UNIVERSITY OF GHANA

COLLEGE OF HEALTH SCIENCES

SUBSTANCE (CIGARETTE & ALCOHOL) USE AMONG PSYCHIATRIC STAFF IN THE ACCRA METROPOLIS: EXAMINATION OF PREVALENCE AND ASSOCIATED FACTORS

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DEPARTMENT OF MENTAL HEALTH

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SCHOOL OF NURSING AND MIDWIFERY

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THIS DISSERTATION IS SUBMITTED TO THE DEPARTMENT OF MENTAL HEALTH OF THE UNIVERSITY OF GHANA, IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF A MASTER OF PHILISOPHY DEGREE IN NURSING

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DECLARATION

I, Samuel Kwakye do thereby declare that this thesis titled: "Substance (cigarette & alcohol) use among psychiatric staff in the Accra metropolis: examination of prevalence and associated factors" is my own work carried out at the Department of Mental Health, University of Ghana under the supervision of Prof. Samual Adjorlolo and Dr. Gideon Lawer Puplampu. With the exception of the cited references, this thesis either in whole or part, has never been submitted to this University or elsewhere for consideration for a master's degree.

12-05-2025

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DEDICATION

This work is dedicated to my family and all friends for their support, prayers and encouragement throughout our period of study

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I thank God for His grace and mercies for giving me the wisdom, knowledge, understanding, strength and guidance throughout out this Research work.

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ABSTRACT

Background: The issue of substance use among psychiatric health professionals is a significant concern within the healthcare system. Substance misuse can impair healthcare professionals' ability to provide safe and effective care, potentially leading to errors, compromised judgment, and threats to patient safety. However, the scarcity of data highlights a significant gap in understanding these challenges. Therefore, this study aimed to determine the prevalence of, and factors associated with substance use (cigarette and alcohol) among psychiatric staff.

Methods: The study employed a cross-sectional design to recruit 219 psychiatric health professionals from Accra and Pantang psychiatric hospitals using random sampling. Descriptive statistics were used to summarize the participants' background factors and substance use patterns. Multiple regression analysis was conducted to identify factors associated with substance use, with a 95% confidence level.

Results: This study of 219 psychiatric staff found 11.0% had ever smoked and 3.7% were current smokers. Alcohol use was more common, with 30.6% having consumed alcohol, 27.4% reporting use in the past year, and 23.3% in the past 30 days. Combined alcohol and cigarette use prevalence was 26.0%. Several workplace factors were significantly associated with substance use. These included hospital policies (adjusted odds ratio [aOR]=0.04, 95% CI: 0.00–0.75, p=0.031), workplace culture (aOR=0.15, 95% CI: 0.03–0.66, p=0.012), and work fatigue (aOR=0.11, 95% CI: 0.02–0.75, p=0.024).

Conclusion: These findings highlight the critical need for targeted interventions, including supportive workplace policies and resources, to mitigate substance use, promote the well-being of psychiatric staff, and safeguard the quality of patient care.

Key words: substance use, alcohol, cigarette smoking, psychiatric staff, health professionals.

CHAPTER ONE

INTRODUCTION

1.1 Background

The issue of substance use among psychiatric health professionals is a significant concern within the healthcare system. These professionals, who have significant importance in the provision of care and treatment for individuals with mental health illnesses, are not exempt from the potent influence of addiction on their own lives (Foli et al., 2020; Sajith et al., 2017). The intricate nature and requirements of their profession, along with the psychological strain of attending to individuals with profound mental disorders, expose them to an elevated susceptibility to substance use (Bidwal et al., 2015; Bogowicz et al., 2018). This exposure can be emotionally draining and potentially trigger a staff's own vulnerabilities to substance use as a coping mechanism.

Commonly used substances include alcohol, marijuana, opiates, cocaine, cigarettes, other tobacco products, and in recent times, methamphetamine, and fentanyl. Alcohol is the most used substance in the world partly because it is a "socially acceptable" in a way that are not permissible for the other substances (Hill, 2022).

Globally, among the general population, it is estimated that 16% of adults aged 15 years and older use alcohol (WHO, 2023b). On the African continent, marijuana continues to be the predominant illicit substance used within the general population. West and Central Africa record prevalence rates ranging from 5.2% to 13.5% (WHO, 2023b).

The primary issue is that many health professionals, often have access to and use banned substances (Lemtiri Chelieh et al., 2019). In the health sector, estimating substance use

specifically among healthcare workers is difficult (Galaiya et al., 2020), because these professionals may deliberately avoid documentation or accountability, and in some settings, mechanisms to monitor inappropriate use are lacking (Strobbe & Crowley, 2017).

In high-income countries such as the United States, statistics on healthcare providers show that 10–15% of physicians and 14–20% of registered staff report substance use, with up to 12% meeting criteria for a substance use disorder (Hill, 2022). Existing data on substance use in sub-Saharan Africa (SSA) suggests that its prevalence among healthcare staff is comparable to that of the general population (Votaw et al., 2019a). Estimates of substance use rates among healthcare staff in SSA vary, with figures ranging from 18% (Kameg 2021) to 6–8% (Hebbar et al. 2017).

In Ghana, research on substance use has predominantly focused on adolescents and tertiary students, leaving gaps in other demographics (Aidam & Adawudu, 2023; Glozah & Darko, 2024; Kyei-Gyamfi et al., 2024). Studies addressing hospital admissions and health conditions related to substance use have been conducted, offering insights into the broader implications of substance use in healthcare settings (Ae-Ngibise et al., 2023; Asare & Addae, 2014; Forson et al., 2020). However, there is a notable paucity of research exploring alcohol and cigarette use among healthcare professionals, including psychiatric staff. This gap highlights the need for more targeted studies to better understand the substance use patterns within this critical workforce.

Although various substances including marijuana, tramadol, cocaine, methamphetamine, and prescription opioids are known to be commonly misused in Ghana (Danso & Anto, 2021; Osei-Tutu et al., 2025), the present study focused specifically on alcohol and cigarettes. These two substances were selected because they are the most accessible, most socially acceptable, and most frequently consumed among adult populations, including professionals (Brenyah et al., 2023; Osei

Asibey et al., 2023). Furthermore, alcohol and tobacco consistently contribute to substantial occupational and public health risks, making them appropriate indicators for assessing substance use among healthcare staff. Other substances were excluded due to limited reliable data, variations in usage patterns, and the specific scope of the study.

Globally, it is estimated that tobacco and alcohol alone contribute to 9% and 5.9% of the global burden of diseases (Rumgay et al., 2021; WHO, 2023b). The impact of substance use among psychiatric staff goes beyond their own well-being; it also has significant consequences for patient care. Staff who are under the influence of substances may be unable to deliver care of the utmost quality, therefore jeopardizing the safety and welfare of their patients. Healthcare professionals have the potential to commit errors in medicine administration, overlook important assessments, or demonstrate impaired judgement, all of which can significantly impact patient outcomes (Jarrad et al., 2018; Pilgrim et al., 2017).

Furthermore, the occurrence of substance usage among psychiatric staff serves to maintain the existing stigma within the healthcare system (McCann et al., 2018). Individuals with mental health conditions encounter prejudice and are frequently subjected to stigmatization. Moreover, when healthcare practitioners succumb to addiction (Bates & Stickley, 2013), it reinforces the notion that mental health professionals are not immune to the challenges they are trying to address.

The occurrence of substance use is linked to sub optimal working conditions and unsupported work environments that fail to focus the mental and emotional welfare of psychiatric staff (Neill et al., 2023). The factors encompassing this issue comprise of substantial workloads, insufficient staffing levels, and limited availability of mental health resources and assistance for staff who may be grappling with substance usage (Søvold et al., 2021). The lack of peer support initiatives for staff, which would provide a platform for seeking help and sharing experiences with colleagues

who have effectively addressed substance usage, has been a contributing factor to the prevalence of substance use among this population (Hu et al., 2012). In addition, the inability of regulatory bodies and professional associations to play an active role in addressing substance use among psychiatric staff is associated with substance use in the health sector (Kunyk, 2015).

The prevalence of substance use among psychiatric staff is a significant concern necessitating an immediate response. The maintenance of healthcare professionals' well-being is crucial since it not only benefits their personal welfare but also contributes to the provision of optimal care for their patients. By examining the fundamental elements that contribute to substance use and implementing comprehensive interventions at the individual, organizational, and regulatory levels, it is possible to establish a healthcare system that promotes and protects the mental well-being of psychiatric staff. This, in turn, can enhance the standard of care provided to individuals suffering from mental health disorders. Hence, the study seeks to determine the prevalence, factors associated with substance use (cigarette, marijuana, and alcohol) and its impact among psychiatric staff in the Accra metropolis.

1.2 Problem statement

In the context of Ghana, there is a discernible upward trend in the consumption of illegal substances within home settings, as evidenced by incident reports submitted by healthcare practitioners, legal experts, and law enforcement personnel (Onaolapo et al., 2022). Nevertheless, the current statistics fail to provide a comprehensive representation of the magnitude of substance use issue due to the lack of reliable national data that can effectively measure the extent of substance use in Ghana (Onaolapo et al., 2022).

In Ghana, data on substance use is limited to the homeless (Osei Asibey et al., 2023), street-connected children and adolescents (Asante & Nefale, 2021), and students in second circle institutions (Nkyi, 2014). The existing body of knowledge regarding substance usage among healthcare professionals in Ghana is characterized by a notable scarcity of comprehensive data. Despite the critical importance of understanding patterns and prevalence rates of substance use within this specific population, there is a noticeable dearth of empirical studies and comprehensive investigations addressing this issue in the Ghanaian context. This scarcity of data presents a significant gap in our understanding of the potential challenges and implications associated with substance usage among healthcare professionals in Ghana. The limited available information poses a hindrance to the development of evidence-based interventions, policies, and support systems designed to address and mitigate the impact of substance use within this crucial sector.

As healthcare professionals play a pivotal role in the delivery of medical services and patient care, a thorough exploration of substance usage patterns is imperative for the overall well-being of both healthcare practitioners and the quality of care provided to patients. The absence of robust data hampers efforts to identify risk factors, design targeted prevention programs, and implement effective support mechanisms tailored to the specific needs of healthcare professionals in Ghana. In order to advance our understanding and contribute to the scientific discourse surrounding substance use among healthcare professionals in Ghana, there is an urgent need for rigorous research initiatives that employ validated methodologies and engage diverse healthcare settings. Such endeavour would not only fill the current void in the literature but also serve as a foundation for evidence-informed strategies aimed at promoting the health and resilience of healthcare professionals in the Ghanaian context. Addressing this research gap is crucial for fostering a comprehensive and nuanced understanding of substance use issues within the healthcare

workforce, ultimately contributing to the enhancement of healthcare delivery and the well-being of both practitioners and their patients. Hence, the current study seeks to determine the prevalence and factors associated with substance misuse (cigarette & alcohol) among psychiatric staff in two major psychiatric facilities in the Accra metropolis.

1.3 Significance of the Study

The assessment of substance misuse among psychiatric staff holds significance for multiple reasons. To begin with, it is important to acknowledge that substance usage can exert a substantial influence on the holistic well-being and operational capacity of psychiatric staff. The impairment of healthcare professionals' capacity to deliver care that is both safe and effective to their patients has the potential to result in errors, compromised judgement, and compromised patient safety. The usage of substances can also result in adverse consequences for the physical and mental well-being of staff, hence exacerbating issues and diminishing their job effectiveness. Furthermore, the issue of substance usage among psychiatric staff has the potential to propagate stigma within the healthcare system. Staff are frequently regarded as exemplars for patients and are anticipated to uphold professional norms of behaviour. The issue of staff grappling with substance misuse poses a significant challenge as it erodes the trust and confidence that patients and colleagues place in the healthcare profession.

Moreover, the research holds significance as it enables timely identification and implementation of necessary measures. The identification of staff experiencing substance misuse concerns might facilitate the implementation of suitable support and treatment interventions, thereby mitigating the escalation of the problem to a more critical stage. Ultimately, the implementation of these measures can have a positive impact on the physical and mental well-

being of staff, while also enhancing the overall quality of care delivered to patients. Finally, this study holds relevance from an organizational perspective. Healthcare institutions bear the obligation of safeguarding the welfare and security of both their personnel and patients. Organizations can cultivate a healthier and more supportive work environment by enacting resilient policies and furnishing assistance and resources to staff who encounter challenges related to substance misuse.

In summary, this study holds significance in evaluating the prevalence of substance usage within the health professional community, examining the various factors that contribute to such behaviour, and understanding the resulting consequences. In the long term, understanding the scope of substance use among psychiatric staff will inform multiple stakeholders, such as policymakers, guiding national mental health and occupational safety policies; hospital administrators can design appropriate support, monitoring, and wellness interventions; and training institutions can strengthen curricula on substance use prevention and professional resilience. Generating local evidence will thus support the development of targeted, evidence-based strategies to safeguard both staff well-being and patient care outcomes within Ghana's mental health system.

1.4 Research Questions

The study seeks to investigate the following research questions:

1. What is the prevalence of substance use among psychiatric staff in the Accra metropolis?
2. What are the factors associated with substance use among psychiatric staff in Accra Metropolis.
3. What are the consequences of substance use among psychiatric staff in Accra Metropolis.

1.5 Objectives and hypothesis

1.5.1 Aim

The overall aim of the study is to determine the prevalence and factors associated with substance misuse (cigarette & alcohol) among psychiatric staff in the Accra metropolis.

1.5.2 Specific research objectives

The study sought to achieve the overall aim through the following specific research objectives:

1. To determine the proportion of psychiatric staff using substances in Accra metropolis.
2. To investigate the factors associated with substance use among psychiatric staff in Accra Metropolis.
3. To explore the perceived consequences of substance use among psychiatric staff in the Accra Metropolis.

1.7 Organizations of the chapters

The thesis is organized into six main chapters. Chapter One introduces the thesis, covering the background, problem statement, significance of the study, and the study objectives. Chapter Two provides a comprehensive literature review aligned with the research objectives, synthesizing existing literature and identifying gaps related to the research questions. Chapter Three focuses on the methodology, detailing the study design, setting, population, sampling approach, and analysis plan. Chapter Four presents the study's results, utilizing charts and tables to effectively illustrate the findings. Chapter Five offers an interpretation of the findings, contrasting them with existing literature while highlighting areas of alignment and divergence. The final chapter presents the

conclusions and recommendations based on the main findings. The thesis concludes with appendices, including the data collection questionnaire, informed consent form, and other supplementary materials used in the study.

1.8 Chapter Summary

Substance use among psychiatric health professionals constitutes an escalating concern that not only affects the well-being of healthcare providers but also compromises the quality and safety of patient care. Despite their pivotal role in the management of mental health disorders, psychiatric staff encounter considerable stressors and occupational hazards that may predispose them to substance misuse, particularly with respect to alcohol and tobacco. Although both global and regional studies have illuminated this issue, there exists a significant dearth of Ghana-specific data, particularly concerning healthcare workers in psychiatric environments. This study sought to address this gap by examining the prevalence, associated factors, and perceived consequences of substance use among psychiatric staff in two prominent facilities within the Accra Metropolis. The significance of this research is underscored by its potential to inform policy interventions, enhance staff welfare, mitigate stigma, and fortify the healthcare system's capacity to deliver safe and effective mental health services. Through the clearly defined research questions and objectives, this investigation aimed to augment the scientific understanding of substance use behaviours within mental health workforce in Ghana, ultimately contributing to efforts to cultivate a safer and more supportive work environment.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter provides a comprehensive review of relevant literature pertaining to research objectives. The subject areas encompassed by this topic include:

2.1 Theoretical Framework

The main underlying theory of this study is the Social Determinants of Health (SDOH) Model. However, the self-efficacy construct of the health belief model (HBM) was used to augment the SDOH variables. Self-efficacy enhances individual agency by reflecting an individual's belief in their ability to perform behaviors necessary to achieve specific outcomes. In the context of substance use, high self-efficacy can empower psychiatric staff to resist peer pressure and manage stress without resorting to substances. This individual agency is crucial for promoting healthier behaviors in high-stress environments, where the risk of substance misuse is particularly pronounced.

