Burnout and its Coping Mechanisms among Health Workers in St. Paul's Hospital, Addis Ababa

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ADDIS ABABA UNIVERSITY

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BURNOUT AND ITS COPING MECHANISMS AMONG HEALTH WORKERS IN St. PAUL's HOSPITAL, ADDIS BABA

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This Thesis is Submitted to the School of Psychology in Partial Fulfillment of the Requirements for Masters Degree in Social Psychology

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Abbreviations and Acronyms

ART –	Antiretroviral Therapy
BSc–	Bachelor of Science
COPE –	Coping Orientation to Problems Experienced
COR –	Conservation of Resources
ENT –	Ear, Nose, Throat
ERI –	Effort – Reward Imbalance
GP –	General Practitioner
HIV/AIDS -	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
ICU -	Intensive Care Unit
JD-R –	Job Demand – Resource Model
MIB –	Maslach's Burnout Inventory
NGO –	Nongovernmental Organizations
NICU -	Neonatal Intensive Care Unit
OPD –	Out Patient Department
OR -	Operation Room
PICU -	Pediatric Intensive Care Unit
SNNPR –	Southern Nations Nationalities and People's Region
SPHMMC –	St. Paul's Hospital Millennium Medical College
UNDP –	United Nations Development Program
WHO –	World Health Organization

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Abstract

The purpose of this study was to assess burnout and its coping mechanisms among health workers. The study was conducted in St. Paul's Hospital Millennium Medical College, in Gulele sub city Addis Ababa. The study aimed at exploring the prevalence of burnout faced by health workers working in SPHMMC, identify burnout level between departments, identifying coping strategies used by respondents to cope with stressful situations in their day to day life, identify coping strategies based on gender, and provide recommendation. The target populations of this study were professional nurses and midwives employed in SPHMMC. The study involved a quantitative research, and stratified random sampling technique that was used to select the respondents of the study, the 55 departments of the hospital further stratified in to three groups, high flow, mild flow, and low flow on the base of the amount of patients they provide service to. Among the total of 972 nurses and midwives who are active in their work, 312 were selected to be participant of this study and to select the participants Solvin's formula was used which is a random sampling technique. However, because of non-response from 312 questionnaires distributed 288 were gathered and used for the study. The data was gathered using a questionnaire, by adapting Maslach's Burnout Inventory and COPE Inventory scales. Then the data was analyzed using a descriptive statistics that consist of frequency, and percentage, as well as computing variables by comparing means using independent sample t-test and one way ANOVA. Finding of the study showed that, there is a medium level of exhaustion (44.1%), and low level of depersonalization (58.3%), and a high level of personal achievement in respondents (53.1%), as a result the study concludes that there is no burnout in SPHMMC. The study findings on the level of difference between the strata's shows that burnout level between the three strata does not have a significant difference ($F_{2, 228}$ = 2.265, .176, and .816, p > .005), as a result, equal variance was assumed. Further, because the findings indicate that there is no burnout problem, the coping strategy of participants assessed separately to other stressful situations. And the study discovered that health care workers in SPHMMC use more problem focused strategy to cope with burnout in their work with a 2.6498 mean. *The study further assess coping strategy based on gender and find that; for problem focused coping, there were significantly no differences between male and female, as such there is equal variance. For emotion focused coping the result indicate that there are significant differences, hence, there is no equal variance between male and female. And f for avoidance coping also the result shows significant differences, therefore, there is no equal variance between male and female respondents in using avoidance coping strategy.*

Chapter One

Introduction

1.1 Background

According to the WHO's 2006 report, the global health workforce is over 59 million people. As a result, health care workers account for a significant portion of the global labor force. The report also states that a typical country spends over 42% of total government health spending on paying its health workforce, while acknowledging that governments in Africa and other low-income countries spend less than high-income countries. Despite receiving loans, grants, and other forms of assistance from other countries, Africa accounts for more than a quarter of the global disease burden while having access to only 3% of the world's health workers and less than 1% of the world's financial resource (Mohr, 2006).This implies that, regardless of the fact that Africa faces a huge number of health problems and diseases; the number of health professionals in the continent is quite small and does not satisfy the need. Besides from a shortage of skilled health professionals, the continent also has a financial shortage as well. These circumstances produced double obstacles in addressing health-related concerns from the position of the government, society, as well as the health-care professionals.

Health workers, not only in Africa but around the world, encounter numerous challenges and stressors at work. By its very nature, the occupation encourages and pushes workers to be altruistic, self-sacrificing, and to prioritize the needs of others, particularly their patients, before their own. They are also expected to work long hour shifts and go above and beyond for their patients. As a result, their profession's expectations and demands create a variety of stressful scenarios, which leads to burnout (Harris, 2012).

Workplace burnout has been linked to low productivity, high absenteeism, and poor job performance, decreased productivity, low job satisfaction, and so forth. Employees with high levels of burnout lose productivity at a considerably greater rate than their colleagues. Similarly, medical costs for both the organization and the individual are higher in health care providers due to stress and burnout. Employees that are under a lot of stress are at a higher risk to burnout and they also have a lot of psychological and physiological problems (Harris, 2012).

It is recognized that not only in the health-care field, but in every part of our lives, whether as a worker, a student, a mother or father, and so on, we all have duties and responsibilities, and that each responsibility generates its own strain and pressure in our daily lives. And if we aren't conscious of how the strains are impacting us, it might result in a serious issue as well as burnout (Maslach, 2003). However, before we can notice the effect, we must first understand what burnout itself is.

The term burnout was first introduced by Freudenberger in 1974 (Meier, 1983). Burnout is defined as a psychological condition that develops over time as a result of continuous interpersonal demands at work. An overpowering sense of tiredness, emotions of cynicism and alienation from the job, as well as a sense of ineffectiveness and lack of accomplishment, are the three essential dimensions of this response. Wearing out, loss of energy, depletion, debilitation, and fatigue were all used to define the exhaustion dimension. Negative or inappropriate attitudes toward clients, impatience, lack of optimism, and withdrawal were all recognized as symptoms of cynicism or depersonalization. Reduced productivity or capability, low morale, and an inability to cope were also highlighted as aspects of the inefficacy component. This clearly places the individual's stress experience in a social framework, and it involves the person's self as well as other (Maslach & Leiter, 2016).

Furthermore, as shown in a study (Burke, 2000), people who are subjected to prolonged work - related stress suffer from serious health consequences that result in poor personal well-being as well as poor job performance. These factors can have an impact on the service's quality and effectiveness. Physically and emotionally well health care providers, on the other hand, are better able to provide high-quality patient care, which helps to enhance overall outcomes for patients.

Because of these negative effects burnout's personal, psychological and organizational costs have led to various intervention strategies being presented. Some professionals attempt to address burnout after it has occurred, while others try to prevent it by encouraging involvement and active monitoring. Therefore, individuals, workgroups, and the entire organization may all benefit from intervention and by identifying effective use of coping mechanisms (Maslach & Leiter, 2016).

On the other hand, coping is described as a person's ongoing cognitive and behavioral attempts to manage certain outside and internal demands which are deemed to be demanding or above the person's resources. It refers to any cognitive and behavioral attempts to overcome, reduce, or endure situations that people believe to be potentially harmful to their health and well being (Lazarus & Folkman, 1984).

The concept of coping is found in two very different theoretical literatures, the first one based on the discipline of animal experiments, and the second one from Freudian ego psychology. Within the animal model, coping is typically defined as activities that control harmful environmental situations, therefore lowering psycho-physiological distress. On the other hand, coping is defined as practical and adaptable thoughts and actions that resolve concerns and thus minimize stress and tension in the psychoanalytic ego psychology framework. The focus on ways of perceiving

and thinking about a person's relationship with the environment is the fundamental distinction between Freudian ego psychology model and the animal model in terms of coping treatment (Lazarus, & Folkman, 1984).However, rather than societal or organizational strategies, the primary focus of this study is on individual mechanisms. Therefore, the focus of this study is assessing the coping abilities, skills and tactics used by health-care workers in order to cope with burnout in their work place.

Burnout and coping have grasped the attention of theorists and scholars from different disciplines, but mainly, from psychologists. This lead to several burnout models to be developed by different scholars to explain the magnitude of burnout. The Job Demands-Resources (JD-R) model shows how job demand and job resources might create burnout. It proposes that burnout occurs when people are faced with constant work demands and insufficient resources to address and alleviate those pressures (Maslach & Leiter, 2016). Effort-Reward Imbalance (ERI) model: which proposes that burnout occurs when an individual attempts or efforts are unequal to the gratification or reward received. The model is concerned with stressful experience and personal work cognitive pattern (Chirico, 2016). Conservation of Resources (COR) model: assumes that burnout occurs as a result of chronic threats to resource availability. Such resources can be personal energy and qualities, objects, and conditions that can be used to obtain other objects, personal traits, circumstances, or abilities. As such, burnout can be exacerbated by a lack of resources, or even the threat of a loss of resources (Maslach & Leiter, 2016). Organizational Injustice model: shows how a worker views the organization's attitude towards its employees. Organizational justice has four components: distributive, procedural, interpersonal, and informational fairness. According to the model, if there are imbalance in these components, burnout are bound to occur (De Hert, 2020).

Furthermore, Scott T. Meier outlines four burnout models. The first model is Reinforcement Expectations model; which assumes that regarding whether or not specific work outcomes meet or will achieve one's objectives. Individuals place different values and meanings on work outcomes as a result of their work experiences. It assumes that continuous low expectations for job reinforcement or rewards might contribute to burnout. The second model is Outcome Expectations; in which particular activities lead to specific results. It shows that workers who are unable to restore control through their efforts may develop burnout if their efforts are unsuccessful. It is a person's understanding of the activities that lead to the desired results. The third model Efficacy Expectations; is expectations of human competency in carrying out productive way. Here, burnout happens when the environment places demands on people that are above their capabilities, and there are significant reinforces involved. The difference between outcome and efficacy expectation is similar to the difference between knowing and doing. The fourth element of model is Contextual Processing; it is processing of human information within situations. It emphasizes that influences within the individual or memory process as well as the organization or group norms can influence the processing of environmental events (thinking about work). The emphasis in the models on investigating both the internal and external context of burnout helps to overcome the cause - effect question by assuming causes of burnout is a consequence of both environmental and individual influence (Meier, 1983).

On the other hand, coping theory is represented by the Lazarus model. Two independent variables are used to classify these theories:

A. Focus Oriented Theories (trait-oriented vs. state-oriented techniques)
B. Approach Oriented Theories (micro- vs. macro-analytic approaches)

The trait-oriented (dispositional) technique seeks to identify people whose coping skills and dispositions are insufficient for the demands of a particular stressful situation early on. On the other hand, state-oriented technique examines the relationships between a person's coping approaches and outcome variables such as self-reported or assessed to determine coping efficiency, emotional reactions to and after certain coping efforts, or adaptive outcome variables. Micro-analytic approaches concentrate on a small number of individual coping mechanisms, whereas macro-analytic analysis works at a greater level of abstraction, focusing on more underlying components. Coping in a confrontational manner, distancing, self-controlling, seeking social support, accepting responsibility, escape-avoidance, simple problem-solving, and positive reappraisal are the eight kinds of coping techniques further identified by Lazarus and his collogue (Lazarus & Folkman, 1984).

In light of this, this study was conducted using a quantitative method to investigate the prevalence of burnout experienced by health care employees, and different coping mechanisms utilized by health care employees to manage stressful situations. As such, the study further investigates the prevalence of burnout experienced by health care employees, assess the difference burnout level between departments, identified type of coping mechanisms, as well as coping mechanisms differences based on gender . Individuals who work as a health care worker at St. Paul's Hospital Millennium Medical College (hereinafter referred to as SPHMMC) in Addis Ababa were the subject of this research.

1.2 Statement of the problem

Understanding how burnout can have a negative impact on individual’s health and well-being, this study evaluates participants' coping methods and the prevalence of burnout. As such, two

variables are examined in this study: burnout and coping methods. Burnout is a common occurrence in a variety of professions and occupations, especially in public health jobs and professional health care services. As such coping skills have been shown to be an essential protective factor in work and health outcomes of professionals in different studies (Shin, Park, Ying, Kim, Noh, & Lee, 2014). As a result, burnout in health-care workers must be addressed, as the problem reduces their ability to manage their overall work outcome, emotional, physical, and teamwork challenges and also, their coping mechanisms need to be identified, as it provide and equip healthcare professionals with the information in different ways of coping strategies and also help them to evaluate and identify what once technique is and what is effective.

As mentioned above burnout has been the subject of a great deal of research; measures, as well as other theoretical models, have been established, and research investigations from a variety of nations have all led to a better understanding of the origins and implications of this occupational challenge. In addition, burnout has been linked to a variety of negative reactions and work withdrawal, including job dissatisfaction, poor organizational commitment, absenteeism, intention to quit the organization, and turnover, to name a few. People who are burned out might have a negative impact on their coworkers by producing more personal conflict and disturbing working responsibilities. As a result, burnout can be transmittable and spread through the workplace through social interactions (Maslach & Leiter, 2016). As such, workplace stress and burnout are well-known issues in the healthcare industry. Stress and burnout, if left untreated, can have a significant impact on healthcare personnel's ability to provide treatment and care effectively (Harris, 2012). As a result, recognizing and preventing burnout is critical to increasing the quality of services given.

Burnout is one of the many variables and issues that contribute to health workers' unhappiness and work scarcity and shortage in their work. Because burnout has the potential to negatively impact health care workers' well-being and job outcomes, which in turn has an impact on their patients, it may be said that the problem can limit and threaten health care workers' ability to provide health care to the general population or the society. Therefore, the purpose of this study on the effects of coping mechanisms on burnout is to identify the prevalence of the problem and show its impact for primary caregivers' psychological health and well-being, which, in turn, affects the society served as well as the health-care system's ability to provide appropriate treatment to patients, as well as to discover individual coping strategy.

