Knežević, Kalebić, & Krapić, 2011).[23] A nurse‘s job is predominantly emotional, and this factor is considered as a main stressor, which can result in a direct intention to leave work (Bartram, Casimir, Djurkovic, Leggat, & Stanton, 2012 .[24]

Exposure to traumatic events. Repetitive professional exposure to traumatic events, such as confrontation with severe injuries, death, suicide, aggression and suffering, was reported to be related to the development of post-traumatic stress syndrome (PTSD) and burnout in various nurses‘ populations (Donnelly and Siebert, 2009; Mealer et al., 2009;[25] Collins and Long, 2003).[26]

Education at the beginning of the work, face problems in confrontation with occupational stressors. They are more prone to lower risk of professional burnout through time, attaining coping skills, getting professional in their field of work, and ultimately adaptation with work environment and factors working as a staff nurse especially at night shift disturb individuals‘ circadian cycle and their rest and sleep. Those working in night shift have to sleep in daytime, when it is not possible to have a deep and good quality sleep. Night shift also impairs individuals‘ physiologic balance. The findings in the present study showed a direct and significant association between monthly night shifts and PB so that the risk of PB( professional burnout ) increases by 1.12-folds for each extra night shift. There was no association between working as a staff and PB. Delpasand *et al.*reported no association between working as a staff

nurse and . Sotoude and Zhang Feng[27] [reported Professional burnout more among the staff. Nurses and Zencirci reported high professional burnout in evening shift.

Emergency and Critical care and intensive care units of health care institutions are areas of high psychological demand and exposure to more stressors compared to other units within health care facilities. In emergency and critical care units life and death issues are dealt with at a very rapid pace (Naude & Rothmann, 2004), which is a mentally draining task. Nursing staff working in such demanding areas are often continually faced with heavy demands of pity, sympathy and compassion (Gillespie &Melby, 2003).[28] .In 1996 Maslach indicated that persons who continually work with people under such circumstances find that chronic stress can be emotionally draining and can lead to burnout (as cited in Gillespie & Melby, 2003).[28].
In sum, several job characteristics, such as excessive work demands and a lack of resources may lead to more burnout. Workload, time pressure, role conflict and role ambiguity are some of the most important ―triggers" of burnout. Lack of social support and job autonomy are harmful as well. When an organization / management / supervisor has high expectations toward the employees but gives less in return, burnout is also likely to develop.

#### 2.4.3. Organizational factors.

Next to job characteristics, organizational and environmental characteristics, such as personnel and material resources, procedures, policies, organizational culture and reward, proved to be associated with the employees' wellness in several study populations (Maslach et al., 2001; Poncet et al., 2007).[6,] This study examined the relationships between work related stress, burnout, job satisfaction and general health of nurses Relationship. . When an organization / management / supervisor has high expectations toward the employees but gives less in return, burnout is also likely to develop.

### 2.5. Conceptual frame work

Burnout is simply the condition of a person who has become very physically and emotionally tired after doing a difficult job for a long time. Burnout is *a* syndrome of depersonalization, emotional exhaustion and a sense of low personal accomplishment that leads to decreased

effectiveness at work" (Shanafelt 2002).[29] A state of mental and / or physical exhaustion caused by excessive and prolonged stress (AIHW, 2002)

Burnout is reflected in pathological emotional depletion and maladaptive detachment that is a secondary result of exposure to prolonged occupational stress. The three dimensions include emotional exhaustion, depersonalization and reduced personal accomplishment. Psychologist(Herbert Freudenberg and Gail North)[30]

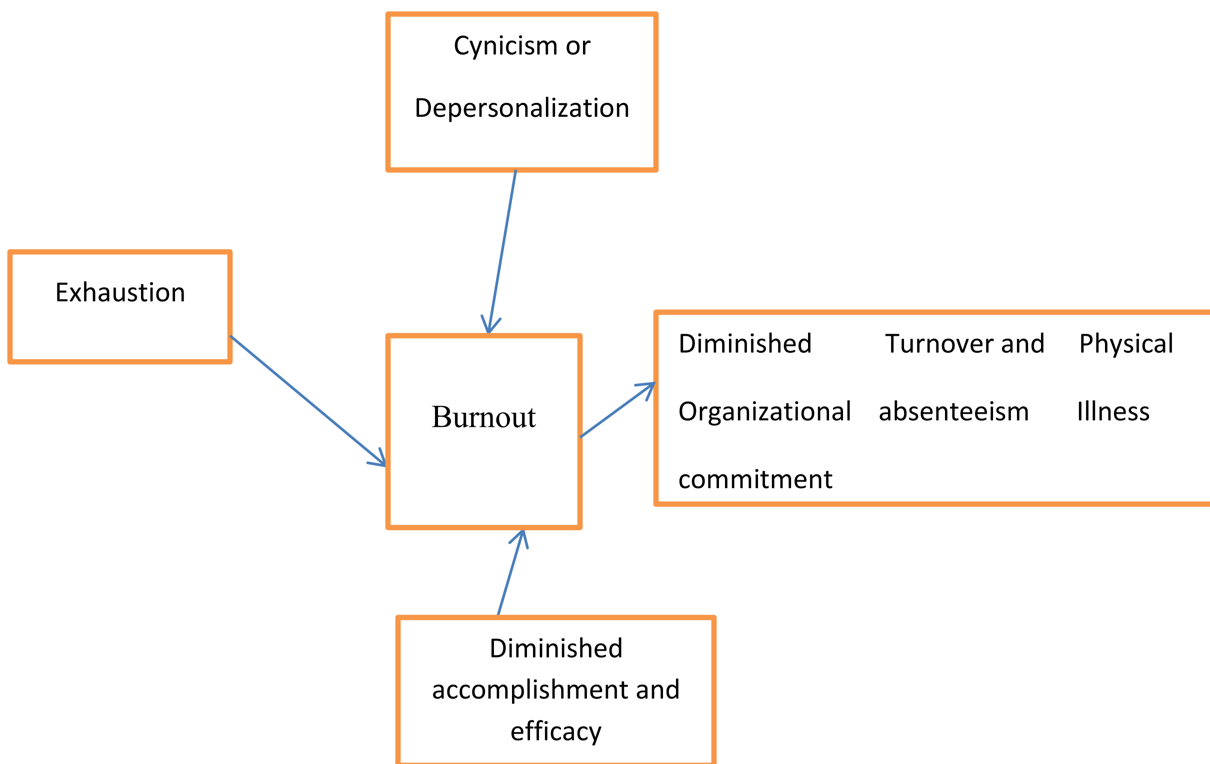


**Figure 1. The conceptual frame work of the three dimensions of burnout and its out comes. *Source Masalach* (1998:77) [31]**