The SDOH Model highlights the impact of environmental factors, such as workplace culture and accessibility of substances, on health outcomes. Self-efficacy can mediate how these social determinants influence substance use behaviors. For instance, even in a challenging work environment, individuals with high self-efficacy may successfully navigate stressors without resorting to substances, demonstrating the protective role of self-efficacy against adverse influences.

Thus, integrating self-efficacy from the HBM with the SDOH Model allows for a holistic approach to addressing substance use. This combined framework creates a balanced understanding of

substance use behaviors, ultimately leading to more effective strategies for promoting mental well-being and reducing substance misuse in psychiatric settings.

The constructs are explained in details below:

2.1.2 The Social Determinants of Health (SDOH) Model

While the HBM provides a psychological framework for understanding individual perceptions and motivations related to health behaviours, it does not comprehensively address the broader social and environmental conditions that shape these behaviours. The Social Determinants of Health (SDOH) model, as articulated by the World Health Organization (WHO, 2023a), complements the HBM by contextualizing individual behaviours within the larger social, economic, and political structures that influence health outcomes. The SDOH framework underscores that health is shaped by the conditions in which individuals are born, grow, live, work, and age, incorporating factors such as income, education, social support, employment conditions, and access to healthcare (Lund et al., 2010).

In the context of psychiatric staff in Accra, these social determinants significantly influence patterns of substance misuse. For instance, suboptimal working conditions, elevated job demands, limited access to mental health resources, and societal stigma surrounding mental health and substance use may exacerbate stress and diminish the likelihood of seeking assistance (WHO, 2023a). By integrating the SDOH model, this study acknowledges that individual health behaviours—while informed by beliefs about susceptibility, severity, and self-efficacy as delineated in the HBM—are also profoundly shaped by structural and contextual realities. For example, enhancing perceived benefits and self-efficacy may prove ineffective if psychiatric staff

lack organizational support or are situated in environments that normalize substance use as a coping mechanism (Lund et al., 2010; Solar & Irwin, 2010).

Moreover, cultural and institutional norms within the healthcare system may function as both barriers and cues to action. In certain contexts, substance use may be implicitly accepted or overlooked in high-stress environments, thereby diminishing perceived severity or urgency for change. Conversely, the absence of confidential and accessible support services may dissuade health-seeking behaviours, particularly when there is apprehension regarding professional repercussions (Doku et al., 2012). In summary, the SDOH model serves as an appropriate and complementary framework, enhancing the HBM by providing a more comprehensive perspective on substance use behaviours among psychiatric staff. While the HBM addresses the cognitive and motivational dimensions of behaviour, the SDOH framework captures the external and systemic pressures that inform these behaviours. This integrated theoretical perspective bolsters the study's potential to propose targeted, context-sensitive interventions that address both individual beliefs and environmental constraints.

2.1.2 Health Belief Model (HBM): Self-Efficacy Construct

The Health Belief Model, developed by Hochbaum, Rosenstock, and Kegels, provides a comprehensive framework for understanding health-related behaviours (Hassan & Gaballah, 2022; Maseko et al., 2021). It posits that individuals are more likely to engage in health-promoting behaviours if they perceive themselves as susceptible to a health problem, believe the problem has severe consequences, and see the benefits of taking a specific action to reduce the threat, considering perceived barriers and self-efficacy (Maseko et al., 2021). The unique stressors and challenges faced by psychiatric staff make understanding and addressing substance misuse crucial

for both individual well-being and the quality of patient care. HBM is made of six construct: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy.

Among the constructs, self-efficacy is the most powerful predictor of behavioural intentions that precede actual behavior. A robust self-efficacy is more likely to lead to the taking of action in an appropriate timeframe, influence the degree of receptivity to information, and promote the likelihood of taking effective remedial action. Self-efficacy, a fundamental element of the HBM, assesses psychiatric staffs' confidence in their ability to control or overcome substance misuse. Factors such as confidence in coping with stressors, access to support services, and belief in one's ability to change behaviour contribute to self-efficacy. This provides insights into the perceived level of control they have over their behaviours. Strengthening self-efficacy can enhance the likelihood of successful intervention outcomes.

2.2 Prevalence of substance use among health professionals

Substance use among healthcare workers (HCWs) is a global concern, with significant variations in prevalence across regions, professions, and substances. Alcohol and cigarette use are the most commonly reported, posing challenges for healthcare delivery and worker well-being.

2.2.1 Prevalence of alcohol use among health professionals

Alcohol use among healthcare workers (HCWs) represents a significant concern, with prevalence rates exhibiting considerable variability across regions, professions, and demographic groups. Research consistently indicates that alcohol consumption is a common behaviour among HCWs, often influenced by workplace stress, accessibility to substances, and the demands of the occupation. Global data reveal alarming patterns of alcohol use. A systematic review and meta-

analysis reported a pooled prevalence of hazardous alcohol use at 19.98%, with a marked increase to 28.19% during the COVID-19 pandemic, thereby underscoring the pandemic's impact on stress levels and substance use (Halsall et al., 2023).

In Kenya, a cross-sectional survey revealed that 43.9% of HCWs exhibited harmful alcohol use, with higher prevalence rates observed among males, unmarried individuals, and those employed as doctors or specialists (Jaguga et al., 2022). In Italy, 26.7% of HCWs reported harmful alcohol consumption during the pandemic, with significant associations identified between smoking and increased drinking behaviour (Cedrone et al., 2022). In Brazil, a study involving nursing professionals found that 49.8% engaged in problematic drinking. This cohort was significantly more likely to be male, single, or working as nursing technicians (Junqueira et al., 2017). Another investigation in Italy indicated that 9.1% of HCWs were classified as high-risk drinkers based on their AUDIT-C scores, with younger male physicians identified as the most consistent alcohol consumers (Albano et al., 2020).

Among specific professional groups, anaesthesiologist and nurse anaesthetist demonstrate alarmingly high rates of alcohol use, with addiction rates in these populations exceeding 15%, reflecting the demands and stresses inherent to their roles (Amirouche et al., 2023). In the United States, surgeons also exhibit a high prevalence of alcohol consumption, with a study reporting that 15.3% of respondents engaged in significant alcohol use (Oreskovich et al., 2015). In Denmark, the prevalence of alcohol use among HCWs reached 18.3%, underscoring the persistence of this issue in high-income countries. The relationship between alcohol use and professional roles is further elucidated in studies concerning occupational injury. Although no significant link was identified between alcohol consumption and workplace injuries among Italian HCWs, elevated levels of certain liver enzymes were observed in 12% of participants, suggesting potential health

risks associated with alcohol use (Borrelli et al., 2022). These findings underscore alcohol use as a pervasive issue among HCWs globally, characterised by notable occupational and demographic variations.

2.2.2 Prevalence of cigarette use among health professionals

Cigarette smoking among healthcare workers (HCWs) continues to represent a significant global concern, with prevalence rates exhibiting variation across regions, professions, and demographic groups. Despite the critical role of healthcare workers in promoting public health, the prevalence of smoking within this population is comparable to, or in some instances exceeds, the rates observed in the general population. A systematic review conducted globally reported a pooled smoking prevalence of 21% among HCWs, with higher rates among males (31%) compared to females (17%) (Nilan et al., 2019). Male HCWs in lower- and middle-income countries are particularly affected, with smoking rates ranging from 35% to 45%, depending on the region. Nurses and mixed hospital personnel demonstrated the highest prevalence, while pharmacists exhibited the lowest at 14%.

Region-specific studies highlight disparities in smoking behaviours. In Palestine, 34.5% of HCWs were identified as current smokers, with many reporting smoking within healthcare facilities despite existing smoking bans (Mizher et al., 2018). In South Africa, a study revealed that 11% of HCWs smoked, with male HCWs being 13 times more likely to smoke than their female counterparts (Okeke et al., 2012). Similarly, in Cyprus, the smoking prevalence among HCWs was reported at 28.2%, with younger and male workers identified as being at higher risk (Zinonos et al., 2016). Within high-income settings, smoking prevalence remains a matter of

concern. An Italian study reported a smoking rate of 36% among HCWs, with nurses displaying the highest rates in comparison to other healthcare professionals (Ficarra et al., 2011).

Additionally, 17.8% of HCWs in an Italian cancer centre were active smokers, with 63.2% admitting to smoking during working hours despite their awareness of the risks associated with second-hand smoke (Bafunno et al., 2021). In Umbrian hospitals, the prevalence remained consistently high at 34.53% over a decade, suggesting resistance to smoking cessation interventions (Pianori et al., 2017). Gender and occupational roles significantly influence smoking prevalence. Mental health professionals in China reported a smoking rate of 8.6%, with notable gender disparities: 31.3% for males compared to 1.1% for females (Xia et al., 2020). Male physicians and younger professionals have been consistently identified as higher-risk groups across various studies, highlighting the impact of stress and cultural norms on smoking behaviours.

2.3 Factors Associated with Substance Use

Substance use among psychiatric staff is influenced by a range of factors, including personal characteristics, socio-cultural dynamics, and work-related stressors. This study utilises the Health Belief Model (HBM) to enhance the understanding of these behaviours. The HBM elucidates how perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy impact health-related behaviours. Each of these factors corresponds to distinct components of the model.

2.3.1 Personal factors associated with substance use.

The issue of substance misuse among professional health professionals is of utmost importance since it has significant ramifications for the well-being of individuals and the quality of patient treatment. This review of the literature investigates the individual aspects linked to

substance misuse in this group. Extensive research has been conducted in the literature to examine the association between age and substance misuse, uncovering varying patterns that evolve across an individual's lifespan. Adolescence is commonly regarded as a phase of heightened susceptibility, since research indicates that the early onset of substance use is associated with an increased likelihood of developing substance addiction and dependence in later stages of life (Chen et al., 2019). During the period of transitioning into early adulthood, various factors like heightened autonomy, exposure to novel contexts, and evolving social norms are known to influence changes in patterns of substance use (Schulenberg et al., 2018). On the other hand, it is important to acknowledge that older people may encounter unique difficulties in relation to substance usage. This can be attributed to several factors such as societal transformations, health concerns, and the experience of social isolation, as highlighted in studies conducted by Colliver et al. (2006) and (Han et al., 2009). In addition, it is worth noting that substance use habits might be influenced by midlife transitions, such as employment shifts or empty nest syndrome (Keyes et al., 2011). Newman (2021) suggest that the presence of protective variables, such as consistent employment and social support, has the potential to alleviate hazards across various age cohorts. It is imperative to comprehend the intricate relationship between age and substance addiction in order to customise preventative and intervention approaches.

The correlation between educational attainment and substance abuse has garnered significant attention in academic studies. A multitude of scholarly investigations have examined the intricate relationship between the level of educational achievement and the probability of involvement in behaviours related to substance usage. According to a study conducted by Kendler et al. (2020), there exists a negative correlation between educational attainment and vulnerability to substance addiction. Moreover, research conducted by Smith et al. (2023) reveals a negative association

between higher levels of education and the prevalence of substance misuse. This link is explained by the presence of improved coping strategies and stronger decision-making abilities among those with increased education. Moreover, the significance of access to resources and education in influencing substance use patterns should not be disregarded. The study conducted by Williams et al. (2017) highlights the significance of educational achievement in relation to substance misuse, revealing a positive correlation between lower educational levels and heightened susceptibility to such behaviours. Nevertheless, the longitudinal study conducted by Tucker et al. (2019) presented contrasting results, suggesting the need for a more nuanced comprehension of the subject matter by emphasizing the influence of contextual variables on the formation of this correlation. In support of this, a small portion of scholarly investigations, as demonstrated by the study conducted by Johnson et al. (2015), suggests a favourable correlation between elevated levels of education and the usage of substances. The authors claim that the presence of academic pressure and stress within highly competitive settings can potentially result in an increased propensity for engaging in substance use as a means of coping. Moreover, the presence of narcotics inside academic environments could potentially contribute to heightened levels of usage. Additionally, scholarly research has recognised educational interventions as potential mitigating variables in preventing substance use (Tucker et al., 2019). Tinner et al. (2022) conducted a study that underscored the significance of school-based preventative programmes in mitigating substance use among teenagers with diverse educational backgrounds.

Extensive research has been conducted to explore the complex correlation between depression and substance misuse, uncovering a bidirectional relationship that carries significant implications for mental well-being. Multiple studies have consistently highlighted the elevated susceptibility to depression in individuals involved in substance misuse, while simultaneously

indicating a greater propensity for substance usage among individuals with pre-existing depression. According to a study conducted by Smith et al. (2017), there is evidence supporting the self-medication hypothesis, which proposes that individuals may engage in substance use as a means to ease symptoms of depression. This relationship between substance use and depression may contribute to the simultaneous presence of these two disorders. Moreover, the longitudinal study conducted by Chilcoat et al. (2019) places emphasis on the temporal sequence, specifically underscoring the tendency for depression to frequently precede substance dependence. The co-occurrence of depression and substance usage has been a subject of interest in the field of neuroscience, particularly in relation to neurobiological causes. Notably, Klugah-Brown et al. (2020) conducted a study that shed light on the influence of neurotransmitter dysregulation on this comorbidity. Moreover, the intricate interaction of psychological elements, such as stressors and environmental impacts, has been implicated in this context (Mukhara et al., 2018). The presence of mental health issues, such as depression and anxiety, increases the likelihood of substance misuse among healthcare workers (Roberts et al., 2021). The presence of societal disapproval and negative attitudes about mental health concerns among healthcare professionals can hinder their ability to seek and receive adequate support, hence intensifying the issue. This literature review highlights the complex relationship between depression and substance misuse, indicating the need for additional study to better understand the intricate mechanisms involved and to develop specific interventions for this vulnerable population.

A plethora of scholarly investigations have been conducted to examine the correlation between individuals' reported susceptibility to life pressures and their involvement in substance misuses behaviours. Updegraff and Taylor (2021) established a correlation between perceived vulnerability, which refers to an individual's personal evaluation of their proneness to adverse

consequences, and increased levels of stress. Individuals who regard themselves as susceptible may utilise coping techniques that include the use of substances as a maladaptive strategy for managing stress and anxiety. According to a study conducted by Jones et al. (2019), there is evidence to show that the perception of vulnerability can play a role in the perpetuation of substance usage. This study proposes that individuals may turn to substance use as a means of coping with perceived dangers or vulnerabilities they experience. Moreover, the study conducted by Van Ruymbeke et al. (2020) sheds light on the potential role of perceived vulnerability as a mediator in the association between environmental stresses and substance usage. This suggests that there exists a multifaceted interaction between several elements within this connection. The occurrence of substance misuse is linked to instances of early trauma, specifically verbal, physical, and sexual abuse, with factors such as diminished self-esteem, reduced stress tolerance, challenges in learning, experiences of despair, and a perceived lack of control over one's life (Malliarakis et al., 2012). Research by (Johnson et al., 2016) underscores the impact of personality factors, suggesting that healthcare workers with higher levels of neuroticism or low resilience may be more prone to substance misuse. The coping mechanisms employed by healthcare professionals, including avoidance or self-medication, also contribute to the complex interplay of personal factors (Clark et al., 2021).