Finding and keeping health-care professionals is crucial to the long-term functioning of the health-care system. The aims of the health-care system are recognized to be achieved by an interdisciplinary team of dedicated practitioners from many fields, professions, departments, sections, and roles. Thus, burnout in the service providing sector, especially among health care professionals or providers in clinics and hospitals, needs to be addressed since the health and well-being of health care employees is crucial to their ability to deliver appropriate care to their patients. Providing patients with high-quality health care that has a positive and immediate influence on their lives contributes to the betterment of society and the country as a whole.

In contrast, despite recent good achievements in several sectors that have improved Ethiopia's economic and social situation, the country remains one of the world’s poorest country (Din Alwan, 2006). Aside from the current political turbulence, the country is dealing with many social and economical issues, including high unemployment, food shortages, housing shortages, internal conflict, homelessness, and a lack of adequate health-care services.

Over the previous decade, Ethiopia's health sector has seen outstanding success in terms of a variety of health, nutrition, and population factors (Abebe & Waddington, 2015), despite, Ethiopia, which ranks 99th out of 103 countries on the UNDP Human Poverty Index, is one of Africa's poorest countries, with 45% of its 77 million people living in poverty. Three-quarters of the population lacks access to safe drinking water, and four out of every five people lack adequate sanitation. Droughts, diseases, displacements, and violent conflicts have regularly affected the country repeatedly. Maternal mortality, malaria, tuberculosis, and HIV/AIDS are the top health challenges in Ethiopia, which are worsened by acute malnutrition and a lack of access to clean water and sanitation. Furthermore, due to significant inadequate funding of the health sector, there are a restricted number of health facilities, inadequate distribution of medical supplies, and inequalities between rural and urban areas, making access to health-care services extremely difficult (Din Alwan, 2006).

It is evident that the lack of systems, or the poorly designed systems that do exist, as well as the resulting lack of integration, is seen throughout professions and in health-care organizations in the country. Such systems have the potential to harm patients or fail to provide them with what they need. Although health professionals collaborate with one another, there is little of the coordination and collaboration that should be found in an interdisciplinary team. As a result, a number of issues contribute to the ineffectiveness of the health-care system, which leads to stress and burnout among health-care personnel; different professional and personal viewpoints, role competition and boundary issues, a lack of a common language in communication among professions within the health care system, variations in professional socialization processes, differing qualifications and licensing requirements regulations, payment systems, and existing

hierarchies are among these factors. These problems make the health care system in Ethiopia not to have a clear structure.

Burnout and work-related stress have attracted the attentions of certain Ethiopian scholars due to the severity of the problems and the severe impact and consequences they have had on professionals, especially, health care workers. As a result, some studies have focused on burnout, stress and coping mechanisms. However, the number of studies and the knowledge gained from them are insufficient to explain the scope of the problem of stress in general, and burnout in particular.

Abrha, Woldu, Guesh, Kidane, Guesh Gebreayezgi, & Teklehaimnot, for example, conducted a systematic review of six cross-section and one cohort studies in Ethiopia, which used Maslach's Burnout Inventory-Human Service Survey (MIB-HSS) to measure burnout level, they concluded that because burnout prevalence among nurses is high, effective interventions and strategies are required to reduce burnout among nurses. Ethiopia's health system, according to this study, is among the least developed in Sub-Saharan Africa, and it is unable to cope effectively with such massive health problems; as a result, nurses are underpaid and work in demoralizing conditions, which are often dangerous as they strive to provide services with limited supplies and equipment, which leads to burnout (Abrha et al., 2020). However, the study's weakness was that the number of papers included in the analysis was too small (only seven were analyzed), making it impossible to generalize for burnout-related characteristics for the whole country. Because of the small number of studies included, as such the accuracy of the results of the collective occurrence of burnout was influenced.

Deribe, Teshager, Negga, Bedasa, & Henock, also used MBI-HSS to measure burnout and associated factors among nurses working in public hospitals in Harari and Dire Dawa. Marriage, considering health state as poor and fair, having the goal to leave job, working in an emergency room, and using a prescription in response to work-related health problems are all associated factors, according to the study (Deribe et al., 2021). The study, however, failed to provide a clear and coherent explanation of how these identified characteristics are linked to burnout and how it impacts nurses' capacity to execute their jobs efficiently.

Another study done on burnout is done by Henok, Hailu, Rodas, Senayt, & Esubalew, after investigating the degree of burnout and stress among medical interns at SPHMMC, discovered that burnout and stress were also high among interns, emphasizing the need to raise awareness about the issue. The study was conducted using a cross-sectional study on 72 interns by using a structured online survey (Henok et al., 2021).Nevertheless, the small sample size limits the study's generalization ability effectively.

These and other studies, which will further be explored more in the literature review, only look at the causes and effects of burnout; little research has been done on how individuals or health care workers might utilize coping mechanisms on their own. Tadesse attempts to discover and describe coping techniques for job stress among nurses working in Jimma, on three public hospitals by using a cross-sectional study of 360 nurses. According to the survey, the most common coping strategies employed by nurses were: just concentrating on what they had to do, making a plan of action and sticking to it, building coworker/peer support, and having a close friend to confide in. While the least common coping strategies among nurses were: refusing to come to work when pressured, immediately expressing anger on family or friends, attempting to feel better by drinking more tea, coffee, and soft drinks than usual, and accepting the situation

because there is nothing else to do. In conclusion, the study indicates that an adaptive approach was the most chosen style, with social support and full-fledged issue solutions being the most preferred tactics, while the least frequent coping method is escape-avoidance (Tadesse, 2018). However, this study only measure stress levels, which is a distinct variable than burnout.

However, as the above review has indicated, previous research has largely ignored the issue of the prevalence of burnout in relation with its associated coping techniques. As a result, the current study tried to fill the gap by examining and identifying individuals' level of burnout and coping mechanisms they use to deal with stressful situations in their day to day life.

1.3 Objectives of the study

1.3.1 General Objective

The general objective of this research was exploring burnout and coping mechanisms among health workers in St. Paul's Millennium Medical College (SPHMMC).

1.3.2 Specific Objectives

Its specific objectives are to:

- Examine the prevalence of burnout faced by health workers working in SPHMMC
- Identify burnout level between departments
- Identify coping strategies health care workers uses to deal with stressful situations in their life
- Identify respondents coping strategy based on gender
- Recommend possible effective mechanisms of coping based on the data gathered

1.4 Significance of the study

The outcomes of this study would have significant practical consequences for programs and intervention designed aimed at preventing or improving burnout. The findings of this study can be used to provide more data for future interventions and activities of similar type. This study also will sheds information on individuals' own coping skills, which can help other health care employees build new coping skills that can help them to identify effective coping techniques that they can use to combat burnout in the work place. As a result, a preventative program based on the findings of this study could focus on teaching health care employees how to solve problems they encounter at work by employing effective personal coping strategies.

Another contribution of this research will be to add further information to existing literatures on burnout, as well as to provide insight into coping methods and their practical use in lowering burnout effects under various settings. As a result, the research will add to the current body of knowledge about health workers' coping mechanisms and strategies. It's an investigation on the coping skills employed by health care workers, as well as what they regard to be successful methods of preventing burnout in the job.

1.5 Delimitation of the study

The study geographically is delimited only to SPHMMC which is found in Addis Ababa, Gulele Subsity, woreda 09.

Also, Participants who are the subject of this study are delimited and also restricted in that it only looks at professional nurses and midwives who are employed and currently working at SPHMMC. There are two categories of health care employees to be aware of; people who deliver

services, which are referred to as "health service providers," whereas those who are not directly involved in the delivery of services, which are referred to as "health management and support employees." The focus of this research is on the first group, which includes health-care providers.

Furthermore, the study delimits its variable to; Burnout in which small things become major tasks, workers feel overwhelmed by their job demand, motivation and interests declined, and they feel as though they are out of energy. In addition, the study looks into the coping mechanisms employed by health care workers (nurses and midwives) to deal with problems at work.

1.6 Operational Definition of Variables

- **Burnout –** a psychological condition of emotional exhaustion, depersonalization, and reduced personal accomplishment, which can occur among individuals who work with other people in some capacity, as measured by Maslach and Jackson (1997).
- **Exhaustion –** a depletion of energy or emotional resources and is characterized as a state of mental, emotional, and physical tiredness, according to Maslachh, Schaufeli & Leiter (2001).
- **Depersonalization –** an attempt to build a psychological barrier between oneself and service recipients and to purposefully ignore the characteristic that sets patients apart as different and unique individuals, according to Maslachh, Schaufeli & Leiter (2001).
- **Reduced Personal Achievement -** the predisposition to negatively evaluate one's own work and a feeling of emotions of failure and low self-esteem, according to Maslachh, Schaufeli & Leiter (2001).

- **Coping Mechanism –** any efforts made by the person to manage, minimize, or tolerate events that individuals perceive as potentially threatening to their well-being, as it is described by Lazarus and Folkman.
- **Emotion-focused Coping –** a change in the interpretation of an experience without changing the fact itself. T he threat is lessened by changing how the situation is perceived, the goal is to reducing the environment's stressful emotional response is the aim, according to Lazarus and Folkman (1984).
- **Problem-focused Coping** - an objective, analytical process that is primarily concerned with the environment as well as internally focused solutions for a given threat, according to Lazarus and Folkman (1984).
- **Avoidance Coping –** are non-adaptive in nature and divert attention away from a stressful situations in an effort to reduce the negative effects on the individual, as indicated by Pickens, McKinney, and Bell (2019).
- **Health Care Worker –**people engaged in paid activities who are employed by organizations or institutions; such as hospitals, clinics, health centers, and other NGO's, whose primary goal is to improve health and provide health care service and who provide health service for patients.

Chapter Two

Related Literature Review

This section discusses the literatures that are relevant to this study. Burnout concepts and terminology, coping techniques, and health-care profession are reviewed further. In addition, theoretical and empirical literatures on burnout and coping techniques are presented. Furthermore, related studies on burnout and coping methods are evaluated in order to discover gaps that have not been addressed by prior studies. This part also includes burnout and coping models that will be used to shape the investigation.

2.1 Overview on Health Care Professionals

Even though, there are variances between countries in defining what health care professionals are, not just in terms of health workers in general, but also in terms of specialized health professions, the size, skills, and commitment of the health personnel have a significant impact on health care (Poz, Kinfu, Dräger, and Kunjumen, 2007).

All those involved in acts whose primary goal is to improve health are defined as health care workers by WHO (Mohr, 2006). Health workers, according to WHO, are "all those engaged in the promotion, protection, or enhancement of the population's health." In strict terms, this means that family members caring for the sick, as well as other unpaid caregivers and volunteers who help to promote health, should be considered as part of the health workforce (Poz et al., 2007)

Health care workers, on the other hand, are people engaged in paid activities who are employed by organizations or institutions such as hospitals, clinics, health centers, and other non-governmental organizations (NGO's) whose primary goal is to improve health and provide health care service and who provide health service for patients, as it has already been identified as an

operational definition. As a result, this definition is restricted to those who work on health promotion for a living and who got compensation to doing so.

As a result, we can distinguish between two sorts of healthcare workers. People who provide health services are referred to as "health service providers"; people who are not directly involved in the provision of health services are referred to as "health management and support workers". (Mohr, 2006).

Given the importance of the health workforce in the health system and the significant time and resources invested in educating and developing skilled health workers, it is critical to understand the factors that negatively impact the future health workforce's well-being in order to prepare appropriately today (Liu, Goryakin, Maeda, Bruckner, & Scheffler, 2017). Health care workers well-being can be improved by taking a complete and proactive approach. A healthy workforce leads to high-quality care for people who need it, which leads to better health outcomes (Harris, 2012).

2.2 Burnout

Workplace occupational stress and burnout are well-known issues in the healthcare sector. There is evidence that health-care workers are subjected to significant levels of psychological stress and burnout syndrome (Harris, 2012). As burnout is a global workplace issue that affects health care and other human service workers (Medihin, Thornicroft, Abebaw,& Hanlon, 2017), it need to be given the attention it deserve and work toward the solution for a better outcome.

As such, burnout is a stress-related issue that has gotten a lot of attention as a serious concern for both the distressed individuals and to the society (Chirico, 2016). Burnout is a psychological

syndrome that comprises three components: exhaustion, depersonalization, and reduced personal accomplishments. Exhaustion indicates the feelings of being overextended and depleted of emotional and physical resources. Depersonalization (or cynicism) refers to indifference or distant attitudes toward patients or the work in general; reduced personal accomplishment refers to a feeling of incompetence or lack of achievement and productivity at work (Maslach & Leiter, 2016).

As it is indicated burnout is a phenomenon characterized by emotional tiredness, depersonalization, and a poor sense of personal success, all of which contribute to lower productivity at work (Maslach & Jackson, 1997). Burnout syndrome is a state of emotional, physically, and mental weariness brought on by a high level of work-related stress over a lengthy period of time. It's a work-related collection of symptoms that's diagnosed in people who haven't had any previous psychological or psychiatric issues (Jagannath, 2021). Burnout syndrome manifestations looks to be very complicated as the condition appears to progress in different stages (De Hert, 2020).

2.2.1 Prevalence of Burnout

Burnout appears to be more prevalent among healthcare workers. This could have serious personal and professional effects, such as decreased patient outcomes, reduced standard of healthcare, and even medical mistakes, which could result in malpractice cases and negligence with considerable expenses for caregivers, health care institutions, and hospitals. As a result, being aware of the phenomena and recognizing it quickly, as well as developing appropriate coping personal and organizational methods, is critical in dealing with this major challenge in modern healthcare. Burnout is a worldwide phenomenon and a form of job

related stress that affects health-care workers, particularly nurses, whose jobs require frequent demands and constant contact with individuals who have physical and emotional needs. Burnout syndrome was shown to be prevalent globally; the region of Sub-Saharan Africa, Southeast Asia, and the Pacific had the greatest rate of burnout syndromes (13.68%), followed by Latin America and the Caribbean (10.51%), while Europe and Central Asia had the lowest prevalence. In generally burnout syndrome affects 34.6% of nurses (De Hert, 2020). According to a study the overall pooled prevalence of burnout among Ethiopian nurses is found to be 39% (Abrha et al., 2020).

