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QUALITY OF LIFE AND MENTAL HEALTH STATUS OF GHANAIAN MILITARY PERSONNEL POST-PEACEKEEPING MISSIONS

BY

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DECLARATION

I, Sheba Afi Mansa Fiadzomor, hereby declare that this dissertation is the product of original research conducted by me under the supervision of Professor Justice Nonvignon (PhD). I also declare that I have not submitted this work to any institution for assessment, publication, or any other purpose and that all references have been duly acknowledged.

Date: October 17, 2022

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DEDICATION

I dedicate my dissertation first to God, then my family and friends especially Indira Fiadzomor, Danny Kaye and Isaac Asare for their words of encouragement and continuous push throughout. I also dedicate and give special thanks to all Ghanaian soldiers for their perseverance and hard work during peacekeeping missions.

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ABSTRACT

Introduction

Quality of life (QOL) is a broad multidimensional concept that includes subjective evaluations of both positive and negative aspects of life. The concept of health-related quality of life (HRQOL) and its determinants have evolved since the 1980s to encompass those aspects of overall quality of life that can be clearly shown to affect health—either physical or mental. Military personnel face multiple stressors in their lives. Studies have reported that stress occurs from risky assignments or missions, the demand for physical fitness, problems in interactions with peers and those of higher rank, sleep deprivation from shift work, deployment and separation from family;and this stress affects mental health.

Objectives

Therefore, the objectives of the study were: What is the quality of life of Ghanaian military personnel having done international peacekeeping missions? What are the level of depression, anxiety, and stress (DASS)s among Ghanaian military personnel having done international peacekeeping missions? What is the relationship between the quality of life and DASS among this Ghanaian military personnel on international peacekeeping missions?

Methods

Against this backdrop, this quantitative cross-sectional study assessed the quality of life of Ghanaian military personnel undertaking peacekeeping missions. In all, 259 military personnel of the 4th Infantry Battalion, Kumasi, Ghana who have been in peacekeeping missions within the past five years were selected to answer self-administered questionnaires. These questionnaires, being

the abridged WHO Quality of Life (WHOQOL-BREF) tool and the Depression, Anxiety and Stress scale, were used to assess their quality of life as well as emotional state.

Results

It was found that overall, the quality of life of these soldiers was high and thus they were satisfied with their quality of life. Widowed military personnel had a significantly lower quality of life as compared to those who were single. Compared to captains, military peacekeepers of lower ranks had a significant reduction in their overall quality of life.

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LIST OF ABBREVIATIONS

Center for Disease Control and Prevention – CDC

ECOWAS – Economic Community of West African States

HRQOL – Health-related Quality of Life

LIC- Low Income Countries

PKO – Peacekeeping Operations

PTSD – Post Traumatic Stress Disorder

QOL – Quality of Life

ROE – Rules of Engagement

UN – United Nations

UK – United Kingdom

WHOQOL – World Health Organization Quality of Life

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

Quality of life is a complex concept that can encompass a variety of subjective evaluations of both positive and negative aspects of life. It is difficult to evaluate the term though "quality of life" matters to almost everyone, and in all academic discipline individuals and groups may define it differently. Health is an important part of overall quality of life, but there are other domains as well—for example, jobs, housing, schools and neighbourhood. Culture, values, and spirituality are important factors that contribute to the overall quality of life, making it more complex to measure. However, researchers have developed useful methods to help conceptualize and measure these multiple areas and how they relate to each other.

Since the 1980s, the concept of health-related quality of life (HRQOL) has evolved to encompass those aspects of overall quality of life that can be clearly shown to affect health-either physical or mental. On an individual level, HRQOL includes how people perceive their physical and mental health, and how those perceptions are related to health risks and conditions, functional status, social support, and socioeconomic status. At the community level, HRQOL includes community resources, conditions, policies, and practices that influence a Population's health perceptions and functional status. Based on a review of the scientific literature and advice from its public health partners, the Centers for Disease Control and Prevention (CDC) has defined HRQOL as "the physical and mental health perceived by an individual or group over time." (Moriarty et al., 2003).