Determinant factors of nurses burnout are categorized in to three:

a. Individual factors

b. Work related factors / job characteristics c. Organizational factors

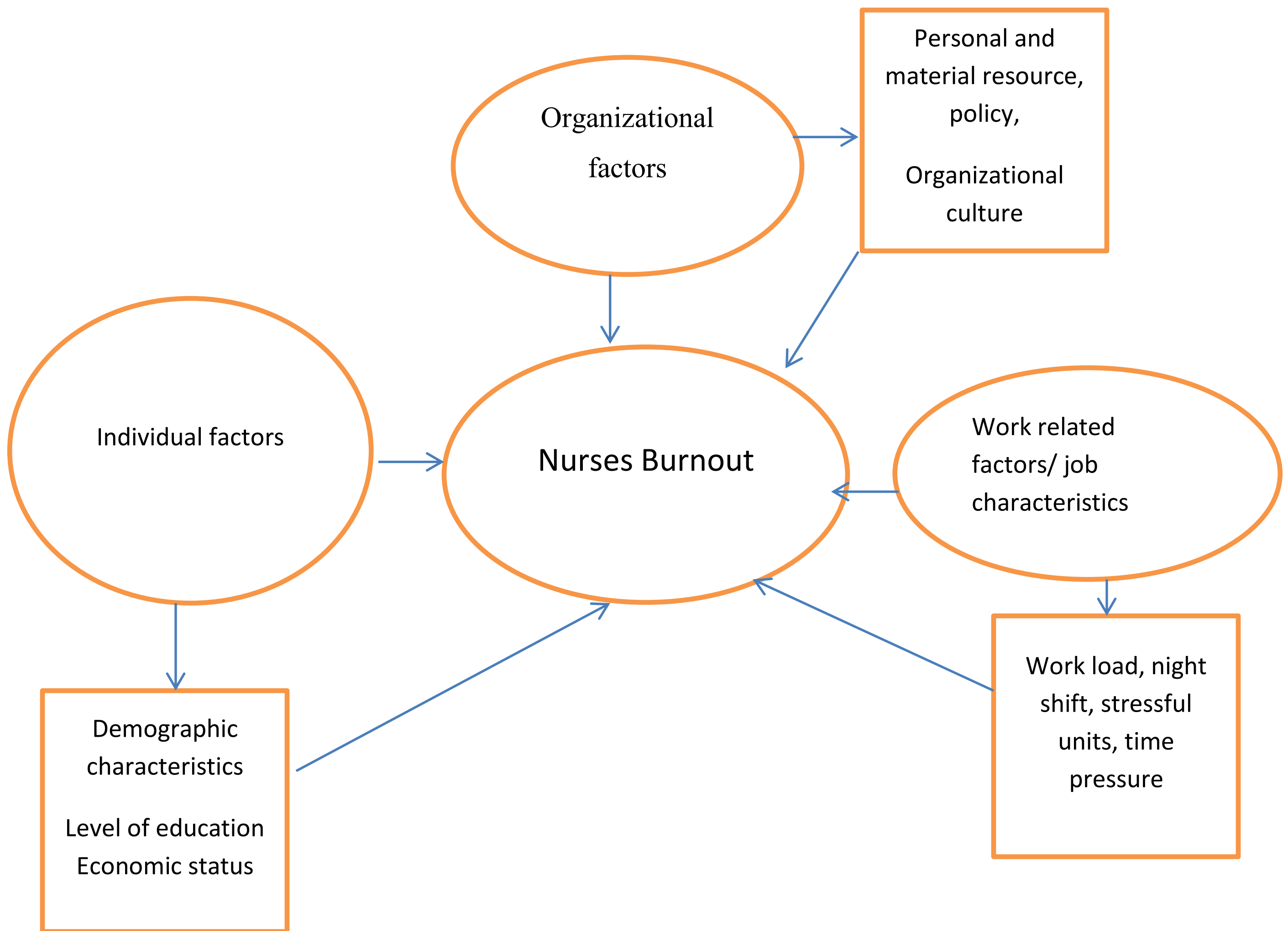


**Figure 2. H**ow determinant factors related to burnout - Conceptual framework

## 2.6. Coping Strategies

Coping Strategies Coping strategies, customarily being defines as *specific methods,* directed to specific objectives: coping oriented to the problem (by responding directly to the stressful situation); coping oriented to the emotion (to moderate the emotional response to stressful events) (Lazarus & Folkman, 1986; [32]. It was identified three categories of coping methods: active-cognitive coping (the management of assessing potentially stressful events); active-behavioral coping (the *observable efforts* managing a stressful situation); coping by avoidance to face a problematic or stressful situation (Billings and Moos, 1981). [33]

*What relevance do coping styles have for preventive intervention in burnout?*

The different coping strategies were examines as regards appearance and development of the three dimensions of burnout. According to Gil-Monte and Peiró (1999) and Plana et al.(2002),[22,34] the coping strategies related to the burnout sequential process. Thus, feelings of low personal accomplishment and emotional exhaustion are the signs of burnout beginning, while depersonalization is a coping strategy.

The efficiency of coping strategies depends on the situations and the processes. Adequate coping strategies can be of great help for preventive intervention on burnout (Planaet al., 2002).[34]
*Modeling coping strategies.* Stress stimuli (as the discrepancies between a perceived state and a desired state) can activate coping in direct or indirect ways related to psychological anticipated or perceived wellbeing (Edwards, 1992)[35]. When anticipating potential threats, stress would activate coping directly, whilst already damaged psychological wellbeing activate coping indirectly. The different patterns of coping are link in a complex system of relationships. In a study with social educators, Plana et al., 2002[34] used the structural equation modeling technique to examine the system of relations between different coping methods and the dimensions of burnout syndrome. The results showed that different coping patterns mediated a simultaneous relationship between feelings of personal accomplishment and emotional exhaustion in the workplace. Personal accomplishment would tend to reduce emotional exhaustion, whilst emotional exhaustion would has a non-significant impact on personal accomplishment. This model provides, counter to expectations, that the combined strategies and methods of coping are more efficient than a managing style of burnout based on single directional strategy.

The coping efficiency depends on the opportunities offered by the work context and on personality characteristics. It was, for example, shown that coping strategies oriented to the problem in situations of low control are counterproductive (they produce more stress). In situation where a lack of control is apparent, strategies oriented to avoidance seem preferable (Plana et al., 2002). **[34]**