2.2.2 Dimension of Burnout

The multidimensionality of burnout is widely acknowledged in the literature. Exhaustion, depersonalization, and a lack of personal achievement are the three fundamental dimensions of burnout (Demerouti, Verbeke, & Bakker, 2005).

2.2.2.1 Exhaustion

Burnout is characterized by exhaustion, which is the most visible indication of this complex condition. When individuals talk about burnout, they're usually talking about exhaustion. Although weariness captures the stress component of burnout, it falls short of capturing the crucial parts of people's work relationships. Exhaustion isn't just a feeling; it also induces behaviors to emotionally and cognitively detach oneself from one's work, presumably as a strategy to cope with work overload. The emotional demands of health care services job might exhaust a health care professional capacity to be involved with and attentive to their patients' needs. Exhaustion is defined by mental, emotional, and physical exhaustion and relates to energy depletion or the depletion of emotional resources (Maslach, Schaufeli, & Leiter, 2001).

Emotional exhaustion is related to the concept of strain, since it has been connected to tension, worry, physical tiredness, restlessness, and other symptoms. As a result, it was hypothesized that emotional weariness would be linked to psychological and physiological stress (Lee & Ashforth, 2019).

2.2.2.2 Depersonalization

Depersonalization is an effort to create a psychological barrier between oneself and service recipients or patients by consciously neglecting the factor that distinguishes the patients as unique and engaging individuals. When patients are viewed as impersonal objects of one's job, their demands become more tolerable. When people feel exhausted and discouraged, they adopt cognitive distance by acquiring an indifference or cynical attitude outside of the human services. Distancing is such an immediate reaction to tiredness that burnout research routinely finds a strong link between exhaustion and cynicism across a wide range of organizational and professional situations. Depersonalization is a dysfunctional sort of detached concern that refers to negative, cynical sentiments toward patients (Maslach et al., 2001). Depersonalization is a problematic coping technique that worsens the breakdown of relationships with recipients and gradually diminishes one's sense of personal accomplishment (Demerouti et al., 2005). Depersonalization is one style of defensive behavior, which is described as reactive and protective acts taken in response to an undesired demand or to lessen a perceived threat. It has been projected to be linked to psychological stress and the use of escape as a coping mechanism. (Lee & Ashforth, 2019).

2.2.2.3 Personal Achievement

Reduced personal achievement has a more complicated relationship with the other two components of burnout. It appears to be a function, to some degree, of exhaustion, depersonalization, or a combination of the two in certain cases. Constant, overwhelming demands at work that lead to tiredness or cynicism are likely to impair one's sense of effectiveness. Furthermore, exhaustion and depersonalization hinder effectiveness: it's hard to feel accomplished when you're exhausted or providing health care for somebody with whom you have no feelings. Lack of effectiveness appears to be linked to a scarcity of appropriate resources, whereas tiredness and depersonalization are linked to work overload and social conflicts. The propensity to adversely judge one's own work with patients is known as a lack of personal accomplishment, and it is often accompanied by feelings of failure and low self-esteem (Maslach et al., 2001).

The stress, lack of resources, and coping process was thought to result in a decrease in personal achievement. It is linked to adapting to difficult settings since it is a component of self efficacy. Self efficacy represents both the desire to be in control and the sense of control. The perception of control is based on beliefs in performance mastery, whereas the desire to be in control is proactive and highest when a person believes he or she is capable of achieving desired results. As a result, personal achievement was projected to be positively connected with the use of control as a coping strategy and self-appraisal of performance, while being adversely associated with a feeling of helplessness (Lee & Ashforth, 2019).

2.2.3 Models of Burnout

In the creation of several psychological explanatory theories for the cause and progression of burnout, various elements have been taken into account(De Hert, 2020). Burnout has been described, explained, and predicted using a variety of theoretical models and approaches. Many useful insights have resulted from these theories (Chirico, 2016). However, for the purpose of this research, a brief summary and overview of the most important models that are relevant for predicting and explaining the burnout syndrome and that can answer the research objectives will be discussed in this section.

2.2.3. 1 Job Demand- Resources (JD-R) Model

The Job Demands-Resources (JD-R) model is a simplistic and comprehensive model that defines how two different sets of working conditions might create burnout and work engagement: job demands and job resources. Job resources are the physical, psychological, social, and organizational characteristics of a job that help to achieve tasks, decrease job pressures, or inspire personal growth, learning, and development, which are the most important predictors of job satisfaction, desire, and commitment. There are two ways in which job needs and resources can interact. Employment resources such as social support, performance feedback, autonomy, and development opportunities can help to reduce the impact of job demands on strain and burnout (Chirico, 2016). The model focuses on the idea that burnout occurs when people are faced with constant work demands and insufficient resources to address and alleviate those pressures (Maslach & Leiter, 2016). The JD-R model's core assumption is that when job demands are high and job resources are limited, job strain occurs, regardless of the type of job or

occupation. The JD-R model's final claim is that when job demands are high, job resources have a greater impact on motivation and work engagement (Chirico, 2016).

2.2.3.2 Effort – Reward Imbalance (ERI) Model

Threatening employment conditions are defined as a mismatch between high demand (high workload) and poor control over long-term incentives. A concept in the model that may have a detrimental impact on the balance between effort and reward is over commitment to the work (De Hert, 2020). ERI's key premise is reciprocity: a mismatch between job effort and appropriate incentives will result in an unpleasant experience. Money, esteem, professional opportunities, and security are highlighted as rewards, whereas effort is claimed to have two components: intrinsic effort, which stems from inner motives, and external factors, such as responsibilities. Extrinsic and intrinsic elements are used in ERI, and the burnout process is caused when a worker believes that his or her attempts are unequal to the gratification received, and hence is unable to justify or cope with further effort input. The ERI model is concerned with the stressful experience and personal work cognitive pattern (Chirico, 2016).

2.2.3.4 Conservation of Resources (COR) Model

COR theory is a motivational theory based on the core idea that people want to get, keep, nurture, and defend their resources. Stress arises when people suffer or predict loss of resources, or when they fail to secure resources after major resource input, according to a central tenet of COR theory. It is consider that the process of loss of resources, gain, and preservation is important in understanding burnout and organizational commitment if we follow this principle. Individuals value resources, which are personal energy and qualities, objects, and conditions that can be used to obtain other objects, personal traits, circumstances, or abilities. Social support,

career advancement prospects, degree of decision-making involvement, psychological well-being or a positive personality, degree of independence, and defined behavior outcome expectations are all examples of resources (Chirico, 2016). Burnout is assumed to occur as a result of chronic threats to resource availability, as the model is based on motivational theory. When people believe that the resources they value are in jeopardy, they work hard to protect them. Burnout can be exacerbated by a lack of resources, or even the threat of a loss of resources (Maslach & Leiter, 2016). The emotional dimension of burnout and job engagement arises from processes that focus on people's innate energetic resources, notably emotional resilience, cognitive agility, and physical strength. In this approach, burnout is the consequence of a process of real or anticipated resource loss that progressively builds over time diminishing energetic resources, while engagement is the result of a lengthy process of a real or perceived resource gain that improve energetic resources (Chirico, 2016).

2.2.3.5 Organizational Injustice Model

This relates to how a worker views the organization's attitude towards its employees. Organizational justice has four components: distributive, procedural, interpersonal, and informational fairness (De Hert, 2020). Distributive justice is concerned with the fairness perceptions of outcomes in companies, with a focus on the employee-management interaction process. Higher levels of turnover and poorer satisfaction levels are associated to perceived injustice with outcomes like as compensation, performance appraisal, or acknowledgment. The fairness of methods used to make choices and determine outcomes is known as procedural justice. Procedural justice is considered to be associated to organizational results such as job involvement, which reflect more general views of procedures, whereas distributive justice was shown to be linked to outcomes such as salary satisfaction and overall work satisfaction.

Interactional justice emphasizes the social aspect of justice and the significance of treating employees with respect while procedures are carried out. The four requirements for interactional justice which should be addressed in meeting expectations of fair treatment are respect, justification, propriety, and truthfulness. Furthermore, informational justice refers to the quality of the explanations presented to individuals during the allocation process, as well as the requirements for honesty and reasonableness (Kwak, 2006).

2.2.4 Risk Factors of Burnout for Health Care Professionals

There are two types of factors that might cause burnout: personal and environmental. Self-esteem is one of the personal characteristics that might influence an individual's appraisal, and it's clear that self-esteem is one of the aspects that can influence the degree of stress among nurses. Different environmental elements, such as limitations and resources, may, on the other hand, influence stress. Job related problems such as job conflict and job ambiguity have been reported to affect the level of burnout among health care providers in several studies. Also, as environmental resources, social support can have an impact on the degree of burnout among healthcare personnel (Al-Mansour, Alfuzan, Alsarheed, Alenezi, and Abogazalah, 2021).

Furthermore, Maslach and Leite (2016) outline six major organizational risk factors that contribute to workplace burnout: *Workload;* contributes to burnout by reducing people's capacity to satisfy the demands of the job. *Control*; where employees' ability to influence action and decision making, exercise freedom and autonomy, and gain access to these resources to do a quality job is limited, they are more likely to feel stressed with their work. *Rewards*; Inadequate recognition and rewards enhance people's vulnerability to burnout by devaluing both the work and the workers, and are linked to feeling of inefficacy at the workplace. Employees' ongoing

ties with coworkers are referred to as "*community*"; there is an increased risk of burnout when these relationships are marked by a lack of support and trust, as well as unresolved disagreement. *Fairness*; how fair and reasonable judgments are regarded to be at work, when people believe they are not being treated with respect, cynicism, anger, and hostility are likely to emerge. Finally, *values* are the ideas and motives that initially drew people to their jobs. When there is a value conflict between individual and organizational values, employees are forced to choose between work they want to perform and work they have to do, which can lead to increased burnout.

Additionally, different and related stressors and burnout factors have been observed in the healthcare job process in the hospital setting. The small number of professionals, the overload of activity and responsibilities, and the challenge of defining the job description of the professionals ; the social complexity interactions; patients responsibility; organizational factors coming from the healthcare system; income stagnation and economical inflation; multiple occupations held by health care professionals; the difficult and long work hours are all factors to consider (Teixeira, Gherardi-donato, Pereira, Cordoso, & Reisdorfer, 2016).

2.3 Coping Mechanisms

Coping, according to Lazarus and Folkman, is described as a person's ongoing cognitive and behavioral attempts to manage certain outside and internal demands which are deemed to be demanding or above the person's resources. It refers to any cognitive and behavioral attempts to overcome, reduce, or endure situations that people believe to be potentially harmful to their health. Lazarus and Folkman go on to explain coping as a process rather than a trait, and they restrict it to demands that are deemed to be difficult or surpassing a person's resources. In general, this restricts coping to situations involving psychological stress, which necessitates

mobilization, while excluding automatic behaviors and thoughts, which do not necessitate effort. Furthermore, defining coping as attempts to control allows the person to cope with anything he or she does or thinks, regardless of how effectively or poorly it works. Finally, managing might entail reducing, avoiding, enduring, and accepting stressful situations, as well as attempting to master the environment (Lazarus & Folkman, 1984).

Health care professionals' coping mechanisms have an important role in overcoming or reducing their stress and burnout level. Identifying effective coping strategy could further reduce the impact of stressful situations on their health and wellbeing as well as providing quality care to their patients. Health care professionals cope with stress and burnout in a variety of ways, including using drugs, drinking, overeating, and smoking, which are all unproductive, while others cope by exercising, meditating, and listening to music, which has been shown to help reduce stress and burnout (Ganesan, Talwar, Fauzan, & Oon, 2018). Coping serves and assists in a variety of purposes for health care workers, including in maintaining appropriate environmental information, in maintaining satisfactory internal state to make a decision and to process information effectively, and in maintaining independence or freedom of movement, as well as the ability to use one's skill set in a flexible manner (Lazarus & Folkman, 1984).

2.3.1 Types of Coping

2.3.1.1 Emotion-focused Forms of Coping

When it is determined that there is nothing that can be done to change hurtful, threatening, or difficult environmental conditions, emotional-focused modes of coping are more likely to emerge. Minimization, distance, selective attention, positive comparisons, and attempting to take positive value from bad occurrences are all examples of cognitive processes aimed at reducing

emotional suffering. Certain cognitive kinds of emotion-focused coping result in a shift in how an experience is interpreted without affecting the actual reality and such methods are similar to reappraisal. Threat is reduced here by altering the interpretation of the circumstances, which is a coping attempt in the form of reappraisal (Lazarus, & Folkman, 1984). The goal of emotion-focused coping is to lessen the environment's stressful emotional reaction. These coping mechanisms are an attempt to recognize, comprehend, and express feelings (Shin et al., 2014).

Emotion-focused coping methods might alter the perception of a stressful transaction without misrepresenting facts, however, we must still consider the possibility of self-deception. These coping mechanisms are used to retain optimism and hope, reject both truth and consequence, refused to believe the worst, act as though what happened didn't matter, and so on. Seeking comforting information from the environment that was consistent with the persons attitudes and hopes about the a problem, making a joke and humor, being a part of a select group, superstitious practices, hostility, looking for support, avoiding others, trying to find suitable possible reasons if they fail, and externalizing responsibility are some of the strategies used to regulate emotion (Lazarus, & Folkman, 1984).