One in seven people worldwide (11-18%) has one or more mental disorders. One billion people worldwide experience a mental disorder in 2017 (Inkster, 2021 A study found that around 20% of soldiers, including veterans, in the UK have a mental disorder (Williamson et al., 2019). Four per cent of the people interviewed reported probable post-traumatic stress disorder (Bandelow & Sophie, 2015). Nearly 19% of respondents reported experiencing other common mental disorders, and 13% reported alcohol misuse. (Williamson et al., 2019).

Since the end of the Cold War, both the number and size of Allied and UN peacekeeping deployments have grown significantly (Hegre et al. 2019). The UN budgeted 7.23 billion USD for the 2012-2013 fiscal year for UN Peacekeeping operations (Themnér & Wallensteen 2012). An explanation for this increase is likely to be found in two global trends seen in armed conflict in recent years: first, that nearly all wars in the world today are fought within countries, and second, the unprecedented rise in peace agreements as a means to end the conflict (Themnér & Wallensteen 2012). Both of these factors present new challenges for peace-building as former enemies must continue living side by side when the conflict has ended, in a continuous negotiation for peace.

According to research, there is a chance that international peace support operations will increase the likelihood of ending a conflict. In the first global, quantitative analysis of the effect of peacekeeping operations (PKOs), Doyle and Sambanis found a significant and substantial effect of peacekeepers on peacebuilding two years post-conflict (Doyle & Sambanis 2000). This result is in line with research from later times. For example, Fortna demonstrated that the risk of further conflict drops by 75%–85% with the presence of a PKO (Fortna, 2004). Other research has found that PKOs limit the temporal and spatial contagion of conflict, and can also have a preventive effect, reducing the risk of genocidal violence (Melander, 2009). However, recent research has also found that peacekeeping operations in settings where there is not yet peace or stability, such

as Afghanistan, may entail the risk of spurring violence against civilians by rebel groups if the deployment does not have an explicit mandate to protect civilians (Hultman, 2010). The effects of operational deployments are also less obvious when considering success in terms other than preventing new conflicts, such as achieving mandated goals or establishing fundamental democracy and stability, which is a governance objective for the majority of current deployments (Gowan, 2008).

An extensive body of literature has examined returned American servicemen from Vietnam, Somalia, Iraq, and Afghanistan, covering issues of psychological ill-health ranging from alcoholism and suicide to the negative effects of a traumatic homecoming experience. These studies have focused on the peacekeepers themselves and the impact these missions have on psychological health and well-being (Maguen et al, 2004; Britt & Adler, 2003). However, less is known about soldiers from other African nations, particularly Ghana, as well as the long-term effects of peacekeeping on psychological health, necessitating a research study.

Currently, there are about 70,000 United Nations military personnel from 120 countries working together (UN, 2020). Military personnel face multiple stressors in their lives (Chou et al, 2014). Studies show that stress arises from dangerous missions and missions (Chou et al, 2014), demands for physical fitness, problems with interactions with peers and seniors (Yang et al 2019), and sleep deprivation due to shift work (Yang et al 2019). Spouses and children at home are also harming military personnel's lives. This is due to problems such as disagreements and conflict, which can disrupt the family unit and interfere with military duties. (Riggs et al, 2011; Davis et al, 2012; Verdeli et al 2011). Until the Russian-Ukraine war in February 2022, budget cuts and the reduction in the number of military personnel have increased the workload and stress on the few remaining military personnel (Richards & Bowen, 1993).

One of the UN's most useful tools for helping nations travel the treacherous path from war to peace has proven to be peacekeeping. Today's multifaceted peacekeeping operations are needed to support constitutional processes, the holding of elections, the protection and promotion of human rights, the restoration of the rule of law, and the extension of legitimate state authority. They are also needed to facilitate political processes, protect civilians, and aid in the disarmament, demobilization, and reintegration of former combatants. The UN Security Council issues mandates for peacekeeping operations, which are overseen by the Department of Peace Operations and backed by the Department of Operational Support at UN Headquarters in New York. Member states provide the troops and police for peacekeeping operations. There are 12 UN peacekeeping missions active at the moment, while 71 have been active since 1948. To reaffirm shared political commitment to peacekeeping operations, the Secretary-General introduced the Action for Peacekeeping Initiative (A4P) in 2019.