The correlation between medical knowledge and substance misuse has emerged as a topic of increasing apprehension in contemporary scholarly discourse. Numerous investigations have delved into the ramifications of medical practitioners' level of expertise on their vulnerability to substance abuse and the subsequent effects on the provision of healthcare to patients. Healthcare professionals, possessing comprehensive understanding of the physiological and psychological impacts of substances, may paradoxically encounter an increased susceptibility to adverse

outcomes as a result of the demanding nature of their occupation. The study conducted by Smith et al. (2018) shed light on the complex relationship that exists between medical stressors and substance usage within the healthcare sector. The presence of a high-pressure work atmosphere, in conjunction with the availability of pharmaceutical substances, adds to an elevated state of susceptibility. In contrast, a study conducted by Johnson and Brown (2019) posits that a comprehensive comprehension of substance usage among healthcare professionals may function as a safeguarding element, facilitating timely detection and intervention.

The complex relationship between gender and substance usage has been a central focus in current scholarly writing. A plethora of scholarly investigations underscore the intricate manners in which gender influences the patterns of substance utilization. The study conducted by Smith et al. (2017) highlights the significant impact of societal expectations and gender roles on the rates and expressions of substance abuse. It reveals that there are notable differences in the onset, progression, and treatment outcomes of substance usage between males and females. Furthermore, the scholarly research conducted by Johnson and Williams (2018) places significant emphasis on the influence of sociocultural factors in developing the distinct trajectories towards substance misuse that are distinctive to different genders. The presence of societal standards and expectations can potentially expose women to certain stressors, which in turn may lead to the development of diverse patterns of substance use when compared to men. Furthermore, a study conducted by Brown and Miller (2019) investigates the significance of biological aspects in relation to substance misuse, specifically examining the potential impact of hormonal oscillations on an individual's susceptibility. According to Darbro and Malliarakis (2007), it has been observed that women exhibit greater prevalence rates of comorbid psychiatric disorders, particularly melancholy and

anxiety. Additionally, women are more prone to linking the initiation of substance misuse to a painful experience or the occurrence of a significant loss.

Personal factors such as age, education, mental health conditions, and coping mechanisms significantly influence substance use patterns among psychiatric staff. These factors correspond with perceived susceptibility, perceived severity, and self-efficacy within the HBM framework.

Perceived Susceptibility: The likelihood of engaging in substance use varies across different life stages. Adolescence and early adulthood are considered high-risk periods for the initiation of substance use, while midlife stressors, such as workplace challenges, can further increase susceptibility (Schulenberg et al., 2018). Psychiatric staff, due to their high-stress environment and exposure to patients with severe mental health conditions, may perceive themselves as particularly vulnerable to substance misuse as a coping mechanism.

Perceived Severity: Despite evidence of adverse physical, psychological, and professional consequences, psychiatric staff may not always perceive the full severity of substance misuse (Han et al., 2009). Those who underestimate its impact are less likely to engage in prevention or intervention measures.

Self-Efficacy: Higher education levels are often associated with better coping mechanisms and lower rates of substance misuse (Kendler et al., 2020). However, even well-educated psychiatric staff may struggle with self-efficacy in managing stress-related behaviours, particularly in high-pressure work environments.

2.3.2 Sociocultural factors associated with substance misuse.

Substance misuse remains a pervasive global health concern, influenced by a complex interplay of sociocultural factors. This literature review explores key elements shaping patterns of substance use within societal contexts. Social factors, such as peer influence, family dynamics, and socioeconomic status, significantly contribute to the initiation and maintenance of drug misuse among diverse populations.

Extensive research has been conducted on the correlation between social or peer pressure and substance addiction, revealing valuable insights into the substantial influence of social factors on individual behaviour. The influence of social environments, specifically peer groups, is of utmost importance in the formation of attitudes towards substance use. The importance of peer pressure in commencing and maintaining substance usage among adolescents and young adults has been highlighted in studies conducted by Smith et al. (2015) and Alhyas et al. (2015). The impact of peers on an individual's substance usage is frequently identified as a significant indicator, as individuals yield to peer pressure driven by a need for social approval or apprehension of being excluded (Okoka et al., 2023). The research conducted by Jackson et al. (2018) sheds light on the impact of social norms within peer networks, which plays a significant role in the acceptance and prevalence of substance use behaviour. Peer influence emerges as a prominent sociocultural factor, with studies emphasizing the role of social networks in shaping drug-related behaviour (Kelly & Vuolo, 2019). Adolescents, in particular, are susceptible to peer pressure, and the desire for social acceptance can drive experimentation with substances. On the other hand, it has been observed that social networks can serve as protective factors, specifically through the presence of positive peer interactions, which can help reduce the likelihood of engaging in substance misuse (Ressel et al., 2020). The aforementioned studies highlight the intricate relationship between social dynamics

and substance misuse. Prevention and intervention efforts should consider the significant impact of peer pressure, encompassing the mitigation of individual susceptibilities and the cultivation of favourable social contexts.

Numerous studies continuously demonstrate a significant association between familial background and the occurrence of substance misuse A multitude of research investigations have extensively examined the complex interaction between genetic and environmental factors, uncovering an increased susceptibility among those with a familial propensity. The heritability of substance usage has been thoroughly established, highlighting the significant role of genetic factors in the transfer of susceptibility. The influence of family dynamics and upbringing plays a vital role in shaping the patterns of substance misuse. The utilization of substances by parents exerts a significant impact, moulding the attitudes and behaviour of their offspring (Hawk et al., 2019). Parental substance uses and attitudes towards substance misuse further contribute to a familial environment conducive to substance abuse. Furthermore, the existence of familial dysfunction, trauma, or insufficient coping skills within the family unit can enhance the likelihood of engaging in substance usage (Hawk et al., 2019). The heritability of substance uses disorders, specifically in terms of familial aggregation, was elucidated in a significant study conducted by Vos et al. (2024). This assertion was corroborated by following studies, such as the one conducted by Merikangas et al. (2013), which underscores the importance of a full comprehension of the familial context when evaluating risk variables.

Nevertheless, it is imperative to do additional research to explore the intricacies within these connections. Various environmental factors, such as peer influences and socioeconomic issues, interact with familial aspects, resulting in an intricate network of determinants. In order to advance the understanding of the complex association between family history and substance usage, future

investigations should utilize longitudinal research designs and comprehensive evaluations. By employing these methodologies, researchers may effectively untangle the intricate nature of this link, ultimately facilitating the development of focused preventative and intervention measures.

Multiple studies indicate that the marital status of individuals plays a substantial role in shaping their patterns of substance use. Married people frequently demonstrate a reduced prevalence of substance addiction in comparison to their unmarried counterparts. The potential mechanisms underlying the protective influence of marriage on substance usage are often linked to the provision of emotional and social support within the context of a marital union, which in turn promotes feelings of stability and accountability. Nevertheless, it is imperative to recognize that the association between marital status and substance abuse is intricate and multifaceted. Several research findings indicate that marital discontent or strain may be associated with a heightened likelihood of engaging in drug misuse behaviour. Furthermore, it is worth noting that divorce or separation can potentially increase susceptibility to substance abuse as a result of the heightened levels of stress and emotional distress that are often linked with such circumstances. Multiple scholarly sources are used in this literature review, including the longitudinal study by Jackson et al. (2018), as well as the research by Alhyas et al. (2015), Smith et al. (2015), and several others. All of these studies help us understand the complicated link between being married and using drugs better. They also show how important it is to look at the issue as a whole, considering the many factors that can help or hurt people in different marriage situations.

Cultural influences also contribute significantly to drug misuse patterns in Ghana. Asante and Nefale (2021) explored the impact of cultural practices, revealing that certain traditional ceremonies and rituals involve the use of psychoactive substances. This interconnection between cultural practices and substance use highlights the importance of culturally sensitive interventions.

While existing literature provides valuable insights into the prevalence of drug misuse in Ghana, it is essential to note the dynamic nature of this phenomenon. Future research should focus on longitudinal studies to capture evolving trends and contribute to the development of targeted interventions that address the specific needs of diverse populations.

Extensive study has been conducted on the correlation between socioeconomic status and substance misuse. Numerous studies repeatedly emphasize the intricate relationship between socioeconomic status and patterns of substance use. There is a commonly observed correlation between individuals from lower socioeconomic status backgrounds and elevated prevalence of substance usage, encompassing both alcohol and illicit alcohol consumption. The correlation between these phenomena can be ascribed to a range of variables, including but not limited to restricted educational access, limited employment prospects, inadequate healthcare provisions, heightened stress levels, and environmental adversities (Lloyd-Smith et al., 2008).

Furthermore, research conducted by Wang and Martins (2024) demonstrates a favourable association between lower socioeconomic status and elevated prevalence of substance misuse. The study conducted by Lee et al. (2018) highlights the significant influence of social determinants on health outcomes. It specifically emphasizes the role of socioeconomic status in contributing to health disparities, including the occurrence of substance misuse. Furthermore, according to the social stress model proposed by Pearlin (1989), individuals facing economic difficulties may resort to substance abuse as a means of managing stress (Roe et al., 2021). On the other hand, certain research suggests a potential association between greater socioeconomic status and substance misuse, specifically in relation to substances such as alcohol. The paradoxical relationship may be influenced by cultural norms and the accessibility of resources. Murakami and Hashimoto (2019)

and Jiang et al. (2020) conducted a study which revealed that persons with higher income levels exhibited a greater propensity for participating in behaviour associated with risky drinking.

A study by Acheampong and Lasopa (2016) found that urban areas exhibited higher rates of substance misuse compared to rural counterparts. Furthermore, age and gender differentials were evident, with young males being more susceptible. These findings align with the global understanding of drug misuse as a complex interplay between individual vulnerabilities and environmental factors.

The existing body of research suggests that there are disparities in substance use trends across diverse ethnic groups. For example, research conducted by Peteet (2019) indicates that there are potential variations in rates of substance usage within different ethnic populations. These disparities may be influenced by factors such as acculturation and cultural identification. According to Anderson (1991), the acculturation stress theory suggests that persons who are in the process of cultural adaptation may face heightened susceptibility to substance usage as a result of the stressors associated with acculturation. Furthermore, the influence of cultural norms and values is significant in shaping patterns of substance use. Gordon et al. (2012) highlight the significance of cultural context in relation to drinking behaviour, highlighting the importance of including cultural elements when examining and addressing alcohol usage across ethnically diverse communities. Nevertheless, it is imperative to acknowledge the diversity present within ethnic groupings, and it is advisable to use caution when generalizing. The research conducted by Chunqiu et al. (2024) emphasizes the significance of considering both individual and contextual characteristics within certain ethnic communities in order to have a thorough comprehension of the dynamics around substance use.

The existing body of evidence concerning the correlation between social support networks and substance usage highlights the complex interaction between interpersonal interactions and individual behaviour. The research conducted by Falade-Nwulia et al. (2022) and Mogro-Wilson et al. (2015) highlights the significance of social support in reducing the likelihood of engaging in substance usage. The presence of positive relationships and a strong support system can serve as protective factors against stressors, hence diminishing the probability of resorting to substance use as a means of coping. Contrarily, a study conducted by Rawas et al. (2020) indicates that insufficient social support or stressed interpersonal interactions may potentially heighten susceptibility to substance addiction. This underscores the significance of both the quantity and quality of social connections. In addition, it has been shown that social support has the potential to exert an impact on the efficacy of treatment interventions for those grappling with substance uses disorders (Kelly & Vuolo, 2019). The presence of a robust support network is frequently essential in facilitating the process of recovery, underscoring the need to consider social dynamics in the development of intervention programmes.

Social influences such as peer pressure, family dynamics, socioeconomic status, and cultural norms significantly shape substance use behaviour. These factors correspond with perceived susceptibility, perceived benefits, and perceived barriers within the HBM framework.

Perceived Susceptibility and Cues to Action: The influence of peers and social networks is critical in shaping substance use behaviour. Psychiatric staff may operate in high-stress environments where substance use is normalized, leading to an increased perception of susceptibility (Kelly & Vuolo, 2019). The presence of substance-using colleagues can serve as a cue to action, reinforcing or discouraging certain behaviours.

Perceived Benefits: Cultural norms may reinforce substance use as a social bonding tool or stress reliever. In Ghana, for instance, alcohol and tobacco are sometimes utilized in traditional ceremonies, potentially influencing substance use behaviours among psychiatric staff Asante and Nefale (2021).

Perceived Barriers: Societal stigma towards mental health issues and substance use can deter psychiatric staff from seeking support or treatment (Roberts et al., 2021). This aligns with the HBM's concept of external barriers, which impede behaviour change.

2.3.3 Work-related factors associated with drug misuse.

Challenging working situations have been identified as a crucial factor that may contribute to the phenomenon of self-medication and substance use (Amirouche et al., 2023). There is evidence to suggest that specific types of employment and work environments may contribute to an increased risk of developing alcohol use disorders and dependence. The nursing profession is characterised by a significant level of stress. In fact, Mohanty et al. (2019) found that healthcare workers reported a higher prevalence of workplace stress compared to other occupational groups. Extended work hours, more work shifts, an insufficient workforce, and rotational shift schedules have been found to significantly elevate levels of stress. In their study on the correlation between work schedule factors and substance misuse, Kuteesa et al. (2020) observed that there exists a positive relationship between unfavourable schedule characteristics and the propensity for substance misuse. The schedule component that exhibited the strongest correlation with substance usage was the combination of extended shifts and rotational shifts. The impact of extended work hours and shift work on an individual's mood, sleep quality, circadian rhythm, and other psychophysiological parameters has been documented (Boivin & Boudreau, 2014).

The complex correlation between occupational stress and substance abuse has become an increasingly worrisome topic in current scholarly discourse. There have been a lot of academic studies that look at this link and have found that stressors at work and the tendency to abuse substances interact in complicated ways. A lot of research shows that people may use substances to deal with stressful things at work, like having too many responsibilities, not having enough say in decisions at work, and disagreements with coworkers (Beehr, 2014; Maslach & Leiter, 2016). The high expectations and competitive nature of today's workplaces make it easy for people to turn to substances as a way to deal with stress (Beehr, 2014).

Several studies (Kuteesa et al., 2020; Mohanty et al., 2019) have emphasised the association between work-related stress and heightened susceptibility to substance usage within the healthcare profession. Also, research shows that using substances not only makes stress worse but also hurts your overall mental and physical health (Shield & Rehm, 2015; Subica et al., 2012). Comprehending this intricate interconnection is crucial for the formulation of precise interventions in work environments. The implementation of organisational methods that aim to promote stress management and enhance employee well-being has the potential to effectively reduce the likelihood of substance misuse that is often linked to workplace stresses (Beehr, 2014).

The correlation between workload and substance misuse has become a subject of growing apprehension within the field of occupational health research. Research conducted by Li et al. (2023) indicates a substantial correlation between an excessive workload and substance usage. This study proposes that heightened job demands and stressors have a role in the adoption of narcotics as a means of coping. The theoretical paradigm, known as the demands-resources model (Nell, 2015), suggests that an excessive workload might deplete an individual's personal resources, hence increasing the probability of engaging in substance addiction.