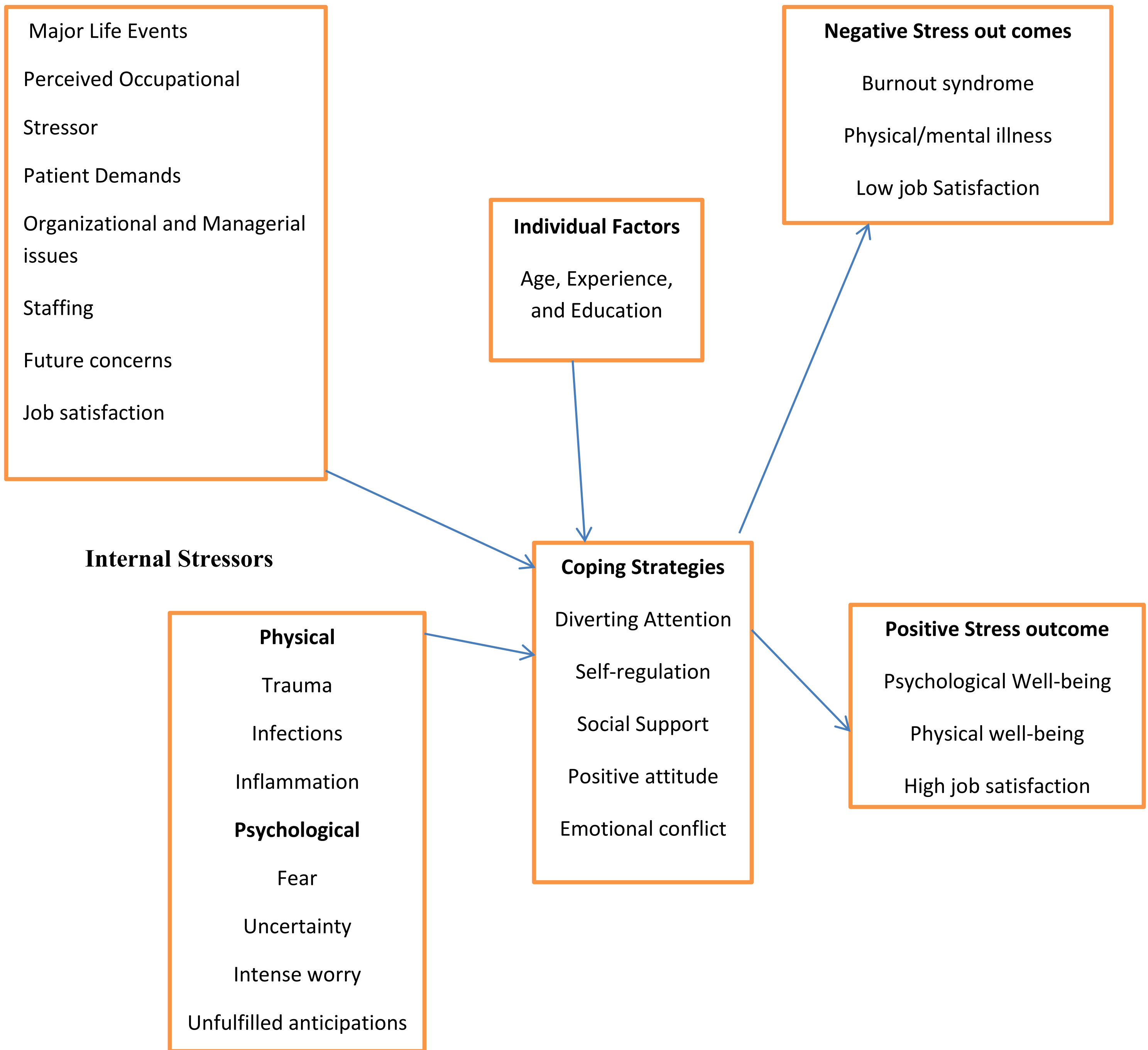


**Figure 3.** A model of perceived occupational stressor, coping strategies, and stress outcomes.

This study was based on the work of Selye, Lazarus, Folk man, and maslach [32]

# CHAPTER THREE

## 3. Aim & Objectives of the Study

### 3.1. General objective

To find out the prevalence of nurse‘s burnout and to identify its determinant factors in public hospital Addis Ababa, Ethiopia.

#### 3.1.1. Specific Objectives of the study

- To assess the prevalence of burnout among nurses working in public hospitals Addis Ababa.
- To identify specific determinant factors of burnout in the work related area.

# CHAPTER FOUR

## 4. METHODOLOGY

### 4.1. Study area and Period

The study was conducted in Addis Ababa, the capital city of Ethiopia. Addis Ababa lies at an altitude of 2,300 meters above sea level and was established in 1889 G.C. In Addis Ababa there are about 33 hospitals comprising about 20 private, 11 public 1 NGO and 2 owned by other companies. According to 2011 data there are 981 BSc nurses and 1988 diploma nurses working in those institutions. The ratio of all nurses to the population in Addis Ababa is approximately 1 to 942 people considering that the estimated total population is 2,975,608 people in 2011.
.The study was conducted between the months, February and May, 2015.

### 4.2. Study design

Cross-sectional descriptive study was designed be employed in this study to describe prevalence of nurses burnout and its determinant factors in public hospitals of Addis Ababa.

### 4.3. Source population

The source population for this study was all nurses who were working in different departments / units of the selected hospitals in Addis Ababa.

### 4.4. Study population

The study population for this study was all nurses working in six randomly selected hospitals .The selected hospitals were- Black lion hospital, St. Paul hospital, Zewuditu Memorial hospital , Ras Desta memorial hospital ,Gandi Memorial hospital and Yekatit 12 hospital in

Addis Ababa and are meeting the inclusion criteria and willing to participate in the study.

## 4.5. Inclusion Criteria

Nurses working in the departments, nurses with work experience of 6 months or more in these units; and nurses available in these units during data collection period and willing to participate in the study.

## 4.6. Exclusion Criteria

Nurses with work experience of less than 6 months; and those not willing to participate in the study.

## 4.7. Sample size

The actual sample size for the study was determined using the formula of single population proportion formula for single proportion population.

$$n = \frac{(Z_{\alpha/2})^2 \, p\,(1-p)}{d^2}$$

Where n = estimated sample size

Z = Confidence level (alpha, α)

P = prevalence

d = marginal error

To determine the sample size the following assumption was used.

Prevalence of, nurses burnout was taken from a previous related study which is 56.6% [35]

A 95% confidence level, margin of error (0.05).

$$n = \frac{(1.96)^2 \times 0.566(1 - 0.566)}{(0.05)^2} = 377.46 = \underline{378}$$

Taking None-response rate to be 10% using previous related research response rate = 378*10%=37.8= 38

38+378=416

**+ 86**

Final sample size= 502

## 4.8. Sampling procedure

A random sampling technique was employed to draw the sample size from among 11 public hospitals currently functioning in Addis Ababa. Six hospitals were randomly selected and considered to participate in the study. The six public hospitals were (Black lion hospital 717 nurses, St Paul hospital 440 nurses,, Zewditu memorial hospital 252 nurses, Ras Desta memorial hospital 104 nurses, Gandi Memorial hospital 156 nurses and Yekatit 12 hospital.