2.3.1.2 Problem-focused forms of coping

Problem-focused coping techniques are comparable to problem-solving strategies. As a result, problem focused efforts are frequently centered on describing the problem, creating possible solutions, evaluating options in terms of advantages and disadvantages, selecting one, and taking action. Problem-focused coping, on the other hand, encompasses a broader range of problem-oriented tactics than problem solving alone. Problem-solving entails an objective, analytic process that is concerned primarily with the environment, it also involves inward-directed solutions (Lazarus, & Folkman, 1984). Problem-focused coping has been found to be a more

adaptable coping method by many researchers. Problem-focused coping attempts to improve the distressed person–environment interaction by acting on the environment or on oneself. Using problem-focused coping means that taking action to address the issue that is causing the pain, coming up with alternative solutions, and sticking to a plan of action (Shin et al., 2014).

There are two types of problem-solving strategies: those directed at the environment, which include strategies for modifying external forces, obstacles, resources, procedures, and the like, and those directed at the self, which include motivational or cognitive changes such as shifting aspiration levels, lowering ego involvement, finding alternative pathways of gratification, developing new standards of behavior, or learning new skills. Selecting areas to focus on, planning, and setting priorities for dealing with the problem and designing techniques to handle the problem are all problem-focused strategies related to meeting the goal (Lazarus, & Folkman, 1984).

2.3.1.3 Avoidance Coping Strategy

The focus of attention away from the source of stress and one's reactions to it is a common feature of avoidant strategies. In avoidance, health care professionals might try to avoid having to deal with the problem directly (e.g. telling oneself the problem is not real) (Holmes & Stevenson, 1990). Avoidant approaches are non-adaptive in nature and lead away from a stressor with the purpose of reducing the negative impact on the self. Despite its reputation as a non-adaptive coping strategy, avoidance has been demonstrated to reduce burnout, to be advantageous when a situation is considered as unpredictable, and to prevent the adoption of more problematic avoidance coping strategies such as substance abuse. However, it should be noted that while avoidance coping strategies such as denial may not be helpful in the long run, denial may lower burnout sufficiently for an individual to resume normal functioning until they

are able to lessen other problems and devote more attention to this new stressor (Pickens, McKinney, & Bell, 2019).

2.4 Review of Burnout and Coping Mechanisms Related Studies of health care workers

Burnout and its consequences have caught the interest of several scholars. As a result, some research into stress, burnout, and coping techniques has been done. Nonetheless, the number of studies and the knowledge gained from them are insufficient to explain the scope of the problem of burnout in general, and its repercussions in particular, especially in Ethiopia. This section thematically highlights some of the research done on the issue of burnout, its effects, and the coping mechanisms people employ to cope with it.

- **Prevalence**

Medhin, Thornicraft, Abebaw, and Hanlon (2017) studied the Silte Zone of Ethiopia's Southern Nations, Nationalities, and Peoples' Regional State, which has a population of about 750,000 people. The government mainly provides health care in the zone, according to the research, with a focus on primary care. In the public sector, there are 33 primary health care institutions in the zone, each servicing 15 to 25,000 people. With an in-depth interview and focus group discussion tool, the study uses a qualitative research design. The data was collected from a total of 50 people. Five BSc degree nurses, 23 diploma nurses, five health officials, and 17 health extension workers made up the sample. There were 22 men and 30 women working in health posts and health centers, with 17 working in health posts and 35 in health centers (Medhin et al., 2017).

According to the study most interviewees felt that some level and type of stress was acceptable and unavoidable in healthcare. Working night shifts and on holidays, treating patients in pain,

and experiencing difficult moments with patients and caregivers were highlighted as acceptable work-related stressors. Participants also discussed personal life difficulties such as competing family responsibilities and not being able to meet family needs owing to a lack of cash or physical illness. The majority of respondents believe that health practitioners are perceived as weak if they show emotion in response to a stressful situation. Many interviewees highlighted physical workplace circumstances, particularly infrastructure such as tap water, phone signal and transport access, as additional pressures. Participants reported using or planned to employ a variety of ways to deal with stress and its effects, ranging from enduring the circumstance to wanting to quit the work. Participants highlighted inter- and intra-personal characteristics such as resilience, excellent peer relationships, and social support as essential factors for dealing with stressors or coping, in addition to system-level changes. In the survey, the majority of participants said that having a positive and harmonious professional relationship with coworkers had helped them deal with pressures. According to Medhin and his colleagues, the outcomes of their study show that dangers to health workers' well-being are frequent, and that burnout is a valid concept in Ethiopian primary healthcare. And recommend that more research is needed to better understand the impact of burnout on staff mental health, job turnover, and the quality of care provided, as well as to create and test contextually appropriate interventions to increase employee wellbeing.

Another recent study on the subject of burnout is Henok, Hailu, Rodas, Senayt, and Esubalew's study on the prevalence and associated causes of burnout and stress among interns in teaching hospitals. The research was carried out at the SPHMMC in Addis Ababa, Ethiopia. Interns rotate among different departments for 12 weeks and psychiatry and emergency medicine for 6 weeks. A cross-sectional survey of 72 interns who had worked in the hospital for at least 6 months was

conducted over the course of 26 days. The information was gathered using a four-part structured electronic online questionnaire: socio-demographic, Maslach Burnout Inventory (MBI) to measure burnout, perceived stress scale to assess stress level, and a final part that assessed factors affecting burnout, including individual and work-related factors (Henok et al., 2021).

According to the study, 69 % of the participants wanted to leave the nation, while 43% planned to completely change their job. In the study, 69.4% of interns reported high levels of emotional exhaustion, 42% reported high levels of depersonalization, and 44.4% reported a highly reduced sense of personal accomplishment. In general, the study found that ten (13.9%) interns had high levels of burnout in all three MBI components. Furthermore, 37% of interns said they were under a lot of stress. The study also discovered that the most common difficulty is role ambiguity, with 97.2 percent of participants citing a poorly defined intern job as the most difficult challenge. As an intern, they face additional problems such as an excessive workload, exhaustion, and sleep loss. Emotional tiredness was five times more likely in people who planned to change careers, had excessive financial worries, and six times more likely in people who reported high levels of perceived stress. Fear of medical errors also raised the likelihood of depersonalization. The study suggests that interns experience high levels of burnout and stress. The findings highlight the importance of increasing public knowledge about the issue. It is critical to promote mental health and improve preventative and psychosocial support services. The researchers also urge that junior physicians' financial and employment stability be protected so that they can work in a more pleasant atmosphere, and further recommends additional study to be done on the subject, including more extensive assessments of the effects of burnout on other aspects of mental health.

Additionally, a comprehensive evaluation of seven studies on burnout among Ethiopian nurses was conducted by Abrha, Woldu, Guesh, Kidane, Guesh Gebreayezgi, and Teklehaimanot. Three

of the studies were conducted in the Amhara area, while the other four were conducted in Addis Ababa, Oromia, the SNNPR, and Tigray. Except for one study, which was a cohort study, all of the studies were cross-sectional. This study has a total sample size of 1654 nurses, with a maximum sample size of 369 from the Amhara region and a minimum sample size of 75 from the SNNPR. According to Abrha and his colleagues' comprehensive evaluation of this study, the overall pooled prevalence of burnout among Ethiopian nurses is 39%. Burnout was found to be 35 percent among nurses working in Amhara region hospitals, according to the systematic review's subgroup analysis. Burnout was found to be common among nurses in various regions, with 43 percent in Oromiya, 50 percent in Tigray, 33 percent in Addis Ababa, and 40 percent in SNNPR. The prevalence of the review undertaken by Abrha and his colleague is higher than that of a global systematic review; the overall pooled prevalence of burnout among global nurses was 34.6%. They also point out that the burnout prevalence rate was highest in Sub-Saharan Africa, whereas it was lowest in Europe and Central Asia. Gender, job instability, working environment, low enthusiasm in the profession, night shift, long hour burden, work experience, health status, and purpose to leave present work are also identified as key characteristics associated with burnout among nurses, according to the study. Abrha and his colleague conclude that burnout affects two out of five nurses in Ethiopia. Therefore, effective interventions and strategies are required to reduce burnout among nurses (Abrha et al., 2020).

Despite the fact that burnout has been the subject of numerous studies and research projects, this one stands out from the others since it measure both variables using two separate measuring instruments (the MBI and the Brief-COPE Inventory). This helps the research to not only identify burnout problem but it also try to understand the solution participants use to cope with

the problem. In addition in this researches Midwifes were included as a target group, which has not been done previously.

- **Risk factors**

Deribe, Teshager, Negga, Bedasa, and Henock (2021) conducted a cross-sectional study on burnout and associated factors among nurses working in public hospitals in Harari region and Dire Dawa administration. The research was carried out at four public hospitals, two from the Harari administration and two from the Dire Dawa administration. There are 569 nurses working in the four hospitals. The information was gathered over the course of a month. The study had a sample size of 412 participants, with 222 females and 190 males, and was done using a simple random sampling procedure based on proportional allocation. The data was then gathered utilizing the MBI – HSS questionnaire. 44% of participants work more than 8 hours per day. Furthermore, participants state that the hospital where they work has few resources, which makes their job more difficult. 54.6 percent of respondents say there is no clear communication between nurses and management, 50.7 percent say they have had conflict with other nurses, and 48.8 percent say they have had conflict with doctors. Despite this, 52.2 percent of respondents thought their quality of life was adequate. Burnout syndrome, on the other hand, affected 44.4 percent of nurses. 65.3% of those had high emotional weariness, 70.6% had high depersonalization, and 74.5% had poor personal successes. Sex, age, marital status, educational level, monthly income, job experience, current health status, health problem, medication used, having the intention to leave a job, working unit, hospital resource, perception on work satisfaction, communication between nurse and management, and perception of quality of life are some of the variables that contribute to burnout identified in the study. The study concludes that the magnitude of burnout among the nurses who participated in the study is high, and they further recommend that

concerned bodies provide trainings that focus on stress copying mechanisms and assertiveness programs, as well as pay attention to and act on nurses' burnout and factors linked to burnout among nurses.

Houkes, Winants, Twellaar, and Vedrank studied a random sample of Dutch general practitioners over the course of three years (2002, 2004, and 2006). The MBI was used to collect data through self-report questionnaires. A total of 212 general practitioners were included in the final sample. In terms of burnout prevalence, the study found that the situation improved between 2002 and 2004, but then declined again between 2004 and 2006. Several changes in GPs' working lives could account for some of these shifts. Since around 2000, out-of-hours primary care has become increasingly structured in large-scale GP cooperatives, with 40 to 120 GPs caring for populations ranging from 50,000 to 500,000 people. In terms of the burnout development process, the study discovered that there appear to be gender variations in the existence of the various symptoms: exhaustion, depersonalization, and a lack of achievement. Exhaustion and fatigue affect both men and women equally, according to the study of GPs. Women, on the other hand, appear to have a greater sense of lack of achievement. Male physicians, on the other hand, appear to be less likely than female physicians to have doubts about the quality of their work (Houkes et al., 2011).

- **Coping strategies to burnout**

Teixeira, Gherardi-Donato, Pereira, Cardoso, and Reisderfer Conducting a cross-sectional, descriptive exploratory epidemiological study on occupational stress and coping techniques among nursing professionals in a hospital setting using a quantitative approach. The study was carried out in a major university hospital in the state of Sao Paulo. The survey included 310

technicians and nursing assistants. According to the study, the most commonly employed coping techniques by the sample of this research were problem-solving strategies (60%). Individuals employed religious practices as their second most prevalent coping mechanism, accounting for 21.3 %. Teixeira and his colleagues indicate that the result of association analysis for occupational stress and coping techniques was statistically significant for emotion-focused strategies, identifying these strategies as a risk factor for occupational stress (Teixeira et al., 2016).

Another study done on coping strategy is Tadesse's study on coping methods among nurses in South-West Ethiopia which used a descriptive, institution-based cross-sectional method with 433 nurses. The research reveals that the most common coping strategies employed by nurses working at the Jimma Zone public hospital were: simply focusing on what they had to do next, making a plan of action and sticking to it, developing work colleague support, and sharing a common friend to tell. On the other hand, the least used coping strategies among nurses were: refusing to come to work when stressed, directly expressing frustration on family or friends, attempting to feel better by drinking more than usual tea, coffee, or soft drinks, and accepting the situation because there is nothing else to do. In the survey, the most commonly utilized coping approach was social support (67.12 %), followed by plan-full issue solving (66.02 %), while escape-avoidance (56.86 %) was the least commonly used stress management method among nurses. The study found that nurses utilized an adaptable approach to stress management, with social support and fully intend problem solving being the most popular, and escape-avoidance coping technique being the least popular (Tadesse, 2018).

Chapter Three

Methods

The primary goal of this study was to assess burnout and explore coping mechanisms among SPHMMC health care employees. A cross-sectional design was used to enhance the scope and clarity of the study. As a result, at various stages of the research, a quantitative study approach was applied.

3.1 Design

In this study quantitative research design was employed. A quantitative research method deals with quantifying and analysis variables in order to get results. It involved the utilization and analysis of numerical data using specific statistical techniques to answer questions like who, how much, what, where, when, how many, and how (Apuke, 2017). From a quantitative research design the research utilize a cross-sectional study; which helps to study association between variable (burnout and coping), it is also possible to recruit study participants and examine outcomes in the population, it also helps to estimate prevalence of outcome in those surveyed (Setia, 2018). To put it another way, cross-sectional studies look at the link between two or more variables to discover if they correlate or associate. It helps the research to be able to determine the prevalence burnout and coping techniques used by health care workers by utilizing this method.

3.2 Study Setting

St. Paul Hospital Millennium Medical College (SPHMMC) has been giving services to the wide range of the society since 1968, as it is cited in the hospital official website. The hospital was founded by Emperor Haile Selassie in Addis Ababa, Gulele Subsity, woreda 09.