On the other hand, de Ternay et al. (2024) present research findings that present contradictory data, suggesting a potential association between low job demands and substance misuse. This association may be attributed to factors such as boredom or lack of engagement. The intricate nature of this relationship emphasises the necessity for a comprehensive comprehension of how workload influences drug use habits across various occupational contexts. In summary, it can be concluded that although certain literature provides evidence for the correlation between a heavy workload and substance misuse, the field of study continues to evolve, with other variables such as job satisfaction and work-life balance also playing a role in shaping this association.

The correlation between workplace culture and substance misuse is an emerging field of study, indicative of the acknowledgment that work settings have a significant impact on the overall health and welfare of employees. The scholarly works conducted by Beehr (2014) and Mohanty et al. (2019) emphasize the significant influence exerted by workplace culture on individuals' engagement in substance use behaviours. Lower rates of substance misuse are often linked to a work environment that fosters a good and supportive culture, characterised by open communication and a strong feeling of community. On the other hand, work environments that are characterised by elevated stress levels and unfavourable interpersonal dynamics can frequently lead to increased occurrences of substance misuse. This is because individuals may resort to substances as a means of coping with the challenging circumstances they face (McCann & Lubman, 2018). Furthermore, the impact of organisational policies and the execution of workplace interventions might have influence on patterns of substance misuse. The study conducted by Subica et al. (2012) emphasises the efficacy of comprehensive workplace interventions that not only target drug usage but also treat the underlying stressors that contribute to it. The results of

this study indicate that the cultivation of a workplace culture that promotes positivity and prioritises health is essential in addressing the issue of substance usage among employees.

A frequently overlooked and significant risk factor for staff is a deficiency in understanding the addictive process, including its signs and symptoms. The limited understanding of substance use issues contributes to individuals harbouring unfavourable stereotypes about healthcare professionals, such as staff and doctors (Van Boekel et al., 2013). According to Van Boekel et al. (2013) and Barenie et al. (2023), healthcare professionals often hold negative perceptions of their colleagues who are experiencing substance use problems. In a study conducted by Barenie et al. (2023), staff were interviewed, and a significant number of them expressed concerns regarding insufficient educational opportunities and a workplace culture characterised by abusive behaviour. According to Malliarakis et al. (2012), it may be argued that a workplace environment characterised by contempt is conducive to staff with drug use issues resorting to more extensive measures to conceal their addiction. Consequently, this situation increases the likelihood of harm to all those involved.

In summary, the organisational culture inside a business has a substantial impact on the vulnerability of individuals to engage in substance usage. The creation of conducive settings and the implementation of efficacious policies can have a positive impact on the overall well-being of the workforce.

The accessibility of drugs presents a potential hazard to workers, particularly when coupled with insufficiently regulated substance administration within healthcare facilities (Oreskovich et al., 2015). According to a survey conducted in (1990) by Sullivan, Bissell, and Leffler, which involved 300 staff participating in treatment programmes, it was found that around one-sixth of the staff relocated to different employment, typically through internal hospital transfers, in order

to enhance their access to narcotics while on duty. Martins and Ghandour (2017) conducted a study that revealed a positive correlation between limited workplace accessibility and an increased likelihood of illicit drug use among nursing students. Furthermore, the study identified access as a crucial determinant of substance use patterns among healthcare professionals. The absence of proper institutional controls and oversight in the storage and distribution of narcotics perpetuates an environment that facilitates drug diversion and its subsequent concealment. Another risk factor is loose prescribing, which reflects society's acceptance of drug use and expectation that medical appointments will result in prescriptions. In a particular study, it was seen that staff who engaged in self-diagnosis of their health concerns exhibited a tendency to forego seeking the necessary medical assistance. Instead, they opted to obtain prescriptions from acquaintances who were doctors, without undertaking thorough assessments or examinations. According to the study conducted by Malliarakis et al. (2012).

The precariousness of coping mechanisms employed in response to the stressful events encountered in daily academic life exacerbates this situation. These events include the substantial workload dedicated to studies and employment, the unique aspects of socialization and peer relationships within the university setting, the pursuit of enhancing intellectual and academic performance for professional development, and the absence of inadequacy of engagement in beneficial activities like regular exercise and a balanced diet (Pariat et al., 2014).

Occupational stressors, such as prolonged working hours, elevated job demands, and a detrimental workplace culture, significantly contribute to substance misuse. These factors align with perceived barriers, self-efficacy, and modifying factors within the HBM.

Perceived Barriers: The demanding nature of psychiatric work characterized by exposure to trauma, violence, and emotional exhaustion cultivates an environment that encourages substance

use as a coping mechanism (Amirouche et al., 2023). Shift work, extended working hours, and staff shortages further exacerbate stress levels, making it increasingly difficult for psychiatric staff to cease substance use (Boivin & Boudreau, 2014).

Self-Efficacy: Healthcare professionals who possess higher resilience and effective coping strategies are less likely to engage in substance misuse. Conversely, those who feel overwhelmed by occupational stress and the responsibilities of patient care may encounter difficulties in self-efficacy concerning the management of their substance use (Clark et al., 2021).

Modifying Factors: Workplace policies, organisational culture, and access to mental health support programmes significantly influence patterns of substance use. Institutions that prioritise employee well-being and enforce stringent substance-use policies can act as protective factors against substance misuse (Subica et al., 2012).

2.4 Consequences of Substance Use

The adverse effects of substance abuse among healthcare workers are a significant issue that has wide-ranging implications for both individual practitioners and the healthcare system as a whole. The multifaceted nature of this matter has attracted heightened scrutiny in contemporary scholarly works as a result of its capacity to pose risks to the well-being of patients, undermine the ethical conduct of professionals, and diminish the effectiveness of healthcare provision. The ramifications of substance misuse among healthcare personnel extend beyond individual well-being, including the calibre of patient care and the overarching integrity of healthcare institutions. Gaining a comprehensive understanding of the prevalence, risk factors, and implications

associated with substance usage within this specific demographic is of utmost importance to formulate and implement efficacious prevention and intervention approaches.

2.4.1 Compromised patient care and safety

The issue of substance usage among healthcare personnel poses a substantial threat to the quality of patient care, hence creating complex issues for the healthcare system. Extensive research has been conducted to examine the effects of substance misuse on patient outcomes. The study conducted by Salyers et al. (2017) demonstrated a significant association between healthcare workers with poor functioning and negative outcomes for patients. The study highlighted that hampered decision-making and reduced cognitive capacities were contributing factors to these unfavourable events. In a study conducted by Rodziewicz and Hipskind (2020), it was emphasised that healthcare personnel who engage in substance usage are at a heightened risk of medication errors and subsequent injury to patients.

Moreover, the study conducted by Okello and Gilson (2015) highlights the widespread impact of the breakdown of trust between patients and healthcare personnel. The perception of degraded healthcare providers by patients might contribute to concerns over their reliability and safety, so increasing existing healthcare inequities and hindering the development of a productive therapeutic relationship.

Substance use impairs decision-making abilities, cognitive function, and patient safety, consequently leading to medical errors (Salyers et al., 2017). Within the framework of the HBM, the perceived severity of these ramifications differs among individuals, thereby influencing their motivation to engage in behaviour change.

2.4.2 Effects on professional career

The consequences of substance usage among healthcare professionals have implications that transcend beyond their personal well-being, infiltrating their professional lives and compromising the integrity of healthcare institutions. This literature review explores the many impacts of substance usage on the professional lives of healthcare practitioners. It investigates how this problem compromises the safety of patients, undermines the professional reputation of individuals, and sets off a series of consequences that have far-reaching ramifications within the healthcare industry.

The consequences of substance usage among health care professionals have wide-ranging implications that reach beyond personal well-being, exerting a substantial influence on professional advancement and the overall healthcare system. The literature suggests a worrisome correlation between substance abuse and professional dysfunction among healthcare providers (Salyers et al., 2017). The presence of this impairment poses a significant risk to both patient safety and the professional reputation and long-term career prospects of those persons afflicted. Healthcare workers who encounter difficulties with substance usage frequently encounter disciplinary measures, revocation of licensing, and termination, resulting in a series of adverse consequences for their professional trajectories (Papinaho et al., 2019). The professional ramifications of substance usage are compounded by the presence of societal stigma, which serves to impede the process of rehabilitation and reintegration into the labour market (Okoka et al., 2023).

Psychiatric staff who engage in substance misuse are subject to disciplinary actions, termination of employment, and damage to their professional reputation (Papinaho et al., 2019).

Individuals who acknowledge these risks may perceive them as cues to action, which could motivate them to pursue professional assistance.

2.4.3 Effects on productivity

The issue of substance usage among health professionals carries substantial consequences for various aspects such as worker productivity, patient care, and the general functioning of healthcare systems. The existing body of literature constantly emphasises the negative consequences of substance misuse on the performance and productivity of healthcare professionals. According to a study conducted by Salyers et al. (2017), there exists a correlation between substance usage and several negative work-related outcomes, such as absenteeism, presenteeism, and decreased work efficiency, specifically within the healthcare profession. The cognitive and psychomotor deficits that arise from substance use have the potential to undermine an individual's capacity to make sound decisions and impede the provision of care that meets high standards (Polles et al., 2020). Substance misuse is associated with heightened absenteeism, presenteeism, and a general decline in efficiency (Polles et al., 2020). Addressing work-related stressors and enhancing self-efficacy in stress management may enhance productivity and alleviate substance misuse.

2.4.4 Financial implications for individuals

The financial ramifications of the misuse of substances within the health professional community are substantial and complex, impacting both people and healthcare organisations. According to Polles et al. (2020), empirical evidence suggests that misuse of substances by healthcare workers has been associated with elevated healthcare expenditures, higher rates of absenteeism, and reduced productivity. Healthcare professionals who are faced with the challenge

of addressing substance usage frequently necessitate medical interventions, counselling, and rehabilitation services, which in turn contribute to increased healthcare costs. Furthermore, the consequences have a broader impact on the dynamics of the workforce, as seen by the occurrence of absenteeism and decreased productivity, which ultimately affect the entire efficiency of healthcare delivery systems (Salyers et al., 2017).

In addition to the obvious financial implications associated with healthcare expenses, substance misuse can also lead to legal and disciplinary consequences, hence exacerbating the burden on financial resources. According to Rowthorn et al. (2019), healthcare workers who are implicated in substance misuse occurrences may be subject to financial penalties, legal expenses, and the expenses associated with participation in monitoring programmes, as mandated by licensing boards and regulating authorities. The financial difficulties in question have a significant impact on both individuals and healthcare facilities, since the latter may encounter legal expenditures. The financial implications of recruiting, training, and potential legal consequences related to impaired practitioners might be significant Rowthorn et al. (2019). Furthermore, the adverse effects on team chemistry and morale have the potential to undermine the collaborative aspect of healthcare provision.

Substance misuse among psychiatric staff results in legal fees, rehabilitation costs, and loss of income due to job-related penalties (Rowthorn et al., 2019). The financial burden associated with substance use may serve as an additional cue to action, motivating individuals to modify their behaviours.

2.4.5 Effects on interpersonal relationships

The issue of substance usage among healthcare workers has emerged as a significant concern, encompassing consequences that reach beyond the confines of the workplace and permeate into

their personal life. The study conducted by Lander et al. (2013) brings attention to the concerning frequency of substance usage within the healthcare workforce, underscoring the negative impact it has on interpersonal connections and familial interactions. The pressure experienced in relationships frequently arises from compromised communication, heightened conflict, and emotional disengagement linked to substance addiction (Saladino et al., 2021).

Furthermore, the research conducted by Zhou et al. (2018) and Wallace and Buchanan (2020) emphasises the increased susceptibility to marital conflict resulting from the demanding characteristics of healthcare occupations, along with the additional strain caused by substance abuse. The presence of the spillover effect is observable in the reduced standard of family life, as evidenced by the occurrence of disruptions in children's daily routines and the manifestation of emotional instability (Zhou et al., 2018). The repercussions transcend the individual, exerting an influence on the collective welfare of families and communities.

Substance misuse adversely affects relationships with colleagues, family members, and friends, frequently resulting in isolation and marital conflicts (Saladino et al., 2021). The perceived severity of these repercussions may impact the willingness of psychiatric staff to engage in measures aimed at reducing or ceasing substance use. This study integrates personal, socio-cultural, and work-related factors to elucidate substance use behaviours among psychiatric staff through the HBM. The model underscores the significance of perceived susceptibility, severity, benefits, barriers, cues to action, and self-efficacy in shaping decisions related to substance use. An understanding of these factors within the HBM framework facilitates the development of targeted interventions aimed at reducing substance misuse and promoting healthier behaviours among psychiatric staff in the Accra Metropolis.

2.5 Chapter Summary

This chapter critically examines the multifaceted dimensions of substance use among healthcare professionals, drawing upon theoretical, empirical, and contextual literature. The review is grounded in the Health Belief Model (HBM), which elucidates how psychosocial constructs—such as perceived susceptibility, severity, benefits, barriers, cues to action, and self-efficacy—provide a comprehensive framework for understanding substance use behaviours within high-stress occupational environments. Evidence from both global and regional studies consistently reveals concerning prevalence rates of alcohol and cigarette use among healthcare workers, with significant variability observed based on profession, gender, region, and workplace conditions. Furthermore, sociocultural influences, including peer pressure, family dynamics, cultural norms, and socioeconomic status, play a substantial role in shaping substance use patterns, either facilitating or hindering such behaviours. Work-related factors, such as job stress, shift patterns, toxic workplace cultures, and access to controlled substances, further exacerbate the vulnerability of psychiatric staff. Notably, the literature indicates that substance use has extensive repercussions, compromising patient safety, eroding professional integrity, undermining productivity, and straining interpersonal relationships. The incorporation of the HBM facilitates a structured interpretation of these findings, providing a theoretical lens through which individual and systemic contributors to substance misuse can be comprehensively understood. Both the Social Determinants of Health (SDOH) framework and the Health Belief Model (HBM) provide insightful viewpoints for comprehending substance use behaviours; nevertheless, each model can be applied separately to alcohol and cigarette use among psychiatric staff in the Accra Metropolis.

The HBM offers insight into individual substance use decision making by focusing on people's judgment of vulnerability, severity, advantages, and barriers (Wong *et al.*, 2020). It clarifies why some mental health professionals may minimize the dangers of drinking alcohol or smoking or view these behaviours as coping strategies for stress at work. The HBM is helpful and frequently over emphasizes individual cognitive aspects while undervaluing the impact of job stressors, organizational culture, and larger socio-environmental influences (Shahnazi *et al.*, 2021).

Additionally, the model is predicated on logical decision-making, accounting for the emotional, habitual, or stress-driven aspects of substance use among mental health professionals (Tong *et al*., 2022). The SDOH framework, on the other hand, emphasizes how work environment, job stress, staffing shortages, shift patterns, and the availability of support networks influence health behaviours (World Health Organization, 2021).

This viewpoint echoes on mental health environments where long term stress, burnout, and being around hostile patients may make people more susceptible to substance abuse. SDOH is frequently general and structural to account for individual behavioural variations among employees with comparable working situations (Marmot & Allen, 2020)

By combining HBM and SDOH, these challenges are addressed and a more thorough insight of substance use among psychiatric staff is produced. While HBM explains why some employees may view drinking or smoking as healthy or low-risk, SDOH describes how social settings and workplace situations influence these behaviours. The models provide a balanced account of the prevalence and related determinants of alcohol and cigarette use in this particular workforce by capturing both internal cognitive drivers and external occupational impacts (Lee & Park, 2023).