U.N. Peacekeeping Operations (UNPKO), which have seven deployments in the African continent, are essential in creating the circumstances for long-lasting peace following a conflict. Many of the 57 missions that have been completed across Africa since 1960 have produced long-lasting impacts, but others have had difficulty accomplishing their goals and have come under fire for inadequate planning and management. Nevertheless, some studies point to a success rate of roughly 60% of instances.

Since the early 1970s, men and women from Ghana have worked as United Nations peacekeepers, taking part in missions that ranged from the Sinai Peninsula to the African continent. With roughly 3,000 people serving on eight missions, the West African nation is currently among the top 10 contributors to UN peacekeeping. A person is subject to laws and traditions in the military, a distinct hierarchical organization. The military's organizational structure places a strong emphasis

on discipline, which makes it easier to complete challenging objectives and supports the development and preservation of spirit and morale.

Operations in modern warfare frequently take place under unstable, unpredictable, difficult, and ambiguous circumstances (Nindl et al., 2018). Physical exhaustion, cognitive overload, lack of sleep, low energy, changes in the operational surroundings, and emotional and psychological stress are the main companions to this. To sustain the best cognitive and physical performance required for success, military personnel must show preparedness and resiliency in the face of stressful environments, according to Nindl et al(2018)'s latest observations. Although peacekeeping is a humanitarian mission, it has its political sides with a hybrid derivation of functions performed by military and paramilitary agencies. It involves the deployment of military personnel from various countries by the United Nations and sometimes regional entities like ECOWAS to help parties control and eventually resolve conflicts. Ghana has contributed troops to missions since 1960. Currently, Ghana is deployed in Mali, Gambia, Lebanon, Congo, Somalia, and South Sudan among others.

The deployment cycle involves three phases: the pre-deployment, deployment and reintegration phases. The expected and foreseeable emotional, intellectual, physical, and/or behavioural reactions of a person who has been exposed to traumatic events in combat are blamed for several stressors that contribute to symptoms of stress throughout this cycle. When most troops return to their units and/or families, they seem to heal from this, but their quality of life is impacted because they are scarcely the same individuals they were before they departed. This is clear from the level of social engagement and relationships, lifestyle decisions, and other factors, which is why this study was conducted.

1.2 Statement of The Problem

Operations for maintaining peace can vary greatly. There may be quite varying demands placed on soldiers depending on the nature and features of the individual mission (Bartone et al., 1998). Additionally, stresses may change over time or during different periods of a peacekeeping operation in terms of both quality and intensity. The creation of successful programs to improve troop adaptation and reduce the negative consequences of stress depends on an understanding of the psychological stressors associated with peacekeeping missions. The ability of soldiers to cope with psychological pressures during peacekeeping operations is crucial for both their health and well-being as well as the effectiveness of the mission as a whole (Bartone et al., 1998b).

The Ghana Armed Forces, like many other armed forces, have soldiers who participate in peacekeeping missions and therefore experience a range of mental disorders (Agyekum, 2020). Most soldiers feel invincible and would deny any hint of mental stress or illness (Hester, 2017). This both, directly and indirectly, affects their output as soldiers, as well as their interpersonal relations, post-peacekeeping. According to some research, soldiers serving in peacekeeping missions who are exposed to intense conflict and atrocities may have post-deployment sadness (Sareen et al, 2010). According to their intrapsychic states, soldiers' quality of life is reflected in their capacity to engage in professional tasks while serving in the military (Dedic, 2003)

Academic resources are available on post-peacekeeping in Ghana; one excellent resource is The Relationship Between Post Deployment Transition, Psychological Well-Being, And Family Relationship Among Military Personnel In Ghana. Academic research revealed a significant relationship between post-deployment adjustment and psychological well-being as well as family relationships. Additionally, compared to their non-deployed counterparts, military personnel who had returned from deployment reported significantly worse psychological health and family

relationships. Social support received after a deployment did not affect how the transition from a deployment and psychological health-related.