. Then final sample was selected from respected hospitals using Proportional to size allocation formula

$$= \frac{n_i * n_f}{N}$$

Where $n_i$- number of nurse in each selected hospital

$nf$ -final sample of the study

N-total number of nurses in the selected hospitals

Black lion hospital =717*502/1899 =189.53 ~190

St. Paul hospital =440*502/1899= 116.3~117

Zewuditu hospital =252* 502/1899=66.6~67

Ras Desta hospital =104*502/1899=27.49~28

Gandi hospital = 156*502/1899= 40.2=40

Yekatit 12 hospital 230*502/1899 =60.00=60

**Systematic sampling** was used to select sample from each hospital ,this was calculated by dividing population size, N ,by required sample size ,n, then the formula is;

K= N/n

Black Lion hospital =717/190 =3.7 ~4

St. Paul hospital =440/117 =3.7~4

Zewuditu hospital =252/67 =3.7`~4

Ras Desta hospital = 104/28 =3.7 ~4

Gandi memorial hospital=156/40=3.9~4

Yekatit 12 hospital =230/60=3.8~ $K=4^{th}$ interval

So the selection was every fourth unit in the population in each hospital from the nurse‘s roster

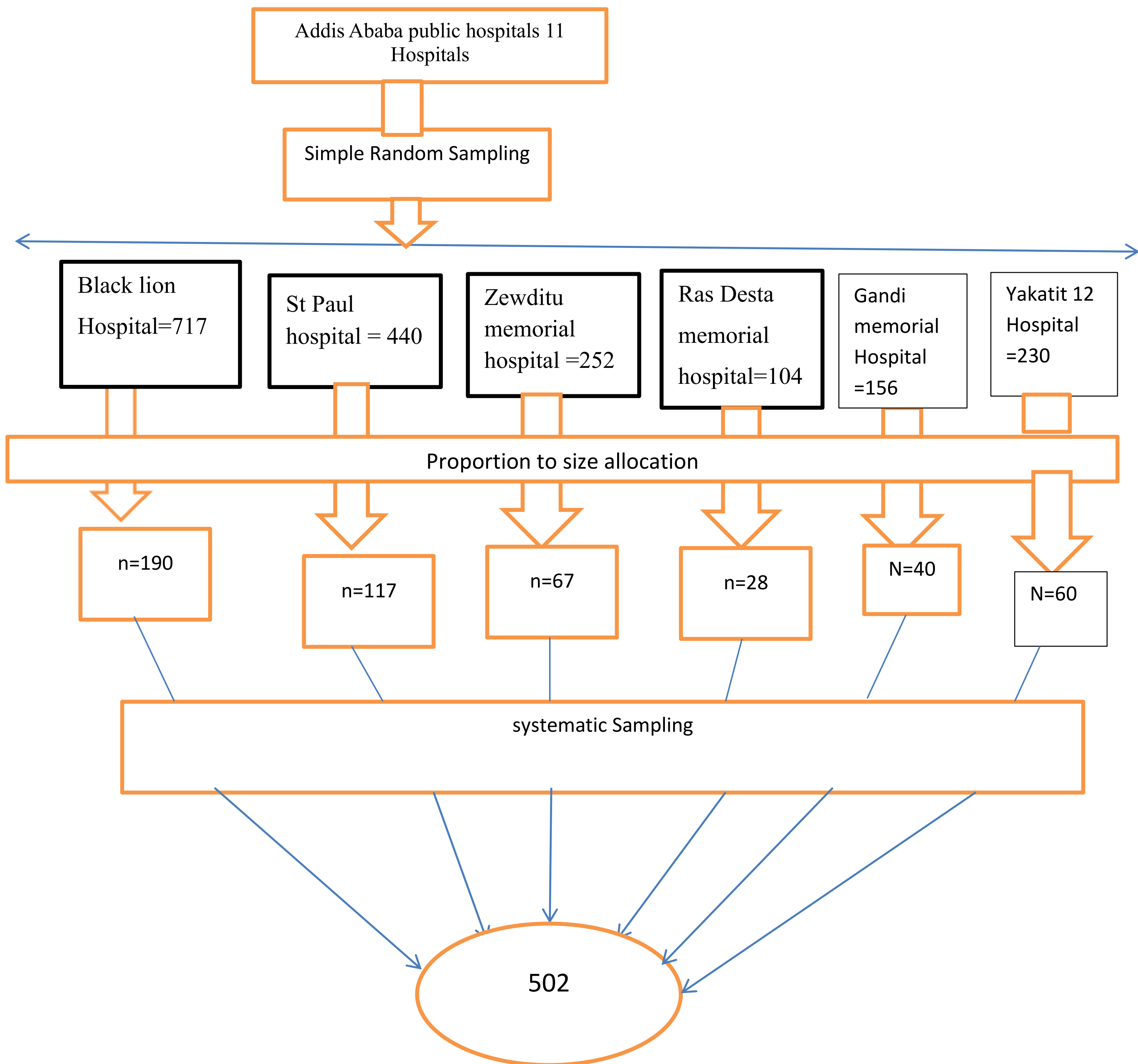


Figure 4. Schematic presentation of sampling procedure on Prevalence of Nurses Burnout and its Determinant factors in selected public hospitals in Addis Ababa Ethiopia, 2015.

## 4.9. Data collection tools

To assess nurse characteristics and work area related characteristics, objective questions was prepared by the principal investigator. The questions were then used to obtain demographic data relevant to the study. Participants was asked to provide information with regard to their age, gender, marital status, educational level, title of work, area of work and years of experience, sector of employment, shift duty, work overload, health status perception, quality of life perception, satisfaction with work and finally intention to leave work within the next 12 months.

To assess prevalence of nurses burnout and its determinant factors , the English version of Maslach‘s Burnout Inventory- Human Services Survey (MBI-HSS) was used, which comprises 22 items regrouped into 3 subscales: emotional exhaustion (EE; nine items), depersonalization (DP; five items), and personal accomplishment (PA; eight items). Each item was answered on a 7-point Likert scale ranging from ―never” (= 0) to ―daily” (= 6). The MBI-HSS is a self-administered questionnaire, was reliable and valid,

## 4.10. Data collection procedures

Self-administered semi structured closed ended questionnaire was prepared and designed by reviewing different similar literatures, on prevalence of nurses burnout and its determinant factors and modified in such a way that can meet the objectives of this study. The questionnaire consist all the variables that directly meet the objective of the study. Questionnaire includes personal factors, work related factors, and organizational factors were used for data collection. Data collection was conducted by the trained data collectors and the supervisor. Training was given to data collectors and supervisors for one day. Six data collectors and two supervisors was recruited based on previous experience of data collection. After identifying the study subjects, informed consent was obtained to confirm willingness and confidentiality was ensured to all of the study subjects and the self-administered semi structured questionnaire was administered. Non respondents were encouraged to fill in the questionnaire and were revisited at least twice. The respondents was encouraged to respond to all items in the questionnaire with in the time they devoted as much as possible to minimize large non-response rate.

## 4.11. Study variables

***Dependent variable***: Nurses‘ burnout

***Independent variable***; personal factors- Personal characteristics such as age, gender, marital status, educational level, years of work experience, quality of life satisfaction with work and intention to leave work within the next 12 months; work related factors ; Work area related characteristics such as title of work, area of work, sector of employment, shift duty, and work overload- and organizational factors.

## 4.12. Operational Definitions: Syndrome comprised of 3 deamination

**Emotional Exhaustion (EE)**, Leading indicator of burnout & defined as inability to give any more of oneself.(ruining of all emotional Resources of individual).

**Depersonalization** (DP)**:** Feeling of cynicism toward one‘s patients.(negative and cruel response to those receivers of service referred to individual (negative view about their client).