By addressing both the systemic elements of the psychiatric care setting and the belief systems of the staff, this integrated approach also improves the design of therapies. The interaction of these two frameworks directs the study variables. By connecting exterior conditions (SDOH) to internal perceptions (HBM), it eventually influence the behavioral outcome of substance use.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This portion of the thesis report delineates the procedural framework for conducting the study. The study commences by specifying the geographical setting in which it will be done, as well as outlining the research design that will be utilised. It also describes the study's target population, sample size, analytical strategy, and ethical considerations.

3.1 Study Setting

This study was conducted at two hospital sites in the Greater Accra Region: Accra Hospital and Pantang Psychiatric Hospital. These sites were chosen purposively as they are the primary centres for psychiatric healthcare in the Accra Metropolis or country and employ over 80% of the workforce (Alhassan & Poku, 2018; WHO, 2020). The selected hospitals will provide an adequate sample frame for the selection of study participants. The Pantang Psychiatric Hospital, an important mental health facility in Ghana, is located close to the Pantang hamlet, about 1.6 kilometres off the Accra-Aburi route and 25 km from Accra Central (Bone & Roberts, 2019). The hospital, which was founded in 1975, assumes a vital role in delivering psychiatric care and treatment to patients grappling with mental health difficulties (Pantang Hospital, 2023). Pantang Psychiatric Hospital aims to destigmatize mental health concerns and foster consciousness by prioritising community-based mental health treatments. (Pantang Hospital, 2023). Additionally, the hospital provides other services such dental care, radiology, medical laboratory, occupational therapy, eye care, maternity, in-patient and out-patient services (Pantang Hospital, 2023). Pantang Psychiatric Hospital admits 1,337 patients annually, primarily due to schizophrenia, schizotypal and delusional disorders, cannabis use, depression, alcohol, and psychoactive substance use

(Alhassan & Poku, 2018; Bone & Roberts, 2019). The present bed capacity of Pantang Hospital is at 336 and the staffing population at Pantang Hospital was recorded to be 500 psychiatric professionals (Alhassan & Poku, 2018; WHO, 2020).

The Accra Psychiatric Hospital is a specialised healthcare facility that is committed to providing comprehensive care, rehabilitation, education, and therapy for individuals who are afflicted with mental disease. The hospital consistently upheld a bed capacity of six hundred (600) patients, while its daily inpatient population frequently fluctuated between 1100 and 1300 patients (Alhassan & Poku, 2018). The Accra Psychiatric Hospital comprises a comprehensive set of 21 divisions, encompassing the Outpatients Department as well. The population of psychiatric health professionals is estimated 400 (Alhassan & Poku, 2018). A special ward of the Accra Psychiatric Hospital provides mental healthcare services to children and adolescents. This specialised facility is equipped with a total of 15 beds (WHO, 2020).

3.2 Study Design and Methods

The study employed a cross-sectional design, which involves collecting data from a cohort of individuals at a single point in time. This methodology aimed to investigate associations and evaluate the prevailing characteristics of the population at a specific moment. Data collection methods typically included surveys, interviews, or observations. Cross-sectional designs are widely used to discern trends, patterns, and connections between variables, though they do not establish causality or temporal changes (Kesmodel, 2018). This design was particularly suitable for examining substance use among psychiatric staff in Accra, as it provided a snapshot of prevalence and associated factors. By concurrently assessing cigarette and alcohol consumption, the study achieved a comprehensive understanding of substance use within this demographic. The

cross-sectional approach enabled efficient data collection on prevalence and associated characteristics, facilitating correlation analyses and supporting targeted interventions. Additionally, the method's expedience and cost-effectiveness rendered it well-suited for investigating diverse issues in psychiatric healthcare. By capturing timely and relevant insights, this approach contributed to the development of prevention-focused policies tailored to the unique context of psychiatric health professionals in Accra.

3.3 Target Population

The target population for the study comprised psychiatric health professionals, including psychiatrists, registered mental health staff (RMN), psychologists, community mental health officers (CMHO), and clinical psychiatric officers (CPO). This focus ensured that the study addressed the perspectives and experiences of key professionals directly involved in psychiatric care.

3.3.1 Inclusion criteria

Staff who meet the following criterium were included in the study.

- The selected staff must be registered and licensed to practice in present year.

3.3.2 Exclusion criteria

The study excluded specific categories of staff to ensure a focused and relevant participant group. Psychiatric staff who declined to provide consent for participation were omitted from the survey. Additionally, auxiliary personnel were excluded, including nurse assistants, health assistants, medical assistants, non-doctor/non-physician primary healthcare workers, as well as professional

and paraprofessional psychosocial counsellors. These exclusions ensured the study concentrated on the target population most pertinent to the research objectives.

3.4 Sample Size Determination

Cochrane's formula for sample size determination was used to estimate the sample size for the study (Israel, 1992), which took into account the prevalence of alcohol use among health professional, estimated at 15.3 percent according to by Oreskovich et al. (2015)

$$N = \frac{Z^2(p)(q)}{e^2} = \frac{1.96^2\ (0.153)(0.847)}{0.05^2} = 199$$

Where:

- N is the estimated sample size
- Z is the constant, critical value for 5% precision
- P is the prevalence of alcohol use (15.3%) among health professionals (Oreskovich et al., 2015).
- q is 1 minus p

Ten percent of the initial sample size was added to cater for non-response and wrongly filled questionnaire. This produced an estimated sample size of 219 staff for the study.

3.5 Sampling Techniques

A multistage sampling procedure was employed in the study. Initially, quota sampling was used to ensure the sample size was proportionate to the population of staff, establishing specific quotas for each hospital. This approach guaranteed that the sample accurately represented the

demographic characteristics of both institutions and ensured proportional representation among different subgroups, thereby enhancing the study's external validity. Facility administrators provided a comprehensive list of psychiatric health professionals for the subsequent sampling phase. The list of participants for each facility was organized in alphabetical order and assigned numerical identifiers sequentially. A simple paper ballot was then utilized to apply a simple random sampling technique, selecting participants from the sampling frame for interviews.

3.6 Data Collection Tool

A structured questionnaire was used to collect the participants information. A structured questionnaire was developed to collect participant information, ensuring that the items were relevant and useful for the study objectives. The questionnaire was designed based on a review of existing validated survey instruments (Oei et al., 2005), as well as self-developed questions informed by literature (Chen et al., 2019; Okoka et al., 2023). It comprised multiple sections, including sociodemographic characteristics, substance usage patterns and frequency, influencing factors, and the impact of substance use on health. To enhance validity, the questionnaire items were carefully selected to align with established research frameworks, pretested for clarity and reliability. The impact or consequences of substance use were partially captured through open-ended questions, with responses later recoded for analysis. Alcohol and cigarette use was defined as the intake of alcohol or the smoking of cigarette in the last 30 days.

The Drinking refusal self-efficacy scale was adopted to assess participants' ability to resist substance usage (Oei et al., 2005). The Drinking refusal self-efficacy scores were calculated from a 19-item Likert scale, ranging from 1, indicating "I am very sure I could not resist drinking," to 6, indicating "I am very sure I could resist drinking." Principal component analysis was used to

compute a composite score for the participants. Significant correlations (Bartlett's test, $p < 0.001$) and a high Kaiser-Meyer-Olkin (KMO) value of 0.866 confirmed sampling adequacy for factor analysis of the drinking refusal self-efficacy questionnaire. Cronbach's Alpha was also high (0.998), indicating strong internal consistency of the estimated composite scores. The questionnaire was uploaded to the KoboCollect server and made accessible on tablets in the field, ensuring convenient administration and streamlined data submission.

3.7 Data Collection Procedure

A data application tool, such as KoboCollect, was used to develop an electronic-based questionnaire. This questionnaire was administered to participants through personal or face-to-face interviews. Each interview was structured into two sections: the first five minutes were dedicated to completing the consenting process, followed by 20 minutes for administering the research questionnaire.

3.8 Pretesting of Questionnaire

The research questionnaire was pretested at Ankaful Psychiatric Hospital among staff who were not part of the target population to evaluate its weaknesses and validity in addressing the research questions. Ankaful Psychiatric Hospital shares similar characteristics with both Pantang and Accra psychiatric hospitals, making its staff suitable for the pilot study. Any incorrectly structured questions were modified for the main study. Additionally, the pretest helped assess the average interview duration per participant.

3.9 Data Quality

To ensure the quality of the data, the initial stage involved providing field assistants with comprehensive training. Field workers underwent a final evaluation to assess their proficiency and competence in administering the questionnaire to participants. Only individuals who successfully completed the final evaluation were selected to assist with the data collection process. The training exercise also covered topics related to research ethics, equipping field workers with the necessary knowledge and skills to protect participants' rights and maintain the integrity of the collected data. Additionally, as part of data quality measures, the questionnaire was pretested to evaluate its validity before the study commenced.

3.10 Data management and analysis

The data were analysed using IBM SPSS Statistics (Version 26.0, Armonk, NY: IBM Corp.). Descriptive statistics were employed to summarize the sociodemographic characteristics and professional background of the participants. In this study, continuous variables were reported using the mean and standard deviation, while categorical variables were presented as frequencies and percentages. Drinking refusal self-efficacy scores were estimated from a 19-item Likert scale questionnaire (Oei et al., 2005), ranging from 1, indicating "I am very sure I could NOT resist drinking," to 6, indicating "I am very sure I could resist drinking." Principal component analysis was used to compute a composite score for the participants. Significant correlations (Bartlett's test, $p < 0.001$) and a high Kaiser-Meyer-Olkin (KMO) value of 0.866 confirmed sampling adequacy for factor analysis of the drinking refusal self-efficacy questionnaire. Cronbach's Alpha was also high (0.998), indicating strong internal consistency of the estimated composite scores. The scores were then categorized into tertiles (lower, middle, and upper) for regression analysis.

The primary outcome was substance use, categorized into a binary variable (staff who used substances and those who did not). The prevalence of substance use among staff was estimated using figures and simple proportions. To identify factors associated with substance use among psychiatric staff, inferential analyses were performed. A Chi-square test was first conducted to identify potential covariates at a 95% significance level. Multiple binary logistic regression models were then employed to assess the relationship between drinking refusal self-efficacy and substance use, while controlling for the potential covariates identified in the Chi-square analysis. Odds ratios and confidence intervals of less than 0.05 were used to determine the direction and strength of the associations. Lastly, frequencies and proportions were used to report the specific consequences of substance use among the staff.

3.11 Ethical Consideration

The study sought ethical approval from the Ghana Health Service Ethics Review Board. Additionally, consent was obtained from the administrative authorities of both Pantang and Accra psychiatric hospitals before the commencement of the study. Prior to participation, all individuals involved in the study were issued informed consent forms to secure their voluntary participation. Participants were provided with detailed information regarding the importance of maintaining confidentiality, the potential benefits of participating in the study, and their right to withdraw from the data collection process at any time.

3.12 Chapter Summary

This chapter delineates the methodological framework utilized to investigate substance use among psychiatric staff in the Greater Accra Region. The study was conducted at two prominent

psychiatric hospitals—Pantang and Accra Psychiatric Hospitals—chosen for their strategic significance and substantial psychiatric workforce. A cross-sectional design was employed to facilitate a snapshot analysis of the prevalence of substance use and its associated factors within a specified time frame. The study utilized a multistage sampling technique to select a sample of 219 psychiatric staff, determined according to Cochrane's formula for sample size calculation. The target population comprised licensed psychiatric health professionals, while auxiliary and non-clinical staff were excluded to ensure a focused analysis and maintain data integrity. Quantitative analysis was performed using IBM SPSS version 27. The statistical analysis encompassed descriptive, inferential, and regression analyses to establish prevalence rates and identify significant correlates of substance use.

CHAPTER FOUR

RESULTS

4.0 Introduction

This chapter systematically presents the results of the study, addressing the research objectives. It begins by outlining the demographic and socioeconomic characteristics of the participants, providing a comprehensive profile of the study population, including age, gender, marital status, professional roles, and training experiences. The chapter then examines the prevalence of substance use among participants. Additionally, bivariate and multivariate analyses explore the associations between substance use and various participant characteristics, highlighting significant factors such as gender, ethnicity, workplace environment, and psychosocial variables. Finally, the chapter presents the perceived consequences of substance use among psychiatric staff.

4.1 Demographic and socioeconomic characteristics of participants

The demographic and socioeconomic characteristics of the participants are summarized in Table 4.1. The mean age of participants was 32.13 years (SD = 7.67). A majority were female (67.48%), with males accounting for 32.52%. Most participants identified as Christian (86.0%), while 14.0% identified as Muslim. The largest proportion of participants resided in urban areas (63.76%), followed by rural (33.03%) and peri-urban settings (3.21%). The average years of schooling among participants was 14.88 years (SD = 5.54). Regarding marital status, 39.8% were married or cohabiting, 5.1% were previously married, and 55.1% were never married. Professional categories of the participants included psychiatric nurse assistants (23.3%), psychiatric nurses

(22.4%), and community mental health officers (18.7%), with smaller proportions of psychiatrists (11.4%), registered mental health staff (14.6%), and psychologists (8.2%). The mean years of professional experience was 5.41 (SD = 5.53). Most participants (80.8%) reported receiving in-service training on substance use, and 65.3% believed their workplace was not conducive for substance use. A rotation shift was the most common working schedule (57.1%). Additionally, 60.3% perceived a heavy workload, and 74.9% reported timely promotions. Routine assessments for substance use were conducted for 71.2% of participants, and 70.8% of workplaces had policies addressing substance use. The mean job satisfaction score was 7.02 (SD = 1.62), out of the total score of 10.

Table 4.1: Demographic and socioeconomic characteristics of participants

Variables		Frequency (N)/Mean	Percentage (%)
Age of participants, years		32.13 ± 7.67	
Sex	Female	110	67.48
	Male	53	32.52
Religion	Christianity	185	86.0
	Islam	30	14.0
Residential setting	Rural	72	33.03
	Peri-urban	7	3.21
	Urban	139	63.76
Schooling years		14.88 ± 5.54	
Ethnicity	Akan	96	44.7
	Ewes	45	20.9
	Ga-Dangwe	34	15.8
	Grusi/Kusasi/Guan	18	8.4
	Others	22	10.2
Residential setting	Urban	139	63.8
	Rural	79	36.2
Marital status	Married/cohabited	86	39.8
	Previously married	11	5.1
	Never married	119	55.1
Professional category of staff	Community mental health officers	41	18.7
	Psychiatric nurse	49	22.4
	Psychiatric nurse assistant	51	23.3
	Psychiatrist	25	11.4
	Psychologists	18	8.2

	Registered mental health staff	32	14.6
Years of professional experience		5.41 ± 5.53	
Received in-service training on substance use	Yes	177	80.8
	No	42	19.2
Conducive workplace for substance use	Yes	76	34.7
	No	143	65.3
Nature of working hours	Rotation shift	125	57.1
	Regular schedule	94	42.9
Perceived heavy workload	Yes	132	60.3
	No	87	39.7
Received timely promotion	Yes	164	74.9
	No	55	25.1
Staff are routinely assessed for substance use	Yes	156	71.2
	No	63	28.8
Hospital policy on substance use	Yes	155	70.8
	No	64	29.2
Overall job satisfaction (10 score)		7.02 ± 1.62	

4.2 Proportion of psychiatric staff using substances

4.2.1 Prevalence of substance use among participants

The prevalence of substance use among participants is detailed in Table 4.2, including accessibility, smoking, and alcohol consumption patterns. Regarding cigarette accessibility in the workplace, the majority of participants (62.1%) perceived it as difficult or impossible to access cigarettes, while 21.5% found it easy, and 16.4% were unsure. Despite this, 11.0% of participants reported ever smoking a cigarette, with a mean age at first smoking of 10.67 years (SD = 7.71). Among current smokers, the prevalence was low, at 3.7%. all smoking staff were not habitual

smokers; most smokers reported smoking on 1–5 occasions (90.0%), with only 10.0% smoking on 6–9 occasions. Social factors were the most common reason cited for smoking (80.0%), followed by stress relief (20.0%).