Although in some cases, the unintended consequences of peacekeeping have been negative, at the institutional level, the military has benefitted from international knowledge transfer, while at the person level, soldiers have been able to improve their living standard as a result of peacekeeping deployments (Agyekum, 2020). However, a proper assessment of the quality of life of Ghanaian servicemen after peacekeeping is yet to be seen, and this piece of academic work seeks to answer that question and add to the existing knowledge in academia.

1.3 Objectives

GENERAL

To assess the quality of life and subjective wellbeing of military personnel post peacekeeping in Ghana.

SPECIFIC

1. To determine the quality of life of Ghanaian military personnel having been on international peacekeeping missions.
2. To determine the level of depression, anxiety and stress (DASS) among Ghanaian military personnel having been on international peacekeeping missions.
3. To determine the relationship between quality of life and DASS of Ghanaian military personnel having been on international peacekeeping.

4. To examine factors associated with the quality of the Ghanaian military personnel who have been on Peacekeeping Missions

1.4 Research Questions

1. What is the quality of life of Ghanaian military troops having done foreign peacekeeping missions?
2. What is the level of depression, anxiety, and stress (DASS) among Ghanaian military personnel having done international peacekeeping missions?
3. What connection exists between the DASS and the Quality of life for Ghanaian military troops serving having been on international peacekeeping missions?
4. What factors are associated with the quality of the Ghanaian Military personnel having been on Peacekeeping Missions?

CHAPTER TWO

2.0 LITERATURE REVIEW

Introduction

This chapter mainly covers numerous scholarly resources in the field of peacekeeping as well as the strategic position and historical involvement of the Ghanaian Armed Forces in international peacekeeping. The spectrum of peacekeeping and the dimensions of stresses in peacekeeping were also examined in the academic literature. How to react to various stressors was also covered in this chapter. Overall, the topic of the crucial part that peacekeeping plays in the overall scheme of things is also thoroughly considered. Along with its measurement scales, the Conceptual Framework for Quality of Life is also described in-depth.

2.1 The Essence of Peacekeeping Missions

UN peacekeeping has established itself as a credible, dependable, and effective method of safeguarding people and aiding the transition from violence to peace over the course of over seven decades. Peacekeeping has been essential in stabilizing nations like Liberia, Timor-Leste, and Bosnia and Herzegovina while they work to rebuild. Our greatest deployment in history, with more than 125,000 military, police, and civilian personnel working in 16 peacekeeping missions across the world, demonstrates the confidence the international community has in peacekeeping as a means of bringing about peace and security. Because they represent the common interests that are the cornerstone of the United Nations, peacekeeping missions succeed.

The stakes for maintaining peace are higher now than they have ever been in history, and the repercussions of failure are severe. The people of Bentiu deserve a UN peacekeeping system that

is a useful tool for maintaining world peace and security, just like the populations that operations protect around the globe. UN peacekeeping requires international assistance now more than ever.

2.2 Role of Ghana in peacekeeping

Since it initially sent troops to the United Nations Operation in the Congo (ONUC) in 1960, Ghana has participated in peace operations as a significant troop and police-contributing country (TCC/PCC) (Kusi, 2017). Since then, Ghana has participated in over 30 UN missions as well as many regional and sub-regional peace missions coordinated by the African Union or the Economic Community of West African States (ECOWAS) (AU). Over 80,000 military, police, and civilian people from Ghana have participated in more than 30 UN missions in a variety of roles.