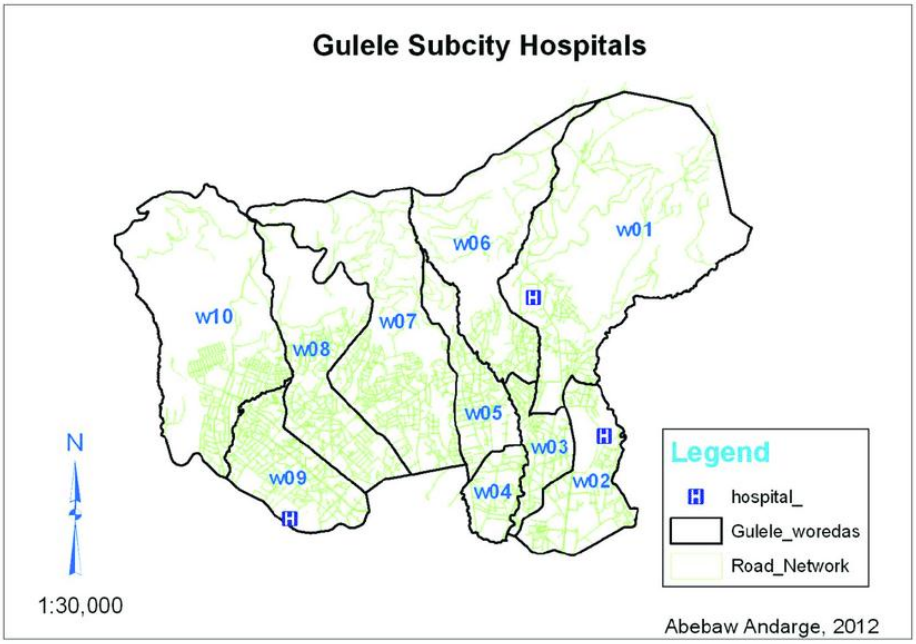

Figure 1: Map of Gulele Subcity and its hospitals

When St. Paul Hospital was founded, its principal goal was to embrace and offer medical care to the poorest members of society. The number of patients accepted and services provided by the hospital has expanded dramatically over time. To fulfill societal demand, the hospital is working hard to increase its capacity by increasing the number of well-educated human resources, providing it with various resources needed to serve patients, and establishing and expanding various wards and departments. The hospital is a teaching hospital that offers a variety of medical services to the general public, including departments of internal medicine, surgery,

radiology, gynecology, ENT, ART, Pediatrics, Maxilo facial, Covid-19 treatment center, kidney and transplant center just to list a few.

3.3 Participants

According to the Hospital's human resource department, there were a total of 3,959 health care providers and supporting workers in the hospital.

Table 1: Employee Data of SPHMMC

Health Care providers			
Profession	**Male**	**Female**	**Total**
Nurse	551	710	1261
Midwife	51	77	128
Laboratory	69	63	132
Anesthesia	21	35	56
Pharmacy	70	32	102
Radiology	21	17	38
Public health	52	30	82
Physiotherapy	3	1	4
Academic Staff (This are doctors)			
Professor	1		1
Associate professor	15	9	24
Assistant Professor	178	179	327
GP (Lecturer)	229	142	371
Other Academy Staff	52	40	92
Supportive Staffs			
Administration	352	616	968
Contract (Project, Covid, & Others	142	227	337
Total			**3959**

N.B: This data was gathered from the hospital human resource, 2022

However, for the purpose of this research the study populations are health care workers who are professional nurses and midwife who are employed and currently working in SPHMMC.

3.4 Sample and Sampling Technique

However, according to the data obtained from the nursing directorate of the hospital currently there are a total of 972 nurses and midwives who are actively working in the hospital, the difference is due to some staffs are on leave, or they have been transfer to different branches. Therefore, 972 are used to calculate the sampling size.

To calculate the sample size the Solvin's formula is used, it is a random sampling technique formula to estimate sampling size and it is used to calculate the sample size (n) given the population size (N) and a margin of error (e).

$$n = \frac{N}{1+(Ne2)}$$

- n : Sample size
- N: is the population size of the study, in this case 972
- e : is the margin of error or the confidence interval. It tells how confident we can be that the results from the study reflect that we would expect to find in were possible to survey the entire population

$$n = \frac{972}{1 + (972 * 0.05^2)}$$

$$\frac{972}{1 + (2.43)}$$

$$\frac{972}{3.43}$$

$$n = 283.38$$

Thus n will be 284 then, 10% non-response rate was added to the final sample size which gives 312 as the sample size As 284 x 0.1 = 28, then 28 + 284 = 312

Furthermore, in order to have a probability sampling technique a stratified sampling technique is implemented in order to have a sample size of 312. In which departments was stratified in to three groups, there are a total of 55 departments within the hospital that nurses and midwifes were assigned to.

Table 2: Units and number of Staffs

Unit	Male	Female	Total
Dialysis	5	15	20
1St East	8	13	21
1St West	7	12	19
4Th West	2	18	20
5Th West	0	1	1
Adult Emergency	52	42	94
Adult ICU	6	30	36
ART	1	4	5
Breast And Women Imaging	0	2	2
C/S OR	8	23	31
Central Sterile Service Department (Cssd)	1	1	2
Dental	3	14	17
Dermatology	2	4	6
E&C	7	3	10
Emergency Gyne OPD	12	10	22
Endoscopy	0	8	8
Endourology	2	11	13
ENT OPD	3	11	14

Family Medicine	2	4	6
Forensic	0	4	4
Gynecology Ward	2	14	16
Hematology	2	9	11
Interventional Radiology	5	6	11
In Vitro Fertilization (Ivf)	4	13	17
Labor Ward	14	28	42
Major Operation Room	32	27	59
Maternity A	4	11	15
Maternity B	7	9	16
Maxilo Facial Ward	2	10	12
Medical OPD	12	10	22
Michu Clinic	3	8	11
Minor Surgery	2	5	7
NICU	6	42	48
Oby /Post Anesthesia Care Unit	5	7	12
Oby/ Ultrasound	3	1	4
Oncology	12	11	23
Ophthalmology OPD	1	13	14
Ophthalmology OR	3	10	13
Pediatric Ward	7	18	25
Pediatrics Emergency	9	28	37
Pediatrics Surgery Ward	2	18	20
PICU	11	13	24
Psychiatry	5	10	15
Recovery	2	14	16
Regular Gyne OPD	3	12	15
Regular Pediatrics OPD	4	12	16
Supervision	4	7	11
Surgical OPD	5	10	15
Transplant ICU	1	13	14

Transplant Dialysis	5	8	13
Transplant OPD	0	6	6
Transplant Or	5	7	12
Transplant Ward	1	7	8
Urology Ward	7	8	15
Vaccine	0	6	6
Total	**311**	**661**	**972**

N.B: This data was obtained from the nursing directorate of the hospital, 2022

Further, the departments are divided into three strata's based on patient flow to the units; high flow, mild flow, and low flow. Then a proportional assigning method is used to the strata's based on the flow, high flow get higher proportion, while low flow will get lower proportion. Here, the departments were divided by the researcher based on observation of the flow of patients to each department.

The number of sample units to choose from each stratum can be proportionate to the number or size of sample units within each stratum. Because the sample size in each stratum should be proportionate to the number of sampling units in that stratum, it sets the sample size in each stratum equal to be proportional to the number of sampling units in that stratum.

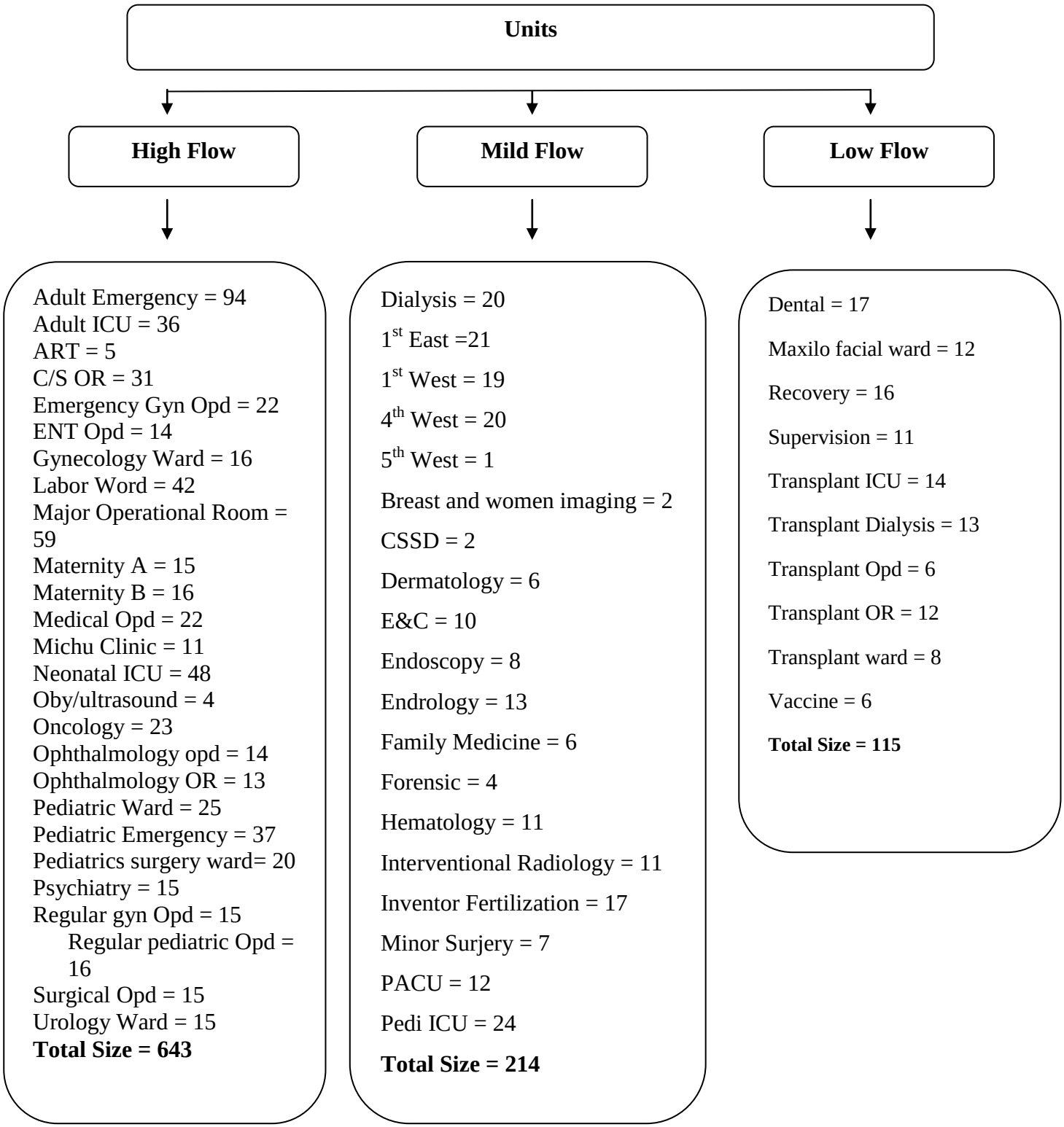

Figure 2: Strata of Units, Hospital Units, 2022

N.B: This data was obtained from the nursing directorate of the hospital, 2022

Proportional allocation is when the total sample size "N" is distributed among different strata in proportion to sizes of strata.

Proportion of strata = Sample size * Population stratum
Total Population

$$ni = \frac{n}{N} * Ni$$

N = 972

n = 312

High Flow	Milled Flow	Low Flow
$ni = \frac{312}{972} * 643 = \mathbf{207}$	$ni = \frac{312}{972} * 214 = \mathbf{69}$	$ni = \frac{312}{972} * 115 = \mathbf{36}$

Table 3: Population size of strata's

Strata	**Population in each strata**	**Sample in Each Strata**
High Flow	643	207
Mild Flow	214	69
Low Flow	115	36
Total	**972**	**312**

3.5 Tools of Data Collection

The survey questionnaire has three parts which is a structured survey questionnaire. The questionnaire was prepared and distributed in English language, this is because most participates having a BSc degree and it is safe to assume they are literate and can understand the questionnaire. The questionnaire is prepared by adapting;

A. Demographic Data:

The survey questionnaire include demographic factors of respondents to see how the prevalence of burnout affect on gender and the difference of coping strategies based on sex. Also for identifying in which strata respondents belongs to.

B. Maslach's Burnout Inventory (MBI) burnout measuring tool:

There are many burnout measurement tools; the Bergen Burnout Inventory (BBI) measures three elements of burnout: exhaustion at work, cynicism toward the meaning of work, and a sense of inadequacy at work, among others. The Oldenburg Burnout Inventory (OLBI) measures weariness and disengagement from work in two domains. Other burnout assessments concentrate solely on weariness and exhaustion; however they distinguish between different types of exhaustion. The Shirom-Melamed Burnout Measure (SMBM) and the Copenhagen Burnout Inventory, for example, distinguish between physical exhaustion, emotional exhaustion, and mental weariness. The MBI, on the other hand, was created particularly to assess the three elements of burnout. The tool has been translated and tested in numerous languages and is regarded the standard instrument for research in this subject. Other early burnout assessments, on the other hand, focused solely on the exhaustion factor (Maslach & Leiter, 2016).

Over time, MBI burnout metrics have undergone revisions and modifications. Because the early concerns about burnout arose from professions that provide care, such as health care and human services, the measurements established in the 1980s tended to mirror that experience. Other occupational groups grew interested in the prevalence of burnout later, but had trouble adapting existing measures to their work situations. The solution for the MBI was to create a General Survey that could be used in any occupation (Maslach & Leiter, 2016). However, since the

subject or the focus of this research is on health care professionals it will use the original MBI scale.

The MBI is used to evaluate the three aspects of burnout syndrome: emotional exhaustion, depersonalization, and a decrease in personal accomplishment (Maslach, Jackson and Leiter, 1997). The three elements of burnout are commonly defined in stages, and MBI measurement focuses on the interaction between them. Exhaustion was thought to emerge first, as a result of excessive demands and pressure, and then detachment and negative attitudes towards people and the job would follow, which is depersonalization or cynicism. If this continues, emotions of inadequacy and failure will develop, resulting in a decrease in personal achievement or professional inefficacy (Maslach & Leiter, 2016).