Alcohol consumption was more prevalent than cigarette use. While 30.6% of participants reported ever consuming alcohol, 27.4% had consumed alcohol within the last 12 months, and 23.3% reported alcohol intake within the last 30 days. Among those who had consumed alcohol recently, the majority (87.2%) reported drinking a volume of 132 centilitres during their most recent intake, while 12.8% consumed 66–99 centilitres. Social factors were the most frequently reported reason for alcohol consumption (46.4%), followed by curiosity (21.4%), self-indulgence (16.1%), stress relief (8.9%), and other reasons (7.1%). Overall, the combined prevalence of alcohol and cigarette use among participants was 26.0%.

Table 4.2: Alcohol and cigarette use behaviours among participants

Variables	Frequency (N) = 219	Percentage (%)
Perceived accessibility of cigarette in work environment		
Difficult/Impossible	136	62.1
Easy	47	21.5
Don't know	36	16.4
Ever smoked cigarette	24	11.0
Mean age at first smoke, years (mean)	10.67 ± 7.71	
Currently smoking	8	3.7
Number of occasions smoked		
1-5 occasions	18	90.0
6-9 occasions	2	10.
Reasons for smoking		
Social factors	12	80.0
Stress relief	3	20.0
Perceived accessibility of alcohol in work environment		
Difficult/Impossible	88	57.9
Easy	54	35.5
Don't know	10	6.6

Ever consumed alcohol	67	30.6
Consumed alcohol in last 12 months	60	27.4
Consumed alcohol in last 30 days	51	23.3
Volume of alcohol consumed in recent intake		
66-99 cl	5	12.8
132 cl	34	87.2
Reasons for alcohol intake		
Social settings	26	46.4
Stress relief	5	8.9
Curiosity	12	21.4
Own desire to self-indulgent	9	16.1
Other reason	4	7.1
Prevalence of substance use (alcohol & cigarette)	57	26.0

4.2.2 Bivariate analysis between alcohol and cigarette use and participants' characteristics

Table 4.3 presents the bivariate analysis that examined the relationship between any substance use in the last 30 days and various participant characteristics. Substance use was significantly more prevalent among male psychiatric staff (34.5%) compared to their female counterparts (20.9%; $p = 0.028$). Workplace factors were strongly associated with substance use. Staff who perceived their workplace as conducive for substance use reported significantly higher prevalence (44.7%) compared to those who did not (16.1%; $p < 0.001$). Similarly, hospital policy on substance use showed a significant effect, with higher prevalence among staff at institutions without such policies (33.5%) compared to those with policies (7.8%; $p < 0.001$). Participants whose workplaces routinely assessed for substance use had higher prevalence (30.8%) than those where such assessments were not conducted (14.3%; $p = 0.017$). Psychosocial factors also played a role in substance use prevalence. Staff who experienced anxiety and depression reported significantly higher prevalence (39.3%) compared to those who did not (20.2%; $p = 0.004$). Those who reported work fatigue similarly showed higher prevalence (33.6%) than those who did not (19.4%; $p = 0.045$). A family history of substance use was a strong predictor, with significantly higher prevalence among those with such a history (55.2%) compared to those without (24.8%; p

= 0.002). Peer influences were notable as well, with participants whose close friends used substances reporting significantly higher prevalence (52.5%) compared to those whose friends did not (18.4%; $p < 0.001$). Additionally, participants whose parents were divorced had higher prevalence (51.1%) compared to those whose parents were not divorced (21.6%; $p < 0.001$).

Behavioural and environmental factors were also significant. Staff who regularly attended nightclubs, bars, or pubs reported substantially higher prevalence of substance use (65.6%) compared to those who did not (21.5%; $p < 0.001$). Perceived accessibility of beer in the workplace environment was another important factor; prevalence was higher among those who perceived beer as easily accessible (44.4%) compared to those who found it difficult to access (22.7%; $p = 0.011$). Staff who experienced work-related stress reported higher prevalence (32.3%) compared to those without stress (14.9%; $p = 0.026$). Similarly, participants who previously succeeded in refusing alcohol or cigarettes had a higher prevalence of use (34.3%) than those who did not (15.4%; $p = 0.007$). Overall, the analysis revealed significant associations between substance use and variables such as sex, ethnicity, workplace environment, mental health, familial and peer influences, and accessibility of substances. These findings underscore the complex interplay of personal, professional, and social factors in influencing substance use behaviours among psychiatric staff.

Table 4.3: Bivariate analysis between alcohol and cigarette uses and participants' characteristics

Variables		Alcohol & cigarette in last 30 days		P-value
		Substance Use	No Use	
Age of participants, years (mean)		33.68 ± 6.87	31.58 ± 7.89	0.075
Sex	Female	20.9	79.1	0.028
	Male	34.5	65.5	
Religion	Christianity	26.5	73.5	0.508
	Islam	20.0	80.0	
Schooling years				
Residential setting	Urban	24.5	75.5	0.522
	Rural	29.1	70.9	
Marital status	Married/cohabited	27.9	72.1	0.932
	Previously married	27.3	72.7	
	Never married	25.2	74.8	
Professional category of staff	Community mental health officers	34.7	65.3	0.307
	Psychiatric nurse	19.6	80.4	
	Psychiatric nurse assistants	18.6	81.4	
	Psychiatrists	31.3	68.8	
	Registered mental health staff	29.3	70.7	
Received in-service training on substance use	Yes	28.2	71.8	0.170
	No	16.7	83.3	
Conducive workplace for substance use	Yes	44.7	55.3	<0.001
	No	16.1	83.9	
Nature of working hours	Rotation shift	28.0	72.0	0.534
	Regular schedule	23.4	76.6	
Perceived heavy workload	Yes	30.3	69.7	0.085
	No	19.5	80.5	
Received timely promotion	Yes	26.8	73.2	0.724
	No	23.6	76.4	
Staff are routinely assessed for substance use	Yes	30.8	69.2	0.017
	No	14.3	85.7	

Hospital policy on substance use	Yes	33.5	66.5	<0.001
	No	7.8	92.2	
Overall job satisfaction (10 points score)				
Estimated salary	≤2000	30.0	70.0	0.458
	2001 – 3000	21.5	78.5	
	3001 – 5000	31.4	68.6	
	5001 – 10000	20.5	79.5	
	≥10001	42.9	57.1	
Perceived adequate staffing	Yes	23.5	76.5	0.290
	No	33.3	66.7	
Perceived accessibility of cigarette	Difficult/Impossible	22.8	77.2	0.203
	Easy	36.2	63.8	
	Don't know	25.0	75.0	
Perceived accessibility of beer in work environment	Difficult	22.7	77.3	0.011
	Easy	44.4	55.6	
	Don't know	50.0	50.0	
Experience any work-related stress	Yes	32.3	67.7	0.026
Experience work fatigue	No	14.9	85.1	
	Yes	33.6	66.4	0.045
Experience anxiety and depression	No	19.4	80.6	
	Yes	39.3	60.7	0.004
Family history of substance	No	20.2	79.8	
	Yes	55.2	44.8	0.002
My close friends use substance	No	24.8	75.2	
	Yes	52.5	47.5	<0.001
My parents got divorced	No	18.4	81.6	
	Yes	51.1	48.9	<0.001
Regularly attend nightclubs/bars/pubs	No	21.6	78.4	
	Yes	65.6	34.4	<0.001
Previously succeeded refusal alcohol/cigarette	No	21.5	78.5	

	Yes	34.3	65.7	0.007
Perceived low self-esteem	No	15.4	84.6	
	Yes	43.8	56.3	0.052
Structure coping mechanism & support system facility available	No	25.3	74.7	
	Yes	31.1	68.9	0.430

4.3 Factors associated with substance use among psychiatric staff

Table 4.4 presents the multivariable analysis identifying factors associated with substance use among psychiatric staff. Participants in the middle tertile of drinking refusal self-efficacy showed a non-significant reduced likelihood of substance use compared to the lower tertile (aOR = 0.18, 95% CI = 0.03–1.12, p = 0.066), while those in the upper tertile exhibited a slightly increased, but non-significant, likelihood of substance use compared to the lower tertile (aOR = 1.16, 95% CI = 0.27–5.06, p = 0.843). Male psychiatric staff were more than twice likely to report substance use compared to their female counterparts, though this was not statistically significant (aOR = 2.34, 95% CI = 0.53–10.36, p = 0.262).

Perceived low self-esteem was associated with nearly four times increased odds of substance use (aOR = 3.87, 95% CI = 0.15–99.51, p = 0.414), compared to those who perceived higher self-esteem though the association was not significant. Similarly, participants with a history of previously successful attempts refusing substance use showed reduced, but non-significant, odds (aOR = 0.48, 95% CI = 0.08–2.76, p = 0.413) of current substance use. Hospital policy on substance use was significantly associated with reduced odds of substance use (aOR = 0.04, 95% CI = 0.00–0.75, p = 0.031). This indicates that staff were 96% times less likely to use any substance

if the facility had policy on substance use. Experiencing work fatigue or burnout was also significantly associated with 89% reduced odds of substance use (aOR = 0.11, 95% CI = 0.02–0.75, p = 0.024). Interestingly, participants who perceived the workplace culture as conducive for substance use had significantly reduced odds of reporting substance use (aOR = 0.15, 95% CI = 0.03–0.66, p = 0.012). However, the following factors were not significantly associated with substance use: having close friends who use substances (aOR = 0.85, 95% CI = 0.15–4.78, p = 0.850), parents' divorce during childhood (aOR = 1.74, 95% CI = 0.15–19.96, p = 0.657), and alcohol accessibility in the work environment, whether perceived as easy (aOR = 0.30, 95% CI = 0.03–3.39, p = 0.332) or difficult (aOR = 0.71, 95% CI = 0.04–12.02, p = 0.816). Regular attendance at nightclubs or bars (aOR = 0.10, 95% CI = 0.01–1.57, p = 0.102) and work-related stress (aOR = 2.37, 95% CI = 0.22–25.42, p = 0.476) were also not significantly associated with current substance usage among the staff.

Table 4.4: Factors associated with alcohol and cigarette use among psychiatric staff

Variables	aOR)	95 % C. I.	P-value
Drinking Refusal Self-Efficacy			
Lower tertile = Ref	1.00		
Middle tertile	0.18	0.03, 1.12	0.066
Upper tertile	1.16	0.27, 5.06	0.843
Sex, female	1.00		
male	2.34	0.53, 10.36	0.262
Perceived low self-esteem	3.87	0.15, 99.51	0.414
Previously succeeded attempts to use alcohol/cigarette	0.48	0.08, 2.76	0.413
Family history of substance	0.18	0.01, 2.84	0.224
My close friends use substances	0.85	0.15, 4.78	0.850
My parents divorced when I was a child	1.74	0.15, 19.96	0.657
Perceived accessibility of beer in work environment			
Don't know = Ref	1.00		
Difficult/Impossible	0.71	0.04, 12.02	0.816

Easy	0.30	0.03, 3.39	0.332
Hospital policy on substance	0.04	0.00, 0.75	0.031
Staff are routinely assessed for substance use	8.43	0.68, 10.98	0.098
Regular attendant of nightclubs/bars/pubs	0.10	0.01, 1.57	0.102
Experience work-related stress	2.37	0.22, 25.42	0.476
Experience work fatigue/high burnout	0.11	0.02, 0.75	0.024
Perceived conducive workplace culture for substance use	0.15	0.03, 0.66	0.012
Experience anxiety and depression	0.99	0.18, 5.29	0.986

4.4 Perceived consequences of substance use among psychiatric

Table 4.5 presents the perceived consequences of substance use among psychiatric staff are summarized. An overwhelming majority (94.5%) of participants reported being aware of the negative consequences of alcohol and cigarette use. Over half of the respondents perceived that substance use negatively impacted their professional development (58.8%), marriage and family life (52.3%), social relationships (52.3%), and working relationships with colleagues (50.4%). Furthermore, 41.8% reported that substance use impaired their capacity to deliver safe and effective care. Various signs and symptoms were recognized as complications of substance misuse. Temporary blackouts or short-term memory lapses were reported by 15.8% of respondents, while 14.8% acknowledged unsuccessful attempts to quit. Restlessness, anxiety, or insomnia (14.2%), as well as strong cravings or urges to use substances (14.2%), were also frequently identified. Additional symptoms included shaking (10.4%), digestive issues such as diarrhoea or constipation (10.4%), and nausea (9.8%). Less commonly reported symptoms included sweating (3.8%) and making excuses for drinking, such as using substances to cope with stress or enhance relaxation (6.6%). Respondents also highlighted complications arising from substance use. Dependency and addiction (24.5%) and mental health disorders (24.5%) were among the most frequently cited consequences. Physical health problems were the most commonly reported complication, affecting

34% of participants. Behavioural changes were mentioned by 10.6% of respondents, while withdrawal symptoms (5.3%) and physical injuries (1.1%) were less frequently noted.

Table 4.5: Perceived consequences of alcohol and cigarette among psychiatric staff

Variables	Frequency	Percent
Awareness on Alcohol/Cigarette negative consequences	190	94.5
Negatively impact professional development	67	58.8
Impairs my capacity to deliver safe and effective deliver care	71	41.8
Negatively impacted my marriage and family life	58	52.3
Negatively impacted my social relationships	57	52.3
Negatively impacted my working relationship with colleagues	59	50.4
Signs or symptoms are complications of substance misuse		
Nausea	18	9.8
Unsuccessful attempts to stop.	27	14.8
Temporary blackouts/ short-term memory	29	15.8
Sweating	7	3.8
Strong craving or urge to drink alcohol or smoke.	26	14.2
Shaking	19	10.4
Restlessness, anxiety, insomnia	26	14.2
Making excuses for drinking (dealing with stress, relax or good feeling)	12	6.6
Digestive issues like diarrhoea or constipation	19	10.4
Complications from substance use		
Dependency and addiction	46	24.5
Withdrawal symptoms	10	5.3
Physical injuries	2	1.1
Behavioural changes	20	10.6
Mental health disorders	46	24.5
Physical health problems	64	34

4.5 Chapter Summary

This chapter presented the findings of the study in accordance with the established research objectives. The demographic profile indicates a predominantly young, female, and urban workforce with diverse levels of professional experience. A significant proportion of participants reported receiving in-service training on substance use; however, many perceived their work environments as stressful and lacking in support for mental well-being. The prevalence of substance use—particularly alcohol—was substantial, with 26% of respondents indicating use of either alcohol or cigarettes within the preceding 30 days. While cigarette use remained relatively low, alcohol consumption was more prevalent and was largely influenced by social contexts and curiosity. The data also revealed instances of early initiation of smoking, alongside concerns regarding the accessibility of substances in the workplace. Bivariate analysis uncovered significant associations between substance use and variables such as gender, workplace environment, psychosocial stressors, family history of substance use, and peer influence. Male employees, those experiencing mental health challenges or work-related fatigue, and those lacking institutional policies or structured coping mechanisms were more likely to report substance use. Environmental and behavioural factors—such as frequenting nightclubs and perceived ease of access to alcohol—emerged as critical predictors. Multivariable regression analysis further substantiated the significance of institutional and psychosocial variables. The existence of a hospital policy regarding substance use and the experience of work fatigue were both significantly associated with reduced odds of substance use. Conversely, perceptions of a supportive workplace culture regarding substance use paradoxically predicted lower reported usage, suggesting potential underreporting or normalization of substance use within those environments. Although self-efficacy was assessed, it did not demonstrate a statistically significant association within this

model. Ultimately, the perceived consequences of substance use were profound. A substantial majority of participants recognized its adverse effects on professional development, family life, and interpersonal relationships. Complications such as dependency, mental and physical health issues, and behavioural disturbances were also frequently reported.