2.3 Spectrum of Peacekeeping

One of the many initiatives the UN and other international players take to maintain international peace is peacekeeping. "Conflict prevention" entails taking steps to avoid intra- and inter-state tensions and disputes from turning violent, whereas "peacemaking" is taking steps to bring the belligerent parties to the negotiating table while hostilities are still in progress (Raju, 2014). After hostilities have ended, peacekeeping operations (PKOs) are intended to keep the peace. To achieve a robust peace, the use of force at the tactical level must be authorized by the majority of the parties to the conflict, as well as the Security Council in the case of UN-mandated PKO. At the strategic or international level, "peace enforcement" entails the use of a variety of coercive tactics, including the use of military units, without the approval of the majority of the parties to the conflict (Raju, 2014).

Each of the aforementioned issues is seen to be addressed to lessen direct violence. On the other hand, peacebuilding encompasses all of the initiatives intended to lessen structural violence, which

is thought to happen when people are deprived of their fundamental rights and necessities. Insidiously and indirectly, structural violence kills. Social justice is a fundamental concern in peacebuilding (UNDPO, 2008) Individual elements of the spectrum of peace activities can't be considered in isolation since structural violence and direct violence feed into one another to create a "system of violence" (Christie et al 2001). To build a suitable mindset and be ready for operations of the peace sort, commanders and mental health experts must learn a little about systems of peace and therefore the systems of violence.

2.4 Dimensions of stressors in peacekeeping

People in specialized occupations like firefighting, rescue work, and the military need specific health care because they are exposed to high physical, emotional, and social pressures daily, which puts them at risk for a variety of health issues (Katsavouni, Bebetsos, Malliou, Beneka, 2016).

The multidimensional nature of the post-cold war PKOs means that its members are exposed to pressures in various aspects. Many PKOs to date have had a sizable warlike atmosphere, thus it is likely that the emerging scenarios will be no different. Because the openly stated aims of PKOs are durable peace, humanitarian aid, and the restoration of democratic institutions, peacekeepers will still be subject to combat stressors, but their cognitive processing may differ. Second, and maybe more significantly, 30% of the group are civilians who are unlikely to have experienced any of the blood, guts, and din of battle. Thirdly, there are a significant number of women in the ranks of the modern PKOs; naturally, India deployed an entirely female force to Liberia in 2007. (Ministry of External Affairs, 2014). It is also important to consider the possibility that females may experience qualitatively different pressures in nonmilitary and military contexts.

The type of pressure also varies from mission to operation, depending on the duration of each campaign, the degree of disarray on the ground, the local population's support, the level of the peace enforcement element, and the attacks from splinter organizations. As a result, the subjectiveobjective, traumatic-nontraumatic, and common-uncommon characteristics must be considered when evaluating stresses. Numerous researchers examine and study various elements of stressors, as well as their adaptation and maladaptation (Koopman &Van Dyk 2012; Mirfin, 2004; Elklit, 1998).

2.4.1 Common stressors

The UN pamphlet categorizes them into basic, cumulative, and critical traumatic stressors. All of them can be experienced in varying degrees before, during, and after deployment in PKOs. Basic stressors are those arising out of daily hassles, discomfort, homesickness, and fatigue. They are generally manageable. Cumulative stressors arise when basic stressors remain unresolved or when stressors are repetitive and overwhelm the individual. Critical traumatic stressors are out-of-theordinary overwhelming stressors (Mulloy, 2007).

2.4.2 Pre-deployment stressors

There may be demands for adjustment due to uncertainty surrounding the departure date, length of the engagement, time constraints to address personal and family issues, the possibility of exposure to a foreign culture and language, the expectation of communication challenges at home, concerns regarding the appropriateness of preparation for the unfamiliar operations, the possibility of combat, and the excitement of travelling abroad.

2.4.3 Deployment stressors

For soldiers trained for traditional warfare, deployment in an unfamiliar environment in a fundamentally different job can be quite stressful. Soldiers' ability to acclimatize can be negatively

impacted by isolation, ambiguity, exposure to atrocities, danger, boredom, alien culture, perceived poor leadership, fluid command, pent-up aggression, doubts, vicarious suffering, and home front concerns.