**Reduced Personal Accomplishment** (PA): Feeling that one‘s job is no longer rewarding.

(a feeling of lower capability in doing personal duties)

Referred to as a negative evaluation of one‘s work).*Maslach, Jackson & Leiter, 19967 ,

Emotional exhaustion: low (<16), moderate (17-26), high (≥27).

Depersonalization: low (<6), moderate (7-12), high (≥13)

Personal accomplishment: low (≤31) moderate (32-38), high (≥39)

A nurse burnout is defined to have if he/she is high in emotional exhaustion or depersonalization and low regarding personal accomplishment.

## 4.13. Data processing and analysis

The collected data was checked for completeness, inconsistencies and data was cleaned, coded and analyzed using SPSS version 20 software package. To explain the study population in relation to relevant variables, descriptive statistics such as frequencies, and percentages was calculated. Associations between dependent and independent variables was tested using Logistic regression and. Bivariate and multiple logistic regression was used and presented in tables. P-values less than 0.2 on bivariate analysis was entered, for multivariate analysis p-value< 0.05 is considered as statistically significant in all cases.

## 4.14. Data Quality Control

In order to assure the quality of data the following measures was undertaken. Validity and reliability was assessed using pre-test which was conducted in Black lion hospital on 5% of the questionnaires. The principal investigator and supervisors was actively involved in supervision of the data collection. Data collectors was supervised at each site and the completed questionnaire was checked search part of the instrument for missed values and completeness on daily basis. Data cleaning was done manually by removing the instruments with missing values. Revisiting was made if a respondent was not found in the first visit.

## 4.15. Ethical consideration

Letter of cooperation request was obtained from Institution Review Board (IRB) of Addis Ababa University College Health Sciences Allied Health Sciences, Department of Nursing and Midwifery**.** Official letter of co-operation was written to selected hospitals from Department of Nursing and Midwifery of AAU. The study was not deserved any cost or expenses on the study participants apart from time cost. There was no potential risks that was cause any harm in any form to the study participants. Letter of cooperation was given to secure permission of access to the hospitals included in the study. After obtaining permission from the hospital directors, & unit coordinators, informed (verbal) consents was obtained from the study participants, and participants was also provided with information about the objectives and expected outcomes of the study. Information obtained from individual participants was kept secure and confidential.

Names and other identifying data of respondents was made anonymous or eliminated throughout the study process to maintain confidentiality.

## 4.16. Dissemination of results

The result of the study will be submitted to Addis Ababa University, college of health sciences school of Allied health sciences department of nursing and midwifery as a requirement for partial fulfillment of master‘s degree in Adult health and soft copies of the study findings will also be made available in the libraries of nursing schools of Addis Ababa University in order it can be accessed by graduate students and other concerned readers & researchers.

# CHAPTER FIVE

## 5. DATA ANALYSIS AND INTERPRETATION

### 5.1. Results

#### 5.1.1. Nurses' characteristics

A total of 502 questionnaires were distributed in different departments and 440 participants (88%) responded the questionnaires, the male participants 161 and the female participant were 279 The majority of the participant were female and the age between 20- 29 which accounted for more than half of the participant 237(53.9%). Nearly half of the participants were single 45.5% and 100% all of them were from public hospitals. The majority of respondents were from pediatrics 29 .8% and the least Orthopedics which was 1.6%. .With regard of service year 29.9% were 2years or less and educational level, 353(80.2%) participants were BSC and the least were MSC 5(1.1%). On working shift, near to half were day shift 46.6%, night shift 45.2%, alternate Shift 8.2%. (Refer to table 1 below )

**Table 1. Socio-demographic characteristics of nurses in public hospitals ,Addis Ababa from, February and May, 2015**

| Variable | Respondents | Frequency | Valid percentage |
|---|---|---|---|
| Sex | Male | 161 | 36.6 |
| | Female | 279 | 63.4 |
| | Total | 440 | 100 |
| Age | 20-29 | 237 | 53.9 |
| | 30-39 | 120 | 27.3 |
| | 40-49 | 56 | 12.7 |
| | >/= 50 | 27 | 6.1 |
| Marital status | Single | 200 | 45.5 |
| | Married | 213 | 48.4 |
| | Divorce | 24 | 5.5 |
| | Widowed | 3 | .7 |
| **Service Area** | Medical ward and out patients | 53 | 12.0 |
| | Surgical ward and out patients | 71 | 16.1 |
| | Pediatrics ward and out patients | 131 | 29.8 |
| | Emergency unit | 17 | 3.9 |
| | Intensive care unit | 74 | 16.8 |
| | Gynecology and Obstetrics ward | 52 | 11.8 |
| | Oncology ward | 35 | 8.0 |
| | Orthopedics ward | 7 | 1.6 |
| | Total | 440 | 100.0 |
| **year of service in working area** | 2year or less | 127 | 28.9 |
| | 3-5 year | 126 | 28.6 |
| | 6-10 years | 67 | 15.2 |
| | 11-15 years | 60 | 13.6 |
| | Greater than 15 years | 60 | 13.6 |
| | Total | 440 | 100.0 |
| **Current Educational level** | Diploma nurse | 79 | 18.0 |
| | BSC nurse | 353 | 80.2 |
| | MSC nurse | 5 | 1.1 |
| | Other | 3 | .7 |
| | Total | 440 | 100.0 |
| **Current duty shift** | Day shift | 205 | 46.6 |
| | Night shift | 36 | 8.2 |
| | Alternate shift | 199 | 45.2 |
| | Total | 440 | 100.0 |

### 5.1.2. Prevalence of Nurse Professional Burnout

From total of 440 participants, 241 (54.8%) suffered from professional burnout( PB )based on its definition. Among the study participants 271(61.6%) ,114(25.9%) ,55(12.5%) were Emotional Exhaustion( EE) high , moderate ,low respectively .on the other hand the scale of Depersonalization( DP) of nurses were 169 (38.4%), 146(33.2%),125(28.4%) high ,moderate and low respectively .the scale of personal accomplishment( PA) were 74(16.8%),129(29.3%).237(53.9%) ,high ,moderate, low respectively.

A nurse burnout is defined to have if he/she is high in emotional exhaustion or depersonalization and low regarding personal accomplishment. (Refer to table 2 below)

**Table 2.** Description of the three sub-scales of MBI-HSS and nurses burnout, Addis Ababa, Ethiopia ,June ,2015 .

| sub-scales | High | Moderate | Low |
|---|---|---|---|
| EE | 271(61.6%) | 114(25.9%) | 55(12.5%) |
| DP | 169(38.4%) | 146(33.2%) | 125(28.8%) |
| PA | 74(16.8%) | 129 (29.3%) | 237(53.9%) |

**Abbreviations: EE = emotional exhaustion, DP = depersonalization, PA = lack of personal accomplishment**

### 5.1.3 Determinants of Nurses Burnout

Bivariate logistic regression association was made among different variables and showed a statistically significant association on nurse professional burn out. Nurses sex, age, marital status, service area, service year, current health status ,intention to leave within 12 months ,health problem and work had significantly associated with nurse professional burn out (p-value less than 0.2).