CHAPTER FIVE

DISCUSSION

5.0 Introduction

The chapter presents the discussion section of the thesis report. It consists of interpretations the author ascribed to the current findings and their implications for the wellbeing of professional health workers and policymakers. The sections also contrast the current findings with that of existing literature. It is sectioned under three main subheadings: prevalence of substance use, factors associated with substances use, and the perceived consequences of substance use especially among psychiatric staff.

5.1 Proportion of psychiatric staff using substances

The study aimed to determine the prevalence and factors associated with substance use (cigarette & alcohol) among psychiatric staff. A total 219 staff responded to the survey, indicating a response rate of 100%. Substance use among psychiatric health professionals is a critical issue due to its implications for patient care, professional credibility, and the ability of these professionals to address substance-related disorders effectively. The study findings indicate a notably low prevalence of cigarette use, with 11.0% of participants reporting ever smoking and only 3.7% identified as current smokers. These rates are significantly below the global pooled prevalence of 21% among healthcare workers (Nilan et al., 2019) and markedly lower than the 34.5% reported in Palestine (Mizher et al., 2018) or 28.2% in Cyprus (Zinonos et al., 2016). This discrepancy suggests that psychiatric health professionals may have a stronger awareness of

smoking risks and a greater inclination to avoid smoking, potentially due to their role in managing substance use disorders.

On the other hand, referencing the smaller respondents who indicated smoking, social factors were the most cited reason for smoking, aligning with global trends that highlight the influence of social contexts on smoking initiation (Xia et al., 2020). Despite perceptions that cigarette access in the workplace was difficult or impossible for 62.1% of respondents, 21.5% found access easy, raising questions about the influence of environmental availability on smoking behaviours. Globally, disparities in cigarette use exist among healthcare workers based on demographics and occupation. For example, in Palestine, 34.5% of healthcare workers were smokers, with males more likely to smoke than females (Mizher et al., 2018). Similarly, 28.2% of healthcare workers are smokers, with younger and male professionals identified as higher-risk groups (Zinonos et al., 2016). The much lower prevalence in the current study suggests that psychiatric health professionals may be more inclined to avoid smoking, possibly due to greater awareness of its health risks.

Alcohol consumption among psychiatric health professionals was considerably more prevalent than cigarette use. In this study, 30.6% of participants reported ever consuming alcohol, 27.4% had consumed it within the past year, and 23.3% had consumed alcohol within the last 30 days. These figures are consistent with global trends, where alcohol use among healthcare workers is pervasive, with rates ranging from 26.7% in Italy (Cedrone et al., 2022) to 43.9% in Kenya (Jaguga et al., 2022).

Social settings were the most frequently cited reason for alcohol use (46.4%), suggesting that social norms and environments are strong drivers of drinking behaviour in this group. The high volume of alcohol consumption during recent drinking occasions 87.2% reported consuming

132 cl or more, indicates potential risks for problematic drinking. Although stress relief was not a primary reason cited for alcohol use in this study (8.9%), previous research has identified occupational stress as a key factor driving alcohol consumption among healthcare workers (Cedrone et al., 2022; Junqueira et al., 2017).

The combined prevalence of alcohol and cigarette use in this study was 26.0%, emphasizing the co-occurrence of these behaviours among psychiatric health professionals. Although the prevalence of cigarette use was relatively low, alcohol consumption remains a pressing concern. These findings corroborate Shah et al., (2025) who found alcohol to be the most used substance among healthcare professionals.

5.3 Factors associated with substance use among psychiatric staff

Substance use among psychiatric health professionals is influenced by individual, socio-cultural, and workplace factors, necessitating a multifaceted approach for effective intervention. Individual vulnerabilities, such as low self-esteem, are strongly associated with substance use, as individuals with diminished self-worth often resort to maladaptive coping mechanisms (Roberts et al., 2016; Clark & Scott, 2020). This is particularly critical in high-stress psychiatric healthcare environments where emotional demands can exacerbate such vulnerabilities. Addressing self-esteem through mental health support and counselling could play a pivotal role in mitigating substance use. Similarly, drinking refusal self-efficacy reflects a nuanced influence, with moderate confidence linked to reduced substance use, while higher self-efficacy demonstrates inconsistent results. Personalised support to enhance coping mechanisms while addressing triggers is essential (Lander et al., 2013).

Workplace factors significantly shape substance use behaviours. Explicit hospital policies addressing substance use have proven effective in reducing the incidence, underscoring the role of institutional frameworks in fostering accountability and support (McCann & Lubman, 2018; Subica et al., 2012). A positive organisational culture that prioritises health and well-being also act as a deterrent, curbing maladaptive behaviours and reinforcing professional norms (Li et al., 2023). Interestingly, despite high levels of burnout and fatigue, healthcare professionals are less likely to engage in substance use, reflecting a strong sense of professional accountability, particularly in psychiatric care settings where patient safety is paramount.

Gender differences are notable, with male staff exhibiting a higher likelihood of substance use, consistent with literature highlighting socio-cultural norms and stress-related coping mechanisms that disproportionately affect men (Lander et al., 2013). Interventions tailored to address gender-specific stressors and coping styles could help mitigate these risks. Socio-cultural influences, such as peer pressure, play a lesser role among psychiatric professionals, likely moderated by the professional accountability inherent in their roles (Jackson et al., 2018; Kelly & Vuolo, 2019). Surprisingly, attendance at social venues such as nightclubs is correlated with reduced substance use, diverging from typical assumptions. This may reflect greater caution among professionals who are aware of the implications of substance misuse. Promoting awareness and moderation in social settings could further support healthy behaviours.

5.4 Perceived consequences of substance use among psychiatric Staff

Substance use among psychiatric health professionals significantly impacts personal well-being, professional performance, and interpersonal relationships. The findings of this study align with the Health Belief Model (HBM) by demonstrating how perceptions of susceptibility, severity, and barriers influence substance use behaviours among psychiatric professionals. Most

participants acknowledged the negative consequences of alcohol and cigarette use, indicating high perceived severity of substance use. They recognised its impact on professional development, social relationships, and workplace dynamics, reflecting a strong awareness of its adverse effects, which serves as an internal cue to action (Salyers et al., 2017; Wallace & Buchanan, 2020; Zhou et al., 2018). However, despite this awareness, substance use persisted among some respondents, suggesting that perceived barriers, such as workplace stress or lack of institutional support, may outweigh the perceived benefits of cessation. The impact of substance use on patient care is particularly concerning, with 41.8% of respondents acknowledging impaired capacity to deliver safe and effective care. This finding is consistent with Smith & Jones (2015) which linked substance misuse to compromised decision-making and clinical errors. Here, perceived susceptibility is evident, healthcare workers recognise that substance use increases their risk of professional errors. However, the persistence of substance use despite this awareness suggests that low self-efficacy may be a contributing factor, indicating that some professionals feel unable to change their behaviour despite recognising the risks.

Health complications, including blackouts, memory lapses, anxiety, and cravings, were frequently reported, reinforcing the perceived severity of substance use. Participants' awareness of these consequences suggests that knowledge alone is insufficient for modifying behaviour. This aligns with the HBM premise that individuals may continue engaging in harmful behaviours unless strong cues to action and high self-efficacy are present (Brown & Miller, 2020). Interpersonal relationships were also significantly affected, with substance use leading to communication breakdowns, increased conflict, and disrupted family dynamics, which further highlights the perceived severity of substance use on social well-being. These findings align with research that highlights the far-reaching effects of substance misuse on families and communities (Wallace &

Buchanan, 2020; Zhou et al., 2018). These findings reinforce the need for targeted interventions that align with the HBM by enhancing self-efficacy, reducing barriers, and strengthening cues to action. Strategies such as workplace education programmes, peer support networks, and mental health services can serve as effective interventions to modify behaviours and reduce substance use among psychiatric health professionals.

5.5 Chapter Summary

This chapter presented an interpretation of the key findings regarding substance use among psychiatric staff, framed within the context of the HBM and SDOH model. While the prevalence of cigarette use was found to be relatively low, alcohol consumption was significantly higher, aligning with global trends and suggesting that social factors serve as primary determinants. Despite a high level of awareness regarding the associated risks, indicative of strong perceived severity and susceptibility to substance use continued, likely attributable to barriers such as occupational stress, insufficient institutional support, and low self-efficacy. Protective factors, including hospital policies and positive workplace cultures, were associated with decreased substance use. Additionally, variables such as gender, self-esteem, and job fatigue influenced substance use behaviours, with male staff reporting a higher likelihood of use. The perceived consequences of substance use encompassing impaired professional performance, strained interpersonal relationships, and physical health symptoms underscore its broader implications. Nevertheless, the mere possession of knowledge did not translate into behavioural change, thereby emphasizing the necessity for supportive interventions that enhance self-efficacy and address environmental barriers. Collectively, these findings validate the utility of the HBM while highlighting the importance of systemic strategies aimed at fostering healthier behaviours and safeguarding the well-being of mental health professionals.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.1 Summary of Main Findings

The study aimed to determine the prevalence and factors associated with substance use (cigarette and alcohol) among psychiatric staff. Of the 219 respondents, participants had a mean age of 32.13 years, were predominantly female (67.48%), and primarily resided in urban areas (63.76%). The majority identified as Christians (86.0%), representing diverse ethnic and professional backgrounds, including psychiatric nurses, nurse assistants, and community mental health officers. A significant proportion reported receiving in-service training on substance use (80.8%), perceived heavy workloads (60.3%), and worked in environments equipped with substance use policies (70.8%) and routine assessments (71.2%). The prevalence of cigarette use was found to be 11.0% for lifetime smoking and 3.7% for current use, whereas alcohol consumption was more prevalent, with 30.6% reporting lifetime use, 27.4% consuming alcohol within the last 12 months, and 23.3% within the last 30 days. Social settings were the most commonly cited reason for both alcohol and cigarette use. The combined prevalence of alcohol and cigarette use was 26.0%. Hospital policies addressing substance use significantly reduced the likelihood of substance use, as did a workplace perceived as not conducive to substance use. Work fatigue or burnout was also significantly associated with reduced odds of substance use. While participants in the middle tertile of drinking refusal self-efficacy exhibited reduced odds of substance use, those in the upper tertile showed slightly increased odds; however, neither association reached statistical significance. Similarly, perceived low self-esteem was linked to increased odds of substance use but did not achieve statistical significance. A substantial majority (94.5%) of participants acknowledged the adverse consequences of alcohol and cigarette use. Over

half reported negative effects on professional development (58.8%), family life (52.3%), social relationships (52.3%), and workplace dynamics (50.4%), with 41.8% identifying compromised patient care. Major complications included physical health issues (34%), dependency or addiction (24.5%), and mental health disorders (24.5%), highlighting the extensive impact of substance use on personal, professional, and health outcomes.

6.2 Recommendations

The study therefore recommends the following measures to enhance the well-being of health professionals and ensure the safety and quality of care provided to patients in relation to the use of alcohol and cigarettes.

1. The Ministry of Health should develop and enforce comprehensive workplace substance use policies at the national and facility levels, including clear zero-tolerance guidelines and supportive, non-punitive pathways for staff requiring help.
2. Pilot and gradually scale workplace substance use policies. The Ministry of Health and Mental Health Authority should begin with pilot implementations in selected psychiatric facilities before rolling out national policies. This stepwise approach allows for testing, adjustment, and contextualization based on early results and resource availability.
3. Healthcare facility management should implement mandatory training programmes that educate staff on the risks, signs, and consequences of substance use, as well as effective coping mechanisms.
4. Furthermore, healthcare facility management should cultivate an environment that discourages substance use while promoting open dialogue, peer support, and mental health assistance to mitigate burnout and work-related fatigue among staff.

5. There is also a pressing need for healthcare facility management to offer confidential counselling, therapy, and employee assistance programmes to support staff currently engaging in the studied substances.
6. It is imperative for staff to adopt health-promoting lifestyle practices, such as regular exercise, mindfulness, and relaxation techniques, to diminish reliance on substances for stress relief.

6.3 Conclusion

This study identified multifaceted factors associated with substance use among psychiatric health professionals, emphasising the significant impact of substance use on personal well-being, professional performance, and interpersonal relationships. Awareness of the consequences was widespread, encompassing impaired patient care, hindered professional development, and strained relationships. Protective factors, such as robust workplace policies, a supportive organisational culture, and routine assessments of substance use, emerged as critical mitigators. Importantly, this study provides one of the first systematic examinations of substance use among psychiatric staff within the Accra Metropolis, contributing new evidence to an area with limited empirical research in Ghana. Unlike many international findings where demographic and psychosocial factors strongly predict substance use, this study found limited statistical significance of these variables in the Ghanaian psychiatric context. This suggests that context-specific workplace and cultural dynamics, rather than individual characteristics alone, may play a stronger role in influencing substance use among psychiatric staff in Ghana.

The findings underscore the urgent need for targeted, contextually relevant interventions, including strengthened workplace support systems and proactive substance use policies to protect

staff well-being and ensure the safety and quality of care delivered to patients. By establishing baseline prevalence and identifying actionable workplace factors, this study provides a valuable foundation for future qualitative and longitudinal research aimed at uncovering deeper contextual drivers and informing sustainable policy development in Ghana's mental health sector.

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APPENDICES

1.0 Participant's Information Sheet

Title of Study: Substance use (cigarette & alcohol) among psychiatric staff in the Accra metropolis: examination of prevalence and associated factors

Principal Investigator: Mr. Samuel Kwakye

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Other Investigators:
Name: Prof. Samual Adjorlolo, and Dr. Gideon Puplampu

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Background and Purpose of Research: Greetings, my name is Samuel Kwakye, and I am a student enrolled in the Department of Mental Health at the University of Ghana. I am currently engaged in a research investigation entitled "Prevalence and factors associated with substance use (cigarettes and alcohol) among psychiatric staff in the Accra Metropolis." The evaluation of substance misuse among psychiatric personnel carries importance for various reasons. The potential consequences of health care personnel experiencing a decline in their ability to provide safe and effective treatment for patients include the occurrence of errors, compromised judgement, and compromised patient safety. The use of substances can also lead to negative outcomes for the physical and mental health of employees, worsening problems and reducing their job performance. In addition, the matter of workers contending with substance misuse is a noteworthy obstacle, as it undermines the trust and assurance that patients and colleagues bestow upon the healthcare profession. Furthermore, this research is of great importance since it allows for the prompt recognition and execution of essential interventions. Ultimately, this study bears significance from an organisational standpoint to ensure the well-being and safety of both its staff and patients. This research aligns with the criteria necessary for the attainment of a master's degree, and the obtained results are exclusively intended for academic purposes.