PKO members frequently deploy to isolated locations where they find it difficult to communicate with their families, resulting in both physical and psychological isolation. They may feel forgotten if there is little media coverage of them. Additionally, while there are no enemies to defeat, soldiers must uphold the peace under tight rules of engagement (ROE). It is impossible to feel the joy of triumph. The consent agreement for PKOs only includes the primary disputing parties. Soldiers' lives and limbs may be in grave danger from attacks by renegade or hostile forces, hostile locals, land mines, endemic diseases, and exposure to toxic substances. The potential for exposure to such situations can increase the need for adjustment in a cognitive sense.

Due to easy, tedious, repetitive tasks, a lack of enjoyment, and a lack of professionally fulfilling employment, soldiers may experience the stress of boredom. When boredom is intermingled with hard humanitarian or war work, it can be quite taxing.

Soldiers serving in peacekeeping operations must uphold the impartiality required by the ROE to see heinous crimes from a distance. In front of the UN, thousands of people were slaughtered in Rwanda with clubs and machetes in broad daylight, while in the former Yugoslavia's Srebrenica, UN troops observed Serbs raping and killing hundreds of defenseless civilians. It is referred to as "double helplessness" to helplessly observe vulnerable people. It can be quite uncomfortable and stressful to see dead bodies that have been dismembered, to find mass graves, and to retrieve dead bodies.

Peacekeepers could feel helpless if they are unable to respond in kind to aggressive groups, have difficult conversations at checkpoints, or have to pass through devastation. There will be many

chances to accumulate and few chances to satisfy aggressive cravings. Doubts There may be concerns among peacekeepers regarding their capacity to provide for the needs of the local populace. Additionally, they might feel the locals' helplessness, wrath, and misery through a proxy.

Soldiers are known to transport their residences to their places of duty all around the world. Home problems can seem more severe when viewed from a distance in a distant country. Even good communication can sometimes lead to issues if family members are not tactful enough while breaking bad news.

Each expedition may include members from as many as a dozen different countries, which makes the working environment hazy. 34 nations, for instance, took part in Cambodia (Waller, 2012). It is possible for each member of a contingent, regardless of their nationality, to have a different work ethic, which adds stress to the interface (Mulloy, 2007). The stress of conducting business in a dynamic environment may increase. In operational areas, private military firms, military support firms, and unarmed citizens may also present challenges for peacekeepers.

Operations for maintaining peace are carried out in a chaotic environment. It can be very upsetting to see enormous amounts of internally displaced people and refugees suffering from sickness and malnutrition (Somalia, Darfur). Due to the ongoing fighting in Rwanda and Croatia, there was a massive influx of refugees (Waller, 2012).

2.4.4 Post-deployment stressors

There are many reasons why homecoming could end up being stressful. Under the umbrella of "transition stress," (Murphy, 2012) these may include a yearning for comrades and recently experienced the closeness of work with them, issues related to guilt, the discrepancy between fantasies of homecoming and reality, rebuilding relationships, picking up the pieces of old routines in the regiments and garrisons, changes in emotionality (brought on by exposure to stress), and

apathy among the general public. Rapid reintegration could make things worse by denying the soldier enough time and chance to change their perspective and find closure (Rosebush 2000).

2.5 Adapting to stress

Soldiers having a psychologically tough disposition were observed to perform effectively in the PKO environment (Bartone et al 1998) Hardy individuals view life's experiences as fascinating chances to develop. In a Dutch study, it was discovered that people with negative personality traits (psycho-neuroticism) were more prone to stress reactions (Bramsen et al., 2000). Lower rank, staff responsibilities, childhood hardship, lower education, female gender, past psychiatric history, the first time experiencing combat, and western culture (Singh et al., 2001) were also noted as some of the other risk factors. There are five main ways that peacekeepers have been observed to deal with stress: seeking safety (inclining toward guarded base areas); diverting oneself from stimuli (alcohol, cigarettes); seeking a change of scenery (wearing "civies," partying with locals); diverting oneself with thoughts of other things; and seeking social support (speaking to a comrade) (Britt et al, 2003).