There are 22 items in total, broken down into three subscales. The terms "patients" are used in the items to refer to the specific people for whom the responder provides service, care, and treatment. The items are written as statements concerning personal experiences or attitudes (for example, "I'm burned out from my job," "I don't really care what happens to some patients"). On a 7-point scale, the questions are responded in terms of the frequency with which the respondent experiences these feelings (ranging from 0, "never" to 6, "every day"). The explicit grounding of all 7 points on the frequency component results in a more standardized response scale, allowing researchers to be more confident in their interpretations (Maslach et al, 1997).

The Emotional Exhaustion subscale consists of nine items that assess experiences of becoming emotionally overstretched and drained by one's job. The Depersonalization subscale's five items assess an uncaring and cold response to those who receive one's service, care, treatment, or guidance. Higher mean scores on the Emotional Exhaustion and Depersonalization subscales

indicate higher levels of experienced burnout. There is a moderate correlation between the two subscales since several of the component items on each subscale had low influence on the other, which is consistent with theoretical expectations that these are independent but connected components of burnout. The Personal Accomplishment subscale consists of eight items that examine sense of competence and effective accomplishment in one's care for people. Lower mean scores on this subscale, in contrast to the other two, correspond to higher levels of experienced burnout. The Personal Accomplishment subscale is unrelated to the other subscales, and its items have no negative impact on them. Person Accomplishment cannot be considered to be the inverse of Emotional Exhaustion or Depersonalization in other works. Consequently, the Personal Accomplishment subscale has minimal correlations with the other subscales (Maslach et al, 1997).

A scoring key with guidance for scoring each subscale is used to core each respondent's test form. Because the scores for each subscale are assessed separately and not combined into a single total score, each respondent receives three scores. Then, using the numerical limit points provided on the scoring key, each score can be labeled as low, average, or high (Maslach et al, 1997).

C. The Brief COPE inventory a coping strategy measuring tool:

The Ways of Coping Scale, the Measure of Affect Regulation Styles, and the Coping Schemas Inventory-Revised are some of the tools used to assess coping techniques. However, the COPE (Coping Orientation to Problems Experienced) Inventory scale is one of the most used (García, Barraza-Pena, Woldarczyk, Alvear-Carrasco, and Reyes-Reyes, 2018).

The Brief-COPE is a 28-item self-report questionnaire that assesses effective and inefficient coping strategies in the face of a stressful life event. In addition, the 28 measures assess thematically separate coping reactions. Self-distraction, Denial, Substance Abuse, Behavioral disengagement, Emotional Support, Venting, Humor, Acceptance, Self-Blame, Religion, Active Coping, Instrumental Support, Positive Reframing, and Planning are among the reactions. Some of these responses are well-known to be adaptive, whereas others are well-known to be harmful. As a result, the Brief COPE allows researchers to swiftly measure potentially relevant coping reactions. The scale is useful in therapy contexts for determining which responses to stressors are beneficial and which are not. With scores on the three subscales, the scale can reveal a person's basic coping styles: problem focused coping, emotion focused coping, and avoidant coping(Carver, 2018).

The Brief-Cope was created as a simplified version of the original 60-item COPE scale, which was theoretically drawn from several coping methods and released in 1989. The Brief-COPE was first tested on a group of 168 people who had been affected by a hurricane. Average scores (total of item scores divided by number of items) are offered for three overarching coping styles, reflecting the extent to which the respondent has been using that coping style(Carver, 2018).

1. = I haven’t been doing this at all
2. = A little bit
3. = A medium amount
4. = I’ve been doing this a lot

A lot of health-related researches have employed the COPE. Many of the coping reactions that it evaluates are crucial in the coping process, and some are indicative of future physiological

impacts, according to the existing research. The three overarching coping styles are: Problem-Focused Coping (question 2, 7, 10, 12, 14, 17, 23, 25), which are active coping, the utilization of informational support, planning, and positive reframing are all characteristics of this type of coping strategy. A high score suggests that the individual is using coping skills to try to change the stressful situation. High ratings indicate mental toughness, resilience, and a practical problem-solving attitude, and they anticipate favorable outcomes. Emotion-Focused coping (question 5, 9, 13, 15, 18, 20, 21, 22, 24, 26, 27, 28), venting, using emotional support, comedy, acceptance, self-blame, and religion are all examples of emotion focused coping mechanisms. A high score implies coping techniques aimed at regulating emotions brought on by the stressful experience. High or low scores are not always associated with psychological well-being, but they can help to shape a more comprehensive picture of the respondent's coping techniques. And Avoidant Coping (question 1, 3, 4, 6, 8, 11, 16, 19), self-distraction, denial, substance abuse, and behavioral disengagement are all signs of avoidant coping. A high score indicates that you are making physical or mental attempt to disconnect from the stressful situations. Adaptive coping is usually indicated by low scores (Carver, 2018).

3.6 Pre-testing of Data Collection Instruments

Before conducting the actual research a pilot study was conducted in SPHMMC on the Medical ward and to avoid contamination the ward was later excluded from the actual study. Pilot study was conducted in order to check the validity and reliability of the instruments. A pilot study is an important stage in a research because it allows researchers to identify potential issue areas and flaws in the research instruments and methodology before they are used in the main study (Hassan, Schattner, & Mazza, 2006). And checking the validity and reliability of the instruments

help us to see whether the measurement are accurate and if they are actually measuring what they say they measure (Joppe, 2000).

Therefore, to conduct the pilot study the medical ward department, both male and female side, was chosen. The pilot study was conducted on 10% of the study population that is 30 respondents were given questionnaires, however, there was one non response, and so, the pilot testing was conducted on 29 respondents. The demographic of the pilot study were all nurses. Then, the reliability of the instruments, especially the internal consistency of the study was checked using Cronbach's Alpha internal consistency scale. Cronbach's Alpha provide a measure of the internal consistency of a test, and it is expressed as a number between 0 and 1. Thus, it is a measure of the extent to which the groups of questions are related and thus gives an estimate of how good or bad the measurement accuracy, the so-called reliability, of a group of items is, and it should be greater than 0.7 for the instrument to be acceptable (Tavakol, 2011). Thus both the MBI and COP scales were analyzed separately, further for the MBI the scale was analyzed differently for the three variables (exhaustion, depersonalization, and personal achievement). The finding shows for exhaustion the cronbach's alpha is 0.869, which make the instrument good. For depersonalization the score of cronbach's alpha was 0.451, which make the instrument unacceptable, however, because here there are only five questions, and the questions that score lowest level were three questions, because it is difficult and not practical to exclude these question, the solution taken was to re-write and use simple language on the identified three questions. The cronbch's alpha score for personal achievement was 0.754, which make the instrument acceptable. Accordingly, the total cronbach's alphas score for the total MBI was 0.745, which make the general model acceptable. For the COPE scale, the cronbach's alpha score was 0.933, which make the instrument excellent.

3.7 Procedures of Data Collection

Data collection is the process of acquiring and evaluating measuring information on targeted variables in a systematic manner that allows researchers to answer research questions, test hypotheses, and assess outcomes (Kabir, 2016).

The first step in the data collection process was obtaining ethical approval from the Ethical Review Board Committee of Addis Ababa University College of Educational and Behavioral Studies School of Psychology, and the approval was acquired on May, 16, 2022. Then after acquiring the ethical clearance and supporting letter from the school, the proposal was submitted to St. Paul Millennium Medical College Institutional Review Board (IRB) along with the clearance and supporting letter, then the board give the research the clearance on May, 30, 2022. After acquiring the clearance from the hospital IRB, the pilot test was conducted and according to the result of the pilot test the instrument was revised and corrected.

Following the completion of the pilot study and after correcting the instrument the questionnaire was distributed to 312 nurses and midwifes who are currently working in SPHMMC. The participants were presented with informed consent in order to obtain their willingness and full cooperation to participate in the study. The data was scheduled to be collected within two weeks time frame, but because some respondents was not able to finish in a short time, and also because some respondents shift was changed, these make gathering the data from respondents quite difficult, as a result collecting the data took more than three weeks.

3.8 Methods of Data Analysis

The information gathered from the survey questionnaire was quantitatively analyzed with IBM SPSS Statistics 20. For each question, a key code was created, and responders' responses were recorded and encoded according to the question's code in to the software. Then the data was computed using a descriptive statistics and the output of the data was organized and presented using tables that shows the data frequencies, percentages, mean, and non parametric correlation.

3.9 Ethical Considerations

In acquiring the necessary data, approaching the participants, the hospital, and performing the entire research, the study followed the required ethical measures and steps.

First ethical clearance was obtained from both Addis Ababa University College of Educational and Behavioral Studies School of Psychology Ethical Review Board Committee and SPHMMC Institutional Review Board. After that a written informed consent was provided for research subjects that further explain the procedures to be followed in gathering the necessary information and explaining the purposes of the study. Participants further were informed that if they feel discomfort and concern they are free to withdraw from participating in the study at any given time without any judgment. The researcher also was available through phone, email, or other means of communication to give answer to any inquiries and concern regarding the research and the procedures of data gathering. Furthermore, in encoding and analyzing the data all participants remain anonymous, and all information gathered from the respondents was treated with confidentially. Additionally, each respondent were informed that they have the right to ask for a copy of the final report if they want.

Chapter Four

Results

This Chapter deals with the result of the research that is based on a quantitative data which are collected through questionnaire. The questionnaire composed of three parts which assess the demographic character of the respondents, Maslach's burnout inventory, and the COPE coping inventory.

The section presents the result of the data gathered from respondents, which is then encoded to SPSS software. The data is presented with tables, to give a clear picture. The section is further divided into other sections based on the specific objectives the research set out to investigate, that are to examine the prevalence of burnout faced by health workers working in SPHMMC, to identify coping strategies health care workers use to deal with burnout, to identify the burnout level between genders, and to assess burnout level between strata's in health care workers.

4.1 Socio Demographic Characteristics

In this research 312 questionnaires were distributed, however, because of non response 288 responses was gathered from the respondents. From high flow strata, there were 14 non responses, from mild flow strata, there were 5 non responses, and from low flow strata there was also a five non responses. The survey that is gathered from the 288 respondents revealed the following data related to the socioeconomic and demographic characteristics of respondents.

4.1.1 Sex, Age, and Education Level

Gender wise, the sex distribution of respondents showed that 60.4% (n= 174) were female and 39.6 % (n= 114) were male participants. The survey data showed that large proportions of respondents were in the age group of 23 -27 years of age (55.6%, n= 160), 22% (n= 56) were

between 28 -32, 10.1% (n= 29) were between 33 -37, 4.9% (n= 14) were between 18 – 22, 3.1% were between 38 – 42, and only 1% (n= 3) indicate their age to be above 43, in collecting the information for respondent's age, the question was presented as an open end question but latter transformed in to a categorical variable when encoded in to SPSS. Additionally, the data also shows there is a 2.8% (n= 8) non response rate for age question.

Table 4: Frequency and percentage distribution of respondent by sex, age, and education level

Variable	Category	Frequency	Percent
Sex	Female	174	60.4%
	Male	114	39.6%
	Total	288	100%
Age	18-22	14	4.9%
	23-27	160	55.6%
	28-32	65	22.6%
	33 - 37	29	10.1%
	38 - 42	9	3.1%
	Above 43	3	1%
	Total	280	97.2%
	Non response	8	2.8%
	Total	288	100%
Level of Education	Diploma	11	3.8%
	Degree	253	87.8%
	Master	24	8.3%
	Total	288	100%

Out of the 288 respondents the majority of them, 87.8% (n= 253) have a bachelor degree in health education, 8.3% (n= 24) have a master degree, and only 3.8% (n= 11) have a diploma in health education.

4.1.2 Profession, Departments, Income, and Experience

As the target population of this study were only nurses and midwifes the data is obtained from only from the two mentioned professions. The data shows that 78.8% (n= 227; F= 141, and M= 86) participants were nurses and 21.2% (n= 61; F= 33, and M= 28) were midwives.

Table 4: Frequency and percentage distribution of respondent by profession, department, income and year of experience

Variable	Category		Frequency	Percent
Profession	Nurse	Female	141	
		Male	86	
			227	78.8%
	Midwife	Female	33	
		Male	28	
			61	21.2%
	Total		288	100%
Departments	High Flow		193	67%
	Mild Flow		64	22.2%
	Low Flow		31	10.8%
	Total		288	100%
Income	3000 - 5000		44	15.3%
	5000 - 7000		164	56.9%
	7000 - 9000		48	16.7%
	Above 9000		12	4.2%
	Total		268	93.1%
	Non response		20	6.9%
	Total		288	100%
Year of Experience	6 Month - 2 year		46	16%
	2 year - 4 year		111	38.5%
	4 year - 6 year		71	24.7%
	Above 6 years		40	13.9%

Total	268	93.1%
Non response	20	6.9%
Total	288	100%

The research divided the units or department where respondents assigned in the hospital as high flow, mild flow, and low flow strata's. Accordingly the data shows that 67% (n= 193) respondents were in the high flow, 22.2% (n= 64) were in the mild flow, and 10.8% (n= 31) were in the low flow strata. As the above table indicates the income of respondents vary starting from 3000 br. The majority of respondents, 56.9% (n= 164) income category lays in 5000 – 7000 birr, 16.7% (n= 48) income is 7000 – 9000 birr, 15.3% (n= 44) is in 3000 – 5000, and only 4.2% (n= 12) indicate that their income level is above 9000. And there were a 6.9% (n= 20) non response rate regarding income.

When it comes to how long respondents has been working in the hospital working, 38.5% (n= 111) have an experience of 2 – 4 years, 24.7% (n= 71) have an experience between 4 – 6 years, 16 % (n= 46) of respondents have an experience of from 6 month to 2 years, and 13.9% (n= 40) indicates that they have been working in the hospital more than 6 years. Here also the data shows a 6.9% (n= 20) non response rate.