All variables that have association (at significance level of 0.2) with the outcome variables in bivariate logistic regression analyses were included in the multiple logistic regression models. After controlling for the effects of potentially confounding variables using multiple logistic regression, nurses' sex, work area, service years, current health problems, work satisfaction were significantly associated with nurse professional burnout at <0.05 p-value.

Nurses who were females were 57.4% o. times [AOR=0.426; 95%CI :( 0.257-0.709)] less likely professional burnout than those who were males. Nurses whose service area were ICU were 4 times [AOR=4.09; 95%CI :( 1.994-8.39)] more likely professional burn out compared to those who gives service in wards. On the other hand nurses who had backache were 60.2% times [AOR=0.475 [0.247-0.913 ] less likely had professional burn out than who had headache. Nurses whose service year 11-15 years were 2.7 times [AOR=2.736,95%CI (1.087-6.884)] more likely professional burnout when compared to service years ≤ two .furthermore nurses whose had current work satisfaction good were 79.8% times [AOR=0.202;95%CI:(0.1.3-0.399)] less likely with professional burn out compared to those who were current work satisfaction poor**.** (Refer to table 3 below)

**Table 3. Bivariate and multiple logistic regressions of the selected variables with nurse professional burnout in public hospitals, Addis Ababa. 2015.**

| Variables | Nurses burnout | | | Adjusted | |
|---|---|---|---|---|---|
| | Yes | No | **COR (95%CI)** | **OR(95%CI)** | **P-Value** |
| **Sex** | | | | | |
| Male | 102 | 59 | 1.00 | 1.00 | |
| Female | 139 | 140 | 0.574[0.386-0.854] | o.426 [o.257-0.709] | **0.001*** |
| **Age** | | | | | |
| 20-29 | 138 | 99 | 1.00 | *1.00* | |
| 30-39 | 63 | 57 | 0.733[0.510-1.233] | 0.814 [0.409-1.621] | 0.494 |
| 40-49 | 34 | 22 | 1.109[0.611-2.01] | 1.54 [0.574-4.133] | |
| ≥50 | 6 | 21 | 0.205[0.08-0.526] | 0.732 [0.170-3.150] | |
| **Marital status** | | | | | |
| single | 116 | 84 | 1.00 | 1.00 | |
| married | 103 | 110 | 0.678[0.460-1.00] | 1.126 [0.613-2.067] | 0.813 |
| Divorced/ Widowed | 22 | 5 | 3.186[1.16-8.755] | 1.588 [0.361-6.994] | |
| **Service area** | | | | | |
| Ward | 169 | 180 | 1.00 | 1.00 | |
| Emergency | 13 | 4 | 3.462[1.107-10.825] | 2.128 [0.508-8.919] | **< 0.001*** |
| ICU | 59 | 15 | 4.189[2.289-7.667] | 4.090 [1.994-8.390] | |
| **Service year** | | | | | |
| <=2year | 63 | 64 | 1.00 | 1.00 | |
| 3-5 year | 79 | 47 | 1.708[1.034-2.819] | 1.699 [0.907-3.074] | |
| 6-10 | 38 | 29 | 1.331[0.734-2.414] | 1.267 [0.56-2.880] | |
| 11-15 | 44 | 16 | 2.794[1.430-5.457] | 2.736 [1.087-6.884] | **0.014*** |
| >=15 | 17 | 43 | 0.402[0.207-0.777] | 0.453 [0.155-1.326] | |

| **Current Health status** | | | | | |
|---|---|---|---|---|---|
| **Poor** | 18 | 15 | 1.00 | | |
| **Fair** | 78 | 40 | 0.839[0.742-3.559] | 0.960 [0.379-2.431] | |
| **good** | 145 | 144 | 1.200[0.407-1.729] | 0.877 [0.375-2.049] | 0.925 |
| **Current Work satisfaction** | | | | | |
| **Poor** | 112 | 37 | 1.00 | 0.451 [0.246-0.824] | < **0.001*** |
| **Fair** | 177 | 74 | 0.687[0.419-1.126] | 0.202 [0.103-0.399] | |
| **Good** | 151 | 88 | 0.353[0.212-0.588] | | |
| **Intention to leave work within next 12 months** | | | | | |
| **Yes** | 154 | 101 | 1.718[1.172-2.518] | 1.377[0.819-2.315 | 0.227 |
| **No** | 87 | 98 | 1.00 | | |
| **Health problem** | | | | | |
| **Headache** | 85 | 44 | 1.000 | 1.00 | |
| **Backache** | 41 | 64 | 0.337[0.197-0.576] | | |
| **Depression** | 69 | 39 | 0.916[0.536-1.564] | 0.475[0.247-0.913] | |
| **insomnia** | 16 | 22 | 0.376[0.180-0.789] | 0.282[0.114-0.696] | **0.004*** |
| **hypertension** | 24 | 7 | 1.77[0.709-4.441] | *1.104[0.325-3.744]* | |
| **others** | 6 | 23 | 0.13[0.051-0.356] | *0.23[0.067-0.614]* | |

# CHAPTER SIX

# 6. DISCUSSION, CONCLUSION AND RECOMENDATION

## 6.1. Discussion

This study was aimed to find out the prevalence of nurse‘s burnout and to identify its determinant factors in public hospital Addis Ababa, Ethiopia. The Prevalence showed that 54.8 % of working nurses in public hospitals in Addis Ababa suffer from professional burnout. The results is consistent with relative study done on the level of nurses burnout, 56.6 % in July-August, 2013 Addis Ababa Ethiopia. (Yavello NatayeYatasa, BSc. On the other hand study done on Prevalence of professional burnout and its related factors among nurses in Tabriz in 2010 , in Tabriz hospitals the result showed that 21.9% of working nurses in hospitals suffer from professional burnout..[39] National Center for Biotechnology Information, U.S. National Library of Medicine 8600 Rockville Pike, Bethesda MD, 20894 USA .Similar study done on determinants and prevalence of burnout in emergency nurses: A systematic review of 25 years of research, On average 26% of the emergency nurses suffered from burnout. Individual factors such as demographic [37] ( J. Adriaenssens et al. / International Journal of Nursing Studies 52 (2015) 649–661660

In this study determinant factors demographic characteristics of nurses burnout were analyzed, and nurses who were females were 57.4% times [AOR=0.426; 95%CI :( 0.257-0.709)] less likely professional burnout than those who were males .so in this study males are more likely to develop professional burnout than females .Similar study done in Leiden University, Institute of Psychology , the Netherlands ,. gender was found to be predictive of burnout in several studies but the results were not uniform. Some studies found higher levels of burnout in women, others found the opposite and some studies did not find a difference.[37] ( J. Adriaenssens et al. / International Journal of Nursing Studies 52 (2015) 649–661660.