2.5.1 Stress responses

Personnel working in peacekeeping operations react to pressures in both positive and bad ways. PKOs resemble low-intensity conflicts (LIC) in certain ways, with the exception that in LIC security officers fight against known groups that engage in aggression against legitimate states. PKOs are somewhat akin to working in situations when a man-made disaster has resulted in widespread human suffering and humanitarian efforts, but with PKOs, humanitarian efforts are only one facet of multi-faceted operations. Numerous mental syndromes were described to reflect the distinctive nature of stressors. Wisaeth and Sund (1979); Raphael and others (1991).

2.5.2 Acute stress syndromes

A collection of symptoms known as acute stress syndromes might appear four weeks after a traumatic event. These signs and symptoms include avoidance behaviours, anxiety, overwhelming terror or powerlessness, and reliving the incident (Raju, 2014). Other symptoms include feeling sad, and irritable, having emotional ups and downs, getting little sleep, having trouble concentrating, and desiring to be alone. Another symptom is recurrent dreams or flashbacks, which can be upsetting and obtrusive.

2.5.3 Battle fatigue

Soldiers may experience this syndrome, which can range in severity from mild to severe, in PKO combat scenarios. Symptoms of increased arousal are typically seen in mild situations. Compean & Hamner (2019) goes further to suggest that in moderate situations, there may also be an increase or reduction in motor activity, although brief psychotic symptoms are more common in severe conditions.

2.5.4 Flameout

This is comparable to a jet engine's rapid loss of combustion brought on by a bird strike or fuel shortage. Flame out is a phenomenon that manifests quickly in PKO, trauma or disasters like burnout. Burnout is likened to a rocket with expended fuel mechanically circling the ground. The syndrome is defined by a loss of interest in the work, physical and mental tiredness, and a disregard for one's requirements for food, rest, friends, and family. It develops as a result of long-term professional boredom.

2.5.5 Peacekeepers acute stress syndrome

When peacekeepers are unable to react to atrocities and violent acts because of the ROE, they develop this syndrome. Rage, delusions, frustration, emotions of powerlessness, and impotence are the hallmarks of this syndrome (Raju, 2014). Syndrome of survivor guilt Combat or other extremely traumatic survivors frequently hold themselves accountable for the deaths of individuals who were also involved in the scenario.

2.5.6 Compassion fatigue

Workers who provide trauma care for patients for extended periods can develop compassion fatigue (Cocker & Foss, 2016). It is characterized by a progressive loss of empathy and unwillingness to assist others. Negative attitudes, anhedonia, anxiety, feelings of inadequacy, selfdoubt, and nightmares are common in sufferers (to be contrasted with burnout which occurs due to routine workplace tedium).

2.5.7 Post-traumatic stress disorder

There have been reports of prevalence rates between 2 and 15 per cent. This large variation was mostly linked to the level of battle exposure and the individual's perception of the real trauma (Koenen et al, 2017). Complex posttraumatic stress disorder (PTSD) is a subtype of PTSD that manifests in people who have experienced repeated or prolonged extreme stress and is distinguished by affect dysregulation, altered interpersonal functioning, persistent feelings of retaliation, obsession with the perpetrators, and self-destructive behaviour.

2.5.8 Counter disaster syndrome

Excitation, inappropriate over-involvement, and a sense of omnipotence are traits of this syndrome. This illness high may have hypomanic overtones.

2.5.9 Peacekeepers stress syndrome

This syndrome affects PKO soldiers and is characterized by ongoing frustration, outrage, guilt, and fear for their lives. The main emotion in the painting is fear of losing control of one's aggression.

2.5.10 Culture change syndrome

After serving in the military, some people endure a persistent personality shift that is marked by social alienation. They adopt countercultural lifestyles because they find homecoming distressing (e.g., Vietnam veteran biker groups).

2.5.11 Stockholm syndrome

In a hostage situation, this happens. After spending some time with their captors, hostages begin to show affection, empathy, and good thoughts toward them at this point.