4.1.3 Marital and children Status

The findings of this study indicated that from the total respondents, 288, 64.2% (n= 185) of them are single, 35.1% (n= 101) of them are married, and only 0.7% (n= 2) indicate that they are divorced. Also, from the 288 total respondents only 22.2% (n= 64) indicate that they have children. From the 22.2%; 9.4% (n= 27) have only one chilled, 9.7% (n= 28) have two children, 2.1% (n= 6) have three children, and only 1% (n= 3) indicate that they have more than three children.

Table 6: Frequency and percentage distribution of respondent by marital and children status

Variable	Category		Frequency	Percent
Marital Status	Single		185	64.2%
	Married		101	35.1%
	Divorced		2	.7%
	Total		288	100%
Children	Have Children	one	27	9.4%
		Two	28	9.7%
		Three	6	2.1%
		Above Three	3	1%
		Total	64	22.2%
	Don't have children		224	77.8%
	Total		288	100%

4.2 Prevalence of Burnout in SPHMMC

Each respondent obtains three scores since the MBI provides individual scores for each of the three variables. The three subscales (exhaustion, depersonalization, and lack of personal achievement) are evaluated independently rather than adding up to a single overall score. Each score is then classified as low, average, or high using the numerical limit points listed on the scoring key for each respondents. Consequently, the data below displays the combined percentage of the three variables (exhaustion, depersonalization, lack of personal achievement).

According to the results for the exhaustion total score, the majority of respondents—44.1% (n=127)—have an average level of exhaustion, while the remaining 34.4% (n=99) have low levels, and 21.5% (n=62) exhibited a very high level.

Table 7: Total score of exhaustion

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0 - 18 (Low level of Exhaustion)	99	34.4	34.4	34.4
	19 - 36 (Average Level of Exhaustion)	127	44.1	44.1	78.5
	37 - 56 (High Level of Exhaustion)	62	21.5	21.5	100.0
	Total	288	100.0	100.0	

According to the depersonalization total score, 58.3% of the sample (n=168) has low depersonalization, 31.6% has moderate depersonalization (n=91), and 10.1% has high depersonalization (n=29).

Table 8: Total score of depersonalization

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0 - 10 (Low Level of Depersonalization)	168	58.3	58.3	58.3
	11 - 20 (Average Level of Depersonalization)	91	31.6	31.6	89.9
	21- 30 (High Level of Depersonalization)	29	10.1	10.1	100.0
	Total	288	100.0	100.0	

The finding indicate that a high degree of personal achievement is suggested by the majority of respondents, 53.1% (n=153), according to the total score for personal achievement. An average

level of achievement is indicated by 31.9% (n=92), while a low level of achievement is indicated by 14.9% (n=43) of the respondents.

Table 9: Total score of personal achievement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0 - 16 (Low Level Personal Achievement)	43	14.9	14.9	14.9
	17 - 32 (Average Level of Personal Achievement)	92	31.9	31.9	46.9
	33 - 48 (High Level of Personal Achievement)	153	53.1	53.1	100.0
	Total	288	100.0	100.0	

4.3 Burnout between Strata's

The burnout level between the three strata's was assessed in order to identify which group is more susceptible to burnout by using One Way ANOVA. We need to keep in mind that the number of size in each strata's are not equal, even though the percentage assigned to each strata's is calculated proportionally according to each strata's size.

Table 10: One Way ANOVA Results

		Test of Homogeneity of Variance				**ANOVA**	
Burnout Dimension	**Strata Groups**	**Mean**	**Std.Deviation**	**Levene's Statistic**	**Sig.**	**F**	**Sig.**
Exhaustion	High Flow	2.9055	1.38980				
	Mild Flow	2.9340	1.44827	1.034	.357	2.265	.106
	Low Flow	2.3513	1.26071				
Depersonalization	High Flow	2.0715	1.46347				
	Mild Flow	2.0250	1.30518	.421	.657	.176	.839
	Low Flow	1.9097	1.55078				

Personal Achievement	High Flow	3.9628	1.42447				
	Mild Flow	3.7478	1.42739	1.164	.314	.816	.443
	Low Flow	3.6976	1.70134				

Group Differences

Burnout Dimension	**Strata Groups**	**Mean Differences**	**Sig**	**95% Confidence Interval**	
Exhaustion	High – Mild Flow	-.02857	.989	-.5013	.4441
	High – Low Flow	.55420	.100	-.0797	1.1881
	Mild – Low Flow	.58277	.136	-.1339	1.2994
Depersonalization	High – Mild Flow	.04650	.973	-.4427	.5358
	High – Low Flow	.16183	.830	-.4945	.8181
	Mild – Low Flow	.11532	.929	-.6269	.8575
Personal Achievements	High – Mild Flow	.21504	.563	-.2800	.7101
	High – Low Flow	.26522	.615	-.3989	.9293
	Mild – Low Flow	.05019	.986	-.7008	.8012

Accordingly as the above table shows the strata that the analysis tests if burnout level differs between the three strata's or departments. The departments were divided into three groups (high flow, mild flow, and low flow). The ANOVA results suggest that burnout level between the three strata does not have a significant difference ($F_{2, 228}$ = 2.265, .176, and .816, p > .005).

Since the result of Levene's Statistic is not significant, equal variance was assumed; because the result indicate that it is p > 0.005. To check for differences between the three department's post-hoc comparisons were assessed using Tukey HSD. The test indicated that the mean score for exhaustion for high flow strata (M= 2.9055, SD = 1.38980) was not significantly different from mild flow strata (M= 2.9340, SD = 1.44827), their mean difference is -.02857. On the other hand, there is a .55420 difference between low flow strata (M = 2.3513, SD = 1.26071) and there is a .58277 difference between mild and low flow strata. For depersonalization high flow strata (M=2.0715, SD = 1.46347) have a difference of .04650 between mild flow (M=2.0250, SD =

1.30518), and a .16183 difference between low flow strata (M = 1.9097, SD = 1.55078) and there is a .11532difference between mild and low flow strata. On personal achievement score there is .21504 difference between high flow (M = 3.9628, SD = 1.42447) and mild flow (M = 3.7478, SD = 1.42739), and a .26522 difference between high flow and low flow (M = 3.6976, SD = 1.70134) , and a .05019 difference between mild and low flow strata.

4.4 Coping Strategies

In the study the coping mechanisms of respondents was assessed by using COPE burnout inventory scale, which is a 4-point Likert scale. This scale provides 4 different answers that give a different level of answers. The response level in this instance ranges from I haven't been doing this at all to I've been doing this a lot. Accordingly, the COPE burnout inventory scale asks different set of questions to measure what type of coping strategies respondents uses to cope with stress full situations, whether it is problem focused, emotion focused, or avoidance coping.

Therefore, the data gathered from respondents on problem, emotion and avoidance coping was transformed using compute variable to get the grand mean of the three variables. As a result, the data in table below shows that the grand mean of the problem focused coping as 2.6498, 2.4740 for emotion focused, and 2.0947 for avoidance coping strategy.

Table 11: Grand mean of problem, emotion and avoidance coping

	N	Minimum	Maximum	Mean	Std. Deviation
Problem focused	288	1.00	4.00	2.6498	.71036
Emotion focused	288	1.00	4.00	2.4740	.55682
Avoidance	288	1.00	4.00	2.0947	.52377
Valid N (listwise)	288				

4.5 Coping by Gender

An independent samples t-test was conducted to compare coping strategies for male and female participants. For problem focused coping, there were significantly no differences (t (286) = -1.444, p = .150) in the scores with mean score for Male (M = 2.5789, SD = 1.12804) was higher than and Female (M = 2.3851, SD = 1.10491) (See Table 1). The magnitude of the differences in the means (mean difference = -.19389, 95% CI: -.45812to .07034) was not significant. Hence, there is equal variance between male and female respondents in using problem focused coping strategy.

Tale 12: Differences in Coping Strategy with Male and Female Respondents

		Levene's Test for Equality of Variance				**t-test for Equality of Variance**						
Coping strategy	Group	Mean	SD	F	Sig.	t	df	Sig. (2-tailed)	Mean difference	Std. Error Difference	95% Confidence Interval of the Difference	
											Lower	Upper
Problem Focused	Male	2.5789	1.12804	.215	.643	-1.444	286	.150	-.19389	.13424	-.45812	.07034
	Female	2.3851	1.10491			-1.438	238.225	.152	-.19389	.13483	-.45949	.07171
Emotion Focused	Male	2.6579	1.04610	.016	.899	-2.319	286	.021	-.29008	.12507	-.53625	-.04391
	Female	2.3678	1.03259			-2.313	239.555	.022	-.29008	.12541	-.53712	-.04304
Avoidance	Male	2.5088	1.23550	13.445	.000	-2.118	286	.035	-.29038	.13709	-.56021	-.02055
	Female	2.2184	1.06901			-2.055	216.945	.041	-.29038	.14127	-.56882	-.01194

For emotion focused coping the result indicate that there are significant differences as (t (239.555) = -2.319, p = .021) in the scores with mean score for Male (M = 2.6579, SD = 1.04610) was higher than and Female (M = 2.3678, SD = 1.03259). The magnitude of the differences in the means (mean difference = -.29008, 95% CI: -.53625to -.04391) was significant. Hence, there is no equal variance between male and female respondents in using emotion focused coping.

For avoidance coping also the result shows significant differences as (t (216.945) = -2.055, p = .041) in the scores with mean score for Male (M = 2.5088, SD = 1.23550) was higher than and Female (M = 2.2184, SD = 1.06901). The magnitude of the differences in the means (mean difference = -.29038, 95% CI: -.56882 to -.01194) was also significant. Hence, there is no equal variance between male and female respondents in using avoidance coping strategy.

Chapter Five

Discussion

In this section the result of the research is interpreted. The survey has generated many findings, however, only few have been selected for the result and interpretation based on the specific objectives of the study. To recap, these objectives are;

- Examine the prevalence of burnout faced by health workers working in SPHMMC
- Identify burnout level between departments
- Identify coping strategies health care workers uses to deal with stressful situations in their life
- Identify Respondents coping strategies based on gender
- Recommend possible effective mechanisms of coping based on the data gathered

5.1 Prevalence of Burnout

The level of burnout among health care workers is calculated using the Maslach's burnout scale to estimate the prevalence of burnout. Furthermore, the research first assigns value to the respondents' response level, which ranges from never - 0 to everyday - 6, when presenting the data's findings. The MBI scale is constructed in a way that the researcher can calculate and give each variable (exhaustion, depersonalization, and personal achievement) a total score independently. Because the scores for each subscale are assessed separately and not combined into a single total score, each respondent receives three scores. Then, to give the data a range, each score are labeled as low, average, and high. Accordingly for exhaustion the study found that the majority of respondents 44.1% (n= 127) report to have an average level of exhaustion the other 34.4% (n=99) have low level of exhaustion, and the other 21.5% (n=62) have a high level

of exhaustion. So, in this case we can conclude that the exhaustion level of health care workers in SPHMMC is average. The depersonalization total score indicate that 58.3% (n=168) have a low level of depersonalization, 31%.6 (n=91) have an average level of depersonalization, and the other 10.1% (n=29) indicated that they have a high level of depersonalization. Here, we can conclude that the majority of respondents exhibited low level of depersonalization. On the other hand, the result on personal achievement indicate that the majority of respondents, 53.1% (n=153) have high level of achievement, 31.9% (n=92) indicated that they have an average level of achievements, and 14.9% (n= 8) indicate they have a very low level of achievement. Unlike exhaustion and depersonalization high score of personal achievement indicate a positive attribute; because of this we can conclude that in SPHMMC health care workers have a high level of personal achievement in their job. Therefore, according to independent score of the three burnout dimensions, it is safe to say that there is not burnout problem in SPHMMC.

5.2 Burnout between Strata's

The research divided the departments that respondents work and assigned at in to three strata's according to the flow of patients in the departments as high flow, mild flow, and low flow. Then the level of burnout of these three groups was assessed using One Way ANOVA. Accordingly The ANOVA results suggest that burnout level between the three strata does not have a significant difference as ($F_{2, 228}$ = 2.265, .176, and .816, p > .005) as the result of all group sig. value is greater than 0.005. Hence, because there are no significant differences on the three groups, equal variance was assumed. Therefore, we can conclude that there are no differences in burnout level between departments and that they are the same. To check for degree of differences between the three departments with each other post-hoc comparisons were assessed using Tukey HSD. The test indicated that the mean score for **exhaustion** for high flow strata was not

significantly different from mild flow strata with a mean difference of -.02857. On the other hand, there is a .55420 difference between low flow strata and there is a .58277 difference between mild and low flow strata. For depersonalization high flow strata have a difference of .04650 between mild flow and a .16183 difference between low flow strata, and there is a .11532 difference between mild and low flow strata. On personal achievement score there are .21504 differences between high flow and mild flow, and a .26522 difference between high flow and low flow, and a .05019 difference between mild and low flow strata. Therefore, according to the post hoc the biggest difference observed on exhaustion is between mild flow strata and low flow strata, for depersonalization it is between high flow and low flow strata, and for personal achievement the biggest difference is between high flow strata and low flow strata.

5.3 Coping Strategies

In assessing the coping strategies the COPE inventory questionnaire is used to identify what strategies health care workers use to cope with stressful situation in work, and since the result of the burnout level shows burnout not to be a problem in the hospital, coping strategy is measured independently. Similarly here also, the research assign value to the response level of respondents, which is from I haven't been doing this at all – 1 to I've been doing this a lot - 4. The data gathered from respondents was transformed using compute variable to get the grand mean of the three variables (problem focused, emotion focused, and avoidance coping strategies). The research found that problem focused coping score a mean of 2.6498, which lies in the range of 2.50 – 3.25, that means respondents use this strategy a medium amount. On the other hand, emotion focused and avoidance coping score a mean of 2.4740 and 2.0947, which lies in the range of 1.75 – 2.50, which indicate respondents use this strategy a little bit. So, it is safe to conclude that health workers in SPHMMC use more of a problem focused strategy to cope with

stressful situations in their day to day life, which suggest that they are actively try to change the stressful situation.