Another finding was nurses whose service area were ICU are 4 times [AOR=4.09; 95%CI :( 1.994-8.39)] more likely professional burn out compared to who gives service in wards. Previous study done in Addis Ababa Eth nurses are found to be vulnerable to burnout, but emergency nurses are even more so, since emergency nursing is characterized by unpredictability y, overcrowding

and continuous confrontation with a broad range of diseases, injuries and traumatic events. ( J. Adriaenssens et al.) International Journal of Nursing Studies 52 (2015) 649–661660).So the association of working in ICU and burnout is highly significance.

Nurses whose service year 11-15 years were 2.7 times [AOR=2.736,95%CI (1.087-6.884)] more likely professional burnout when compared to service years ≤ two .In this study increased work experience more association with burnout. In contrary research done in Addis Ababa,Ethiopia,2013 nurses with work experiences of more than 5 years reported lower levels of EE than their counter parts, the burnout dimension most commonly experienced by nurses, though statistically not significant. Study by Cameron et al (1994) indicated that nurses with more years of work experiences report lower burnout levels and less likely intention to leave their job position than those with fewer years of experience.

A recent study by Ayala et al (2013) on acute and critical care nurses come up with similar findings that, there is an inverse relation between emotional exhaustion and work experience, which means as work experience increases, emotional exhaustion decreases.( Yavello Nataye Yatasa). Another study shows that with regard to the association of PB with occupational factors, the subjects with shorter work experience had significantly more PB in the present study. And many other researchers reported an invert significant association between work experience and dimensions of PB. Fresh staffs, especially those who have not undergone enough education at the beginning of the work, face problems in confrontation with occupational stressors. They are more prone to lower risk of PB through time, attaining coping skills, getting professional in their field of work, and ultimately adaptation with work environment and factors. National Center for Biotechnology Information, U.S. National Library of Medicine 8600 Rockville Pike, Bethesda MD, 20894 USA

Job satisfaction has association with burn out in this present study on the contrary some research found that Job satisfaction is similarly negatively related to EE ($\rho$=-0.383, $\alpha$=0.000) and DP ($\rho$=-0.214, $\alpha$=0.003) and positively with PA ($\rho$=0.214, $\alpha$=0.005), which similarly indicates that nurses who reported high satisfaction with their job had lower levels of EE and DP with high PA.( Yavello Nataye Yatasa) Dissatisfaction from work environment, inappropriate relationship between manager and the staffs, occupational stresses, and feeling of accomplishment disability

can lead to emotional burnout ( National Center for Biotechnology Information, U.S. National Library of Medicine 8600 Rockville Pike, Bethesda MD, 20894 USA ).

In the study nurses who had backache were 60.2% times [AOR=0.203; 95%CI :( 0.067-0.614)] less likely had professional burn out than who had headache. Slightly more than 46% participants reported headache, over 38% backache. On the other hand weak negative associations were identified between EE and health problems; headache (ρ=-0.188 These weak statistically significant relationships indicate that the existence of EE causes absence of health and vice versa .( Yav ello Nataye Yatasa)

**Under Determinants of Nurses Burnout ;**

**Individual factors** Demographic characteristics. In general populations, male 11-15 age was found to be related to a higher risk of burnout. Health problem was also found to be predictive of burnout.

**Work related factors** Nurses whose service area were ICU are 4 times [AOR=4.09; 95%CI :( 1.994-8.39)] more likely professional burn out compared to who gives service in wards. Dissatisfaction from work environment, occupational stresses, and feeling of accomplishment disability can lead to emotional burnout.

Working in the fields with not enough reward, feeling of efficiency and self-discovery, when duties are not well perceived, or there is no new and different approach, in case of an unpleasant work environment and lack of mental peace all increases the depersonalization leading to separation of individuals from work, and consequently being indifferent toward the clients The ability to control occupational events is one of the most important factors, which is effective on personal accomplishment. It can be concluded that most of the nurses are not probably able to prove their competency in work environment, possibly due to the lack of positive conditions in work environment. High level of PB in dimension of personal accomplishment can be an indicator for existence of negative attitude and lack of interest and satisfaction toward the profession as well as the reduction of interest.[37] (J. Adriaenssens et al). International Journal of Nursing Studies 52 (2015) 649–6616560.

**Organizational Factors**; In this study the organizational factor has an association with nurses professional burnout which was the public hospitals, job satisfaction has association with burnout in the study population.

## 6.2. Limitation of the Study

The limitation of this study was some nurses, not interested in joining the study, stated that not having enough time to fill the questionnaire, the pile of questionnaires they had to fill for other researches and lack of researchers' feedback to participating nurses in a research had lowered their interest and mood. The other limitation of this study is no research done on the prevalence of nurses burn out and its determinant factors and is limited to public hospitals in Addis Ababa and does not include nurses of private hospitals in Addis Ababa as well as of most regional nurses as there is a time and budget constraint . It would have been possible to assess differences between rural and urban area nurses' experiences.

## 6.3. CONCLUSION

This study presents strong evidence that a significant proportion of nurses experience mental and physiological disturbances due to the stress from their jobs. From total of 440 participants, 241 (54.8%) suffered from PB based on its definition. Among the study participants 271(61.6%) ,114(25.9%) ,55(12.5%) were Emotional Exhaustion( EE) high , moderate ,low respectively .on the other hand the scale of Depersonalization( DP) of nurses were 169 (38.4%), 146(33.2%),125(28.4%) high ,moderate and low respectively .the scale of personal accomplishment( PA) were 74(16.8%),129(29.3%).237(53.9%) ,high ,moderate, low respectively.

Statistically significant associations where identified between burnout and its determinant factors, individual factors many nurses' characteristics including health problems, , satisfaction with job, gender, work related factors-work experience and work area and organizational factors such as employment sector are also statistically associated with burnout .

## 6.4. RECOMMENDATIONS

Based on the results of this study the following recommendations are forwarded by the researcher,

- Authorities in Nursing Association and Federal ministry of health of Ethiopia and Addis Ababa city administration health bureau are suggested to pay more attention to the importance of the researches in nursing profession and to emphasize on the role of these researches in scientific and logical reflection of the problems to the health system.
- As the study indicate nurses suffer from professional burn out (PB) it need more attention of nursing managers and authorities in different levels should be paid for making a friendly communication with the staffs, team work encouragement, sharing the personnel in decision making, giving occupational supports, reducing occupational conflicts .
- Also focus on coping Strategies, prevention and reduction of burnout and implement these strategies in hospitals under their responsibility and hence improve employee mental health and well-being; improve employee quality of life; and increase motivation to work.
- Finally, further and rigorous studies are recommended in the coping strategies of burnout and its prevention.

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# 8. ANNEX

Annex 1. Informed Consent

# Participant consent

## PROJCET OVERVIEW

**Project title; Prevalence of nurses burnout and its determinant factors**

**Principal investigator;Hirut Adeba,BSC nurse**

**Project Objective**

**The overall objective of the study** is to estimate the prevalence of nurse's burnout and to identify its determinant factors in public hospital Addis Ababa, Ethiopia.