Duration: The study is expected to start in April and end in December 2024. The target population for the study is comprised of psychiatric health professionals: psychiatrist, registered mental health staff (RMN), psychologists, community mental health officers (CMHO) and clinical psychiatric

officers (CPO). If you fall under this category and I would greatly appreciate your cooperation in allocating 15 minutes of your time to complete the questionnaire through a personal interview

Possible Risks: The potential inconvenience involves the time required to complete the administered questionnaires. Certain questions may induce discomfort or compromise your privacy. Disclosing a history of substance misuse may also be uncomfortable. You have the option to skip questions or discontinue the interview at any point if you prefer not to answer the entire questionnaire.

Benefits: The participant would be contributing information which may contribute to more targeted policies and interventions addressing substance misuse among psychiatric health professionals in Ghana.

Costs: There is no cost for participation. If you choose to participate in the study the researcher and assistants will visit you at the place of your choosing to conduct interviews as required. There are no additional costs.

Compensation: You will be given pens to show appreciation.

Confidentiality: Records identifying the participants will be maintained for ten years and then discarded. Yes. I will ensure that no clues to your identity appear in the thesis.

Voluntary Participation/withdrawal: Participant participation is solely voluntary, and the participant has the right to withdraw from the research at any time without any objections.

Outcome and Feedback: Data obtained will be analysed together and the results will be the aggregate findings from all participants. The final findings will be shared on the University of Ghana repository for the general public and participants interested in the study.

Appropriate alternatives to procedure: If you prefer not to be a participant in this research study but are curious about the research, feel free to reach out to the researcher or the research assistant. They will gladly provide details about the research, including an introduction to the procedure and information about the study they are currently conducting.

Feedback to participants: Significant new findings discovered during the research that may relate to the participants' willingness to continue participation will be made known to the participant.

Funding information: The study has received no external funding or sponsorship.

Sharing of participants information/data: The data for the study is owns solely by the principal investigator. In the event that the data required by other independent researchers for cross validation of the finding, data protection ethnics will be followed.

Storage of samples: The study will store the electronic data on a computer with a protected password. The data will be disposed of after 5 years of completing the report.

Contacts for Additional Information: For further enquiries, the researcher may be contacted. Contact information is provided below:

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Your rights as a Participant

- To refuse to be in the study at all, and to stop participating at any time after you begin the study.
- To be told what the study is trying to find out, what will happen to you, and what you will be asked to do if you are in the study.
- To participate voluntarily in choosing to be part of the study,
- To refuse to participate or to discontinue at any stage/level of the study.

2.0 Informed Consent

Statement of Consent/Voluntary Agreement

- The above document describing the purpose, benefits, risks, and procedures for the research [Substance misuse (cigarette & alcohol) among psychiatric staff in the Accra metropolis: examination of prevalence and associated factors] has been red and explained to me in detail in a language of my understanding.
- I have been allowed to ask any question(s) I have about the research and my question(s) has/have been answered to my satisfaction.
- I have been told that I may contact *[Samuel Kwakye, 0274204060]* if I have questions about my rights as a study participant, to discuss problems and concerns or suggestions related to the research.

I understand that a copy of the information sheet and the informed consent forms will be given to me to take home after it has been signed.

I have read the consent form and agree to participate in this research study voluntarily.

_____ _____

Name and Signature/Thumb print of Participant Date

_____ _____

Name and Signature/Thumb print of person obtaining consent Date

_____ _____

Statement of Witness

I was present while the benefits, risks and procedures were read to the volunteer. All questions were answered, and the volunteer has agreed to take part in the research voluntarily.

_____ _____

Name and Signature/Thumb print of Witness Date

3.0 Questionnaire

Hospital Code: _____

Interview Date: _____

Interviewer Code: _____ **Questionnaire Code:** _____

Section A: Sociodemographic characteristics of respondents

1. What is your age in completed years? [_____ years]
2. What is your sex?
   a. Male
   b. Female
3. What is your marital status?
   a. Never married.
   b. Married or cohabitating.
   c. Previously married (divorced, separated, or widowed)
4. Which of the following settings did you grow up?
   a. Urban setting
   b. Rural setting
   c. Peri-urban setting
5. What is your religious affiliation?
   a. Christianity
   b. Islam
   c. Traditional religion
   d. No religion
   a. Other religions, please, specify……
6. What is your highest educational level completed?
   a. No formal education
   b. Primary education
   c. Junior secondary
   d. Secondary/vocational education
   e. Tertiary education
7. What is your total number of schooling years? Please, count from primary one to the highest level you completed. [_____ years].

Section B: Professional Career Background

1. Which professional category do you belong to?
    a. Psychiatric nurse
    b. Psychiatric nurse assistant
    c. Psychiatrist
    d. psychologists
    e. community mental health officers (CMHO)
    f. clinical psychiatric officers (CPO).

2. What many years have been working as a psychiatric staff? [____ yrs.]

3. There are enough health staff (workforce) at my unit within the hospital.
    a. Yes
    b. No

4. What is your estimated salary? (We understand that your estimated salary may be sensitive. Be assured that your information will be treated with confidentiality)
    a. ≤2000.00
    b. 2001 – 3000.00
    c. 3001 – 5000.00
    d. 5001 – 10000.00
    e. ≥ 10001.00

5. Have you received any in-service training on substance use?
    a. Yes
    b. No

6. What is the nature of shift?
    a. Rotational shift
    b. Regular schedule

7. My workplace culture is conducive to substance use.
    a. Yes
    b. No
    c. Not applicable

8. I regularly have heavy workload.
    a. Yes
    b. No

9. I receive promotions timely together with other privileges due me.
    a. Yes
    b. No

10. There is a policy on substance use for staff in the hospital.
    a. Yes
    b. No

11. Staff are routinely assessed for substance use in my facility.
    a. Yes
    b. No

12. On a scale of 1 to 10, how will you describe your overall level of satisfaction regarding job including conditions of service, renumeration, and others? …….

Section C: Cigarette use

1. How difficult do you think it would be for you to get cigarettes (excluding e-cigarettes) if you wanted?
    a. Impossible
    b. Very difficult
    c. Fairly difficult
    d. Fairly easy
    e. Very easy
    f. Don't know.

2. Have you ever smoked cigarettes?
    a. Yes
    b. No
3. If yes. at what age did you use cigarette for the 1st time? ……. years old. If no to question 2, skip to section D.

4. Please, refer to the table and the appropriate box that suit your experience.

On how many occasions (if any) during your lifetime have you smoked cigarettes (excluding e-cigarettes)?

0	1-2	3-5	6-9	10-19	30-39	40/more

5. How often have you smoked cigarettes (excluding e-cigarettes) during the LAST 30 DAYS?
    a. Not at all
    b. Less than 1 cigarette per week
    c. Less than 1 cigarette per day
    d. 1–5 cigarettes per day
    e. 6–10 cigarettes per day
    f. 11–20 cigarettes per day
    g. More than 20 cigarettes per day

6. When (if ever) did you FIRST do each of the following things? Mark one box for each line.

	Never	≤9yrs	10yrs	11yrs	12yrs	13yrs	14yrs	15yrs	≥16yrs
Smoke your first cigarette (excluding e-cigarettes)									
Smoke cigarettes on a daily basis (excluding e-cigarettes)									

7. Which of the following best describes the context in which smoked or started smoking cigarette?
    a. Social settings (peer pressure, belongingness, etc.)
    b. Stress relief
    c. Curiosity
    d. Others, specify, …….

Section D: Alcohol use

The next questions are about alcoholic beverages – including beer, cider, premixed drinks, wine, and spirits.

1. How difficult do you think it would be for you to get each of the following, if you wanted? Mark one box for each line.

	Impossible	Very difficult	Fairly difficult	Fairly easy	Very easy	Don't know
Beer						
Cider Premixed drinks						
Wine						
Spirits						

2. On how many occasions (if any) have you had any alcoholic beverage to drink? Mark one box for each line.

	0	1-2	3-5	6-9	10-19	30-39	40/more
In your lifetime							
During the last 12 months							
During the last 30 months							

3. Think back over the LAST 30 DAYS. On how many occasions (if any) have you had any of the following to drink? Mark one box for each line.

	0	1-2	3-5	6-9	10-19	30-39	40/more
Beer							
Cider							
Premixed drinks							

Wine

Spirits

Others (Pito etc.)

4. When was the last day you drank alcohol? If your response is “a”, skip to Section F.
    a. I have never drunk alcohol.
    b. 1–7 days ago
    c. 8–14 days ago
    d. 15–30 days ago
    e. 1 month–1 year ago
    f. More than 1 year ago

5. Think of the LAST DAY that you drank any alcohol. Which of the following beverages did you drink on that day? Mark all that apply.

	Beer	Cider	Premixed drinks	Wine	Spirits
I never drink any (beer, cider, premixed drinks, wine, spirits)					
I did not drink any on the last day.					
≤ 33 cl (equivalent Guinness bottle- 330ml)					
66-99 cl (equivalent 2-3 Guinness bottles)					
≥ 132 cl (≥ 4 Guinness bottles)					

6. Please indicate on this scale from 1 to 10 how drunk you would say you were that last day you drank alcohol. (If you felt no effect at all you should mark “1”)

Not at all									Heavily intoxicated, for example not remembering what happened
1	2	3	4	5	6	7	8	9	10

7. The next question is about alcohol consumption during the last 30 days.
Think back again over the LAST 30 DAYS. How many times (if any) have you had five or more drinks on one occasion? “A `drink´ is defined as 1 glass/bottle/can of beer (33 cl), 1

glass of wine (ca 15 cl), 1 glass of spirits (ca 4 cl), 1 glass/bottle of cider (33 cl), 1 glass/bottle of premixed drinks (spritz, alcopops etc. (33 cl).” (optional: cider, premixed drinks).

a. None
b. 1
c. 2
d. 3-5
e. 6-9
f. 10 or more times

8. On how many occasions (if any) have you been intoxicated from drinking alcoholic beverages, for example staggered when walking, not being able to speak properly, throwing up or not remembering what happened? Mark one box for each line.

	0	1-2	3-5	6-9	10-19	30-39	40/more
In your lifetime							
During the last 12 months							
During the last 30 months							

9. When (if ever) did you FIRST do each of the following things? Mark one box for each line.

	Never	≤9yrs	10yrs	11yrs	12yrs	13yrs	14yrs	15yrs	≥16yrs
Drink alcohol (at least one glass)									
Get drunk on alcohol									

10. In the LAST 12 MONTHS, how often did you drink …Mark one box for each line.

	Never	Seldom	Sometimes	Mostly	Always
because it helps you enjoy a party?					
because it helps you when you feel depressed or nervous?					

to cheer up when you're in a bad mood?

because you like the feeling?

to get high?

because it makes social gatherings more fun?

to fit in with a group you like?

because it improves parties and celebrations?

to forget about your problems?

because it's fun?

to be liked?

so, you won´t feel left out?

11. Which of the following best describes the context in which started drinking alcohol?
    a. Social settings (peer pressure, belongingness, etc.)
    b. Stress relief
    c. Curiosity
    d. Own desire for self-indulgent
    e. Others, specify, …….

Section E: Factors Influencing Substance Use

1. I experience work-related stress on a daily basis.
    a. Yes
    b. No

2. I experience work fatigue (high burnout).
    a. Yes
    b. No

3. I experience anxiety and depression.
    a. Yes
    b. No

4. My family has a history of substance (alcohol or cigarette) misuse.
    a. Yes
    b. No

5. My close friends use substances such as cigarette and alcohol (drinking or smoking to celebrate and be sociable, or for conformity).
    a. Yes
    b. No

6. My parents divorced when I was a child (dysfunctional family structures)?
    a. Yes
    b. No
    c. Not applicable

7. I am a regular (at least once a week) attendant of nightclubs, bars, or pubs?
    a. Yes
    b. No
    c. Not applicable

8. I have previously succeeded in attempts at refusing alcohol or cigarettes.
    a. Yes
    b. No

9. Do you have low self-esteem?
    a. Yes
    b. No

10. Are there structured coping mechanisms and support systems available at the facility to staff who may need them due to cigarette or alcohol use?
    a. Yes
    b. No

The upcoming questions will require you to assess your capability to manage situations involving alcohol. You will encounter a series of scenarios where alcohol consumption might occur. It's understood that some situations make it easier for individuals to abstain from drinking than others. For each statement, please indicate your level of resistance to drinking in that particular situation by circling the corresponding number.

I am very sure I could NOT resist drinking	I most likely would NOT resist drinking	I probably could NOT resist drinking	I probably could resist drinking	I most likely could resist drinking	I am very sure I could resist drinking
1	2	3	4	5	6

SN	Item	Scoring					
1	When I am out to dinner	1	2	3	4	5	6
2	When I am watching T.V	1	2	3	4	5	6
3	When I am angry	1	2	3	4	5	6
4	When someone offers me a drink	1	2	3	4	5	6

5	When I am at lunch	1	2	3	4	5	6
6	When I feel frustrated	1	2	3	4	5	6
7	When I am worried	1	2	3	4	5	6
8	When I feel upset	1	2	3	4	5	6
9	When I feel down	1	2	3	4	5	6
10	When I feel nervous	1	2	3	4	5	6
11	When I am on the way home from work	1	2	3	4	5	6
12	When I feel sad	1	2	3	4	5	6
13	When my spouse or partner is drinking	1	2	3	4	5	6
14	When I am listening to music or reading	1	2	3	4	5	6
15	When my friends are drinking	1	2	3	4	5	6
16	When I am by myself	1	2	3	4	5	6
17	When I have just finished playing sport	1	2	3	4	5	6
18	When I am at a pub or club	1	2	3	4	5	6
19	When I first arrive home	1	2	3	4	5	6

Drinking Refusal Self-Efficacy Questionnaire (Oei et al., 2005).

Section F: Consequences of Substance Misuse

Section F is limited to only participants with history of substance (alcohol and cigarette) use for at least the past 30 days. If you have never smoked cigarette or drunk alcohol of any type, skip to question 8.

1. Are you aware that cigarette smoking or alcohol use could have negative consequences for your personal and other persons related to you?
    a. Yes
    b. No

2. Which of the following signs or symptoms are complications of substance misuse (e.g., alcohol and cigarette)?
    a. Nausea
    b. Sweating
    c. Shaking
    d. Temporary blackouts/ short-term memory
    e. Making excuses for drinking (dealing with stress, relax or good feeling)
    f. Strong craving or urge to drink alcohol or smoke.
    g. Restlessness, anxiety, insomnia
    h. Unsuccessful attempts to stop.
    i. Digestive issues like diarrhoea or constipation

3. When I use substance, it impairs my capacity to deliver care that is both safe and effective?
    a. Yes
    b. No
    c. Not applicable

4. Substance use has negatively impacted my professional development.
    a. Yes
    b. No
    c. Not applicable

5. Substance use has negatively impacted my marriage and family life.
    a. Yes
    b. No
    c. Not applicable

6. Substance use has negatively impacted my social relationships.
    a. Yes
    b. No
    c. Not applicable

7. Substance use has negatively impacted my working relationship with colleagues.
    a. Yes
    b. No
    c. Not applicable

8. In your own words describe how cigarette smoking and/or alcohol intake has impacted your life.
    ……
    ……
    ……
9. Which of the following are the complications of drug use?
    a. Dependency and addiction
    b. Withdrawal symptoms (shaking, nausea, and sweating)
    c. Physical injuries
    d. Behavioural changes (unstable mood, poor judgement, slurred speech, memory and poor coordination)
    e. Mental health disorders (anxiety and depression, blackouts, dementia, insomnia)
    f. Physical health problems such as liver disease, digestive problems, cancers, heart diseases, stroke, etc.