5.4 Coping by Gender

The research also analysis whether there is a difference between the two genders (male and female) on which coping strategies they use by using independent t-test for equality of variance. As a result, the finding shows that; for problem focused coping, there were significantly no differences in the scores between male and females, with mean score for Male (*M* = 2.5789, *SD* = 1.12804) was higher than and Female (*M* = 2.3851, *SD* = 1.10491). The magnitude of the differences in the means (mean difference = -.19389, 95% *CI*: -.45812to .07034) was not significant. Hence, there is equal variance between male and female respondents in using problem focused coping strategy. Therefore we can conclude that male and female uses problem focused coping equally. For emotion focused coping the result indicate that there are significant differences as (*t* (239.555) = -2.319, *p* = .021) in the scores with mean score for Male (*M* = 2.6579, *SD* = 1.04610) was higher than and Female (*M* = 2.3678, *SD* = 1.03259). The magnitude of the differences in the means (mean difference = -.29008, 95% *CI*: -.53625to -.04391) was significant. Hence, there is no equal variance between male and female respondents in using emotion focused coping. As a result we can say that, male and female uses emotion focused coping differently as the mean shows male uses emotion focused coping more than females. Likewise, avoidance coping result shows significant differences as (*t* (216.945) = -2.055, *p* = .041) in the scores with mean score for Male (*M* = 2.5088, *SD* = 1.23550) was higher than and Female (*M* = 2.2184, *SD* = 1.06901). The magnitude of the differences in the means (mean difference = -.29038, 95% *CI*: -.56882 to -.01194) was also significant. Hence, there is no equal

variance between male and female respondents in using avoidance coping strategy. Therefore, it is safe to say that male and female uses avoidance coping strategies differently.

Chapter Six

Conclusions and Recommendations

This chapter deals with the conclusion of the research findings that has been analyzed and discussed in detail the previous chapter. The conclusions are related with the research objectives and data's that are presented in the research. Furthermore, based on the data's, the findings and the conclusions of the study a recommendation are forwarded.

6.1 Conclusions

The main objective of this thesis was to assess burnout and coping mechanisms among health care workers in St. Paul's hospital. Furthermore, the research also examines the prevalence of burnout faced by health workers, identify burnout level between departments, Identify coping strategies health care workers uses to deal with stressful situations in their life, Identify coping strategies by gender, and give possible recommendations based on analyzed data. To achieve these objectives, the research utilizes a cross-sectional study through a stratified sampling technique. The research demography wore only nurses and midwifes who are currently working in SPHMMC.

In calculating the total scores of the three variables, exhaustion, depersonalization, and personal achievement, the study found that for exhaustion, majority of respondents, 44.1% are in average level of exhaustion, 34.4% % low level, while the other 21.5% have a high level of exhaustion, for this the research conclude that the exhaustion level in SPHMMC is and average level. Therefore, the exhaustion level of respondents is average level in SPHMMC hospital. The total

score of depersonalization shows that, 58.3% have low level of depersonalization, 31.6% have an average level of depersonalization, while only 10.1% have a high level of depersonalization. Therefore, it can be conclude that depersonalization level of participants is low level. For personal achievement the study found that 53.1% have a high level, 31.9% have an average level, and the other 14.9% have a low level of personal achievement, thus, the study conclude nurses and midwifes in SPHMMC hospital have a high level of personal achievement, which tells that the workers feels they achieved positive things through their work. As a result of these the study concludes that there is no burnout problem in SPHMMC

The another objective of the study was identifying burnout level between departments, the data was analyzed using One Way ANOVA, the results shows that because the significant value of the three strata's (high, mild, and low flow) are less than 0.005 as a result the research find out that there are no significant differences on the three groups and that there are equally variance, thus, the study concludes that there are no differences in burnout level between departments and that they are the same. Further the research check the degree of differences between the three strata's with each other using post-hoc comparisons and the findings show that; for exhaustion, high flow strata was not significantly different from mild flow strata, on the other hand the findings show that there is a .55420 difference between high flow and low flow strata. And there is a .58277 difference between mild and low flow strata, mild flow strata scoring the highest point. For depersonalization high flow strata have a difference of .04650 between mild flow and a .16183 difference between low flow strata, scoring the higher point from both mild and low flow strata. On personal achievement score there are .21504 differences between high flow and mild flow, and a .26522 difference between high flow and low flow, and a .05019 difference between mild and low flow strata. Therefore, the research conclude that, mild flow strata score

highest point against low flow strata. For depersonalization high flow strata score higher point against low flow strata. And for personal achievement again high flow strata score higher point against low flow strata.

In identify coping strategies health care workers uses to deal with burnout, the study discover that problem focused coping score a mean of 2.6498, that means respondents use this strategy a medium amount. On the other hand, emotion focused and avoidance coping score a mean of 2.4740 and 2.0947, which indicate respondents uses this strategy a little bit. Therefore, the study concludes that health care workers in SPHMMC use more problem focused strategy to cope with burnout in their work.

Further, the study also analysis whether there is a difference between the two genders (male and female) on which coping strategies they use by using independent t-test for equality of variance. Accordingly, the findings show that; for problem focused coping, there were significantly no differences in the scores between male and females, as such, the research assumed an equal variance between male and female respondents in using problem focused coping strategy. As a result the study concludes that male and female uses problem focused coping equally. For emotion focused coping the result indicate that there are significant differences, thus, there is no equal variance between male and female respondents in using emotion focused coping. As a result the research concludes that male and female uses emotion focused coping differently as the mean shows male uses emotion focused coping more than females. And for avoidance coping the result shows significant differences between male and female, here also, there is no equal variance between male and female respondents in using avoidance coping strategy, therefore, it is safe to conclude that male and female uses avoidance coping strategies differently, male applying the strategy more than their female counter parts.

6.2 Recommendations

Based on the findings and conclusions of the presented study, the researcher would like to put forward the following recommendations.

- Burnout is a serious problem that, as has been observed throughout the thesis, is especially prevalent among health care providers. As a result, focus should be paid to addressing the problem at the individual, organizational, and societal levels. There needs to be awareness creation on the topic of burnout at the individual level, because the researcher observed in the data collection process that many employees lack a clear knowledge and understanding of how burnout manifests in their daily lives and the extent to which it affects both their job and personal lives, and an overall explanation needed to be given to them. These shows that health care providers need to educate themselves on the indication and affect of burnout not only its impact on their work but also in their mental health. Not doing this and working themselves to the point of being drained will render the service they provide to the general public. Therefore, health care providers need to see information on the effect of burnout, and how to recover from it. They also should give themselves a break by taking annual leaves to give themselves a mental clarity.
- In addition health care workers should make an effort to recognize where they find themselves in terms of burnout level and look for solutions, interventions, and help without feeling ashamed and embarrassed.
- At the organizational level, the hospital must give the problem attention because it not only has a negative impact on the employees but also interferes with the proper delivery of the services the hospital aims to offer to the society. The hospital should also offer its

employees resources to assist and promote their own personal and professional well-being. Create and maintain an environment that encourages behaviors that support psychological safety and actually assist. Therefore, the hospital should create platforms and trainings on the topic of burnout for health care providers; it also should provide psychological support like counseling for health care providers who are affected by burnout.

- The researcher suggests that additional research on the subject in order to demonstrate its enormity and magnitude and also to provide more comprehensive details on burnout. Burnout is a condition that doesn't go away by itself. If not addressed properly the underlying problems that are causing it, it can even get worse and affect the society in general and the individual worker in particular. And to properly address the issue of burnout more studies need to be conducted so that they can highlight what the cause, effect, prevalence, and magnitude of burnout in the work place, in doing this, it helps to design strategies, programs, as well as policies to combat the problem.

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Appendix A: Questionnaire

ADDIS ABABA UNIVERSITY

COLLEGE OF EDUCATION AND BEHAVIORAL STUDIES

SCHOOL OF PSYCHOLOGY

Survey on Burnout and Coping Mechanism for health care workers

The purpose of this study is to assess the effect of burnout and identifying coping mechanisms used by health care workers in St. Paul's hospital. Furthermore, it examine the level of burnout faced by health care workers**, i**dentify coping strategies health care workers uses against burnout, explore the impact of burnout on health care workers**, r**ecommend possible effective mechanisms of coping, and exploring the potential influence of sex on the level of burnout

Therefore, to gather the required information for the study, you are selected to be one of the participants in this study and your participation is strictly voluntary. Your genuine information is very relevant for the success of the study, so I would very much appreciate your full participation and input in the survey. So it is important for you to fill the questions honestly and freely.

Whatever information you provide would be kept confidential, and if you feel discomfort and concern you are free to withdraw from participating in the study at any given time without any judgment. Also, if there are questions you aren't comfortable to answer you can skip and move to the next one.

If you have any question about the study and the survey you can contact the researcher through 0926791584 or gzewditumail@gmail.com.

CONSENT

I have read and I understand the provided information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason. I voluntarily agree to take part in this study.

Participant's signature _____ Date _____

Thank you for your cooperation in advance.

Part I. Demographic Data:

1. Sex:

   Female ☐

   Male ☐

2. Age: _____

3. Level of Education

   Diploma ☐

   Degree ☐

   Master ☐

   Other _____

4. Profession _____
5. Job position _____
6. Department/Unit _____
7. Monthly Income _____
8. Marital status

   Single ☐ Divorced ☐

   Married ☐ Separated ☐

   Widowed ☐

   Other _____
9. Do you have any children? If yes how many _____

Part II. Maslach's Burnout Inventory (MBI)

The Maslach Burnout Inventory (MBI) is a tool that helps to determine the risk of burnout, the MBI explores three components: exhaustion, depersonalization and personal achievement.

The following questions ask your feelings and attitude toward your job. Read the statements and indicate how often you engage in the feelings or attitude.

0 = Never
1 = A few times per year
2 = Once a month
3 = A few times per month
4 = Once a week
5 = A few times per week
6 = Every day

Questions	Never	A Few Times per Year	Once a Month	A Few Times per Month	Once a Week	A Few Times per Week	Every Day
Section A: Exhaustion							
	0	**1**	**2**	**3**	**4**	**5**	**6**
I feel emotionally drained by my work.							
Working with people all daylong requires a great deal of effort							
I feel like my work is breaking me down							
I feel frustrated by my work.							
I feel that I work too hard at my job.							
It stresses me too much to work in direct contact with people							
I feel like I am about to break down							
I feel tired when I get up in the morning and have to face another day at work.							
I am at the end of my patience at the end of my work day.							
Sub-scores							
Section A Total Score							

Section B: Depersonalization							
	0	**1**	**2**	**3**	**4**	**5**	**6**
I feel I deal with colleagues or patients impersonally, as if they were objects							
I have the impression that my colleagues or clients make me responsible for some of their problems							
I really don't care about what happens to some of my colleagues/patients.							
I am more insensitive to people I was working with.							
I am afraid that the job was making me uncaring.							
Sub-scores							
Section B Total Score							
Section C: Lack of Personal Achievement							
	0	**1**	**2**	**3**	**4**	**5**	**6**
I have accomplished many worthwhile things in the job.							
I feel full of energy							
I can easily understand what my colleagues or patients feel.							
I look after my colleagues' or patients' problems very effectively.							
In my work, I handle emotional problems very calmly.							
Through my work, I feel that I have a positive influence on people.							
I am easily able to create a relaxed atmosphere with my colleagues or patients							
I feel refreshed when I have been close to my colleagues or patients at work.							
Sub-scores							
Section C Total Score							

Part III: The Brief COPE Inventory

The Brief-COPE is a 28 item self-report questionnaire designed to measure effective and ineffective ways to cope with a stressful life event. The 28 measures assess 14 thematically separate coping reactions. Self-distraction, Denial, Substance Abuse, Behavioral disengagement, Emotional Support, Venting, Humor, Acceptance, Self-Blame, Religion, Active Coping, Instrumental Support, Positive Reframing, and Planning are among the 14 reactions.

The following questions ask how you have sought to cope with a hardship in your life. Read the statements and indicate how much you have been using each coping style.

1. = I haven't been doing this at all
2. = A little bit
3. = A medium amount
4. = I've been doing this a lot

No		**I haven't been doing this at all**	**A little bit**	**A medium amount**	**I've been doing this a lot**
	Score	**1**	**2**	**3**	**4**
1	I've been turning to work or other activities to take my mind off things.				
2	I've been concentrating my efforts on doing something about the situation I'm in.				
3	I've been saying to myself "this isn't real".				
4	I've been using alcohol or other drugs to make myself feel better				
5	I've been getting emotional support from others.				
6	I've been giving up trying to deal with it.				
7	I've been taking action to try to make the situation better.				
8	I've been refusing to believe that it has happened.				
9	I've been saying things to let my unpleasant feelings escape.				
10	I've been getting help and advice from other people.				

11	I've been using alcohol or other drugs to help me get through it.				
12	I've been trying to see it in a different light, to make it seem more positive.				
13	I've been criticizing myself.				
14	I've been trying to come up with a strategy about what to do.				
15	I've been getting comfort and understanding from someone.				
16	I've been giving up the attempt to cope.				
17	I've been looking for something good in what is happening.				
18	I've been making jokes about it.				
19	I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping				
20	I've been accepting the reality of the fact that it has happened.				
21	I've been expressing my negative feelings.				
22	I've been trying to find comfort in my religion or spiritual beliefs.				
23	I've been trying to get advice or help from other people about what happened.				
24	I've been learning to live with it.				
25	I've been thinking hard about what steps to take.				
26	I've been blaming myself for things that happened				
27	I've been praying or meditating				
28	I've been making fun of the situation.				