**What we will do**

In order to meet the objective, I will administer the English version of Maslach's Burnout Inventory- Human Services Survey (MBI-HSS), which comprises 22 items question will be used.

**Duration**

15 and 30 It is estimated that the needed time to complete the survey and questionnaire will take between minutes per person.

**Risks/Confidentiality**

There is little or no risk for anyone who agrees to participate in the study. Your name ,title, and of work will not be recorded anywhere. After collecting the information, the data collection form will be given . . You are free to choose not to answer any question.

**Compensations/Benefits**

You will not receive any compensation for participating in the study. However you may get some level of satisfaction knowing that the response you provide will assist to identify the prevalence of nurses burnout and its determinant factors.

**Voluntary Participation**

Participation is entirely voluntary. You are free to participate or not. If you agree to participate, you may change your mind at any time and ask to withdraw, or not to answer certain questions. All your response should be confidential and anonymous. Please give your views freely and honestly. There is no right or wrong answers; all information provided is highly appreciated.

## Who should you call for more information or if you have questions or concerns?

**Please speak to the principal investigator**


**Hirut Adeba , BSC Nurse**

Cell phone: +251 912157093/911774364

E-mail: adebahirut@gmail.com


Thank you for your time and consideration. Would you like to participate in this study? Please circle one.

Yes No

**DECLARATION OF CONSENT (signature or thumb print is mandatory)**

I acknowledge that I have given my consent to participate in the study .I understand that my participation is voluntary and that I can decline to answer any question or withdraw from the study at any time.

I understand that my response to questions will be collected and that any information obtained will be kept confidential.

I was informed that my name or any other identifiable information will not be recorded on the survey questionnaires nor will it appear in any report or publication.

**Signature or thumbprint**

______________________________ **Date**___________________________

**Annex 2. .** Questionnaire

## Addis Ababa University College of Health Sciences

## Allied Health Sciences, Department of Nursing and Midwifery

**Research Questionnaires to be filled by Nurses of *selected Public Hospitals***

**Dear respondents:-**

This questionnaire is designed for preparing a thesis on the title **of prevalence of nurses burnout and its determinant factors in public hospitals, Addis Ababa.**

The outcome of the study will be used in order to suggest possible solutions for problems identified while conducting the study. I kindly request you to spent your precious time to fill the questionnaire as frank as and reasonable as possible. I inform you that, the information you provide will be consumed for Research purpose only. The information you provide is confidential. Therefore, you all not expected to write your name.

**Thank you for your cooperation!**

**Part I: Nurses' characteristics (personal information).**

**Instruction:** Please circle the number in front of the option you choose.

1/ Sex: 1. Male 2. Female

2/ Age: 1. 20-29 years 2. 30-39 years 3. 40-49 years 4. ≥ 50 years

3/ Current marital status: 1. Single 2. Married 3. Divorced 4. Widowed

4/ Employment sector: 1. Public (governmental) 2. Non-public (non-governmental)

5/ Service area: 1.Medical ward 2.surgical ward 3.pediatrics wards 4. Emergency care unit 5.Intensive care unit 6.Gynacalgy and Obstetrics ward 7.Oncology ward 8.Orthopeadices ward.

6/ Service years i\n this working area. 1. 2 year or less 2. 3-5 years 3. 6-10 years 4. 11-15 years 5. Greater than 15 years

7/ Current educational level: 1. Diploma nurse 2. BSc nurse 3.MSC nurse 4. Other __________

8/ Job title: 1.Clinical nurse (Diploma) 2. Professional nurse (BSC)

. 3. Head/supervisor nurse

9/ Current duty shift: 1. Day shift 2. Night shift 3. Alternate shift

10/ Presence of work overload: 1. Yes 2. No

11/ How do you perceive your current health status? 1. Poor 2. Fair 3. Good

12/ How do you perceive your current quality of life? 1. Poor 2. Fair 3. Good

13/ How do you perceive satisfaction with your work? 1. Poor 2. Fair 3. Good

14 / Do you have planned to leave working at your current unit within the next 12 months?

15/ Which of the following health problems have you experienced in relation to your work? (Circle all that apply) 1. Headache 2. Backache 3. Depression 4. Insomnia 5.Hypertension 6. Other ______________________ (mention here if not in the least)

16/ Which one of the following medication or activities do you use related to your work? (Circle all that apply) 1. Anxiolytics/sleeping pills 2. Analgesic 3. Smoking 4. Physical activity

5. Other ____________________ (mention here if not in the least)

**2. MBI- Human Services Survey**

***Instructions***: On the following pages are 22 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, write the number ―0" (zero) in the space before the statement. If you have had this feeling, indicate how often you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way. An example is shown below.

**Example**

| **How often** | **0** | **1** | **2** | **3** | **4** | **5** | **6** |
|---|---|---|---|---|---|---|---|
| | Never | A few times a year or less | Once a month or less | A few times a month | Once a week | A few times a week | Every day |

:

How often
0-6 Statement:

1. ________ I feel depressed at work.

If you never feel depressed at work, you would write the number ―0" (zero) under the heading ―How Often." If you rarely feel depressed at work (a few times a year or less), you would write the number ―1." If your feelings of depression are fairly frequent (a few times a week but not daily), you would write the number ―5.

**Part III**

### MBI-Human Services Survey

| How often | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|
| | Never | A few times a year or less | Once a month or less | A few times a month | Once a week | A few times a week | Every day |

:

**How often**
**0-6** **Statements:**

______________________________________________________________

1. __________ I feel emotionally drained from my work.
2. __________ I seem physically exhausted and wiped out. .
3. __________ I feel fatigued when I get up in the morning and have to face another day

On work related and organizational factors.

4. __________ I feel of incompetence when dealing with work task.
5. __________ I feel I treat some recipients as if they were impersonal objects.
6. __________ Working with people all day is really a strain for me.
7. __________ I deal very effectively with the problems of my recipients.
8. __________ I feel overwhelmed with my work demands. .
9. __________ I feel I'm positively influencing other people's lives through my work.
10. __________I lack access to a social- professional support group.
11. __________ I worry that this job is hardening me emotionally.
12. __________ I feel very energetic.
13. __________ I feel frustrated because of the work..

14. _________ I feel I'm working too hard on my job.
15. _________ I don't really care what happens to some recipients.
16. _________ working with people directly puts too much stress on me.
17. _________ I can easily create a relaxed atmosphere with my recipients.
18. _________ I feel exhilarated after working closely with my recipients.
19. _________ I have accomplished many worthwhile things in this job.
20. _________ I feel my payment is too little.
21. _________ In my work, I deal with emotional problems very calmly.
22. _________ I feel recipients blame me for some of their problems.

## Annex: 3. Declaration

I the undersigned, declare that this is my original work, has not been presented for a degree in this or any other university, and that all the resource materials used for this have been fully acknowledged.

Name___________________________________

Signature_______________________________

Date___________________________________

This thesis has been submitted for examination with my approval as a university advisor.

Name_______________________________________

Signature___________________________________

Date_______________________________________