High levels of stress over extended periods may have additional or hidden effects in addition to the conditions mentioned above. These additional or hidden effects may include disruptions in cohesion and breach of discipline leading to misconduct, as well as clumsiness and recklessness leading to equipment loss and "blue on blue" (Koopman & Van Dyk, 2012).

2.5.12 General psychiatric problems

General psychiatric disorders may become more severe in some soldiers, or some soldiers may enter PKOs while still receiving out-of-service psychiatric care. Numerous studies have indicated high morbidity rates ranging from 15% to 30%. (Murphy, 2008, Sareen et al, 2007, Connorton et al 2012, Orsillo et al, 1998). There have been reports of an increase in anxiety, depression, suicides (Connorton et al. 2012), violent deaths (Wisaeth et al. 1979), increased alcohol usage (Elklit, 1998, Britt et al. 2003, Mehlum, 1999), and accident proneness (Elklit, 1998). Despite understanding the need for psychological state treatment in one study, 23.2% of participants did not access mental

health services due to structural and attitude barriers (Sareen, 2007). Gross misbehaviour by peacekeeping personnel, such as violating regulations and murder, has also been documented (Saldanha et al, 1996, Datt, 2012; Farnsworth, 1994). The nature and extent of psychiatric issues among Indian peacekeepers do not appear to be known, but the lack of morbidity need not be interpreted as proof of the absence of such issues. The morbidity in PKOs might be rather severe if one compares it to the psychiatric morbidity in LIC operations (Saldanha et al., 1996; Chaudhury et al., 2006; Raju, 2013).

Peacekeeping presents families with a variety of issues as well as benefits. Over expectations were indicated by two-thirds of the households. According to Lobnikar et al. (2011), Families may feel helpless when learning about unfavourable situations in the media during the redeployment period and may have anticipatory worry during that time. Some reported feeling uninspired, down, and unsupported. [UN Fact Sheets on Peacekeeping, 2014; Adler, 1995; Lobnikar et al., 2011] Secondary traumatization and reunion stress may greatly increase the need for adjustment during the post-deployment period (Dirkzwager et al., 2005).

Secondary traumatization is defined as a normal response to another person's traumatic experience and presents as a variety of cognitive, emotional, and physical symptoms.

2.6 Positive aspects of peacekeeping missions

The majority of PKO employees (60–90%) mention positive advantages. Helping those in need, making a difference in the lives of other people, working with militaries from other countries, getting exposed to new technology, learning how to be effective in a foreign culture, and other similar things can give one a sense of competence and confidence that can change how they view life and their role in the military. Castro et al., 1997 ; Sareen et al., 2007 ; Schok et al., 2008 ;

Palmer, 1995 ; Connorton et al., 2011). Some of the opposite benefits described include financial gain (Ahmed et al., 2010) and appreciation for things back home (Thomas et al., 2006).

2.6.1 Process Or Implementation Of Peace Keeping Missions

U.N. Peacekeeping Operations (UNPKO), which have seven deployments in the African continent, are essential in creating the circumstances for long-lasting peace following a conflict. Many of the 57 missions that have been completed across Africa since 1960 have produced long-lasting impacts, but others have had difficulty accomplishing their goals and have come under fire for inadequate planning and management. Nevertheless, some studies point to a success rate of roughly 60% of instances.

2.7 Conceptual Framework.

2.7.1 Quality of Life

The World Health Organization Quality of Life (WHOQOL) was created as a result of the need for a globally accepted definition due to the lack of such a notion. The WHO defines the quality of life as "an individual's impressions of their place in life with their goals, aspirations, standards, and concerns in the context of the culture and value systems in which they live." It is a wide-ranging notion that intricately considers a person's physical and mental well-being, level of independence, social connections, religious convictions, and interactions with important environmental elements. According to this definition, quality of life refers to a personal assessment that is rooted in a cultural, social, and environmental context. (As a result, the terms "health status," "lifestyle," "life satisfaction," "mental state," or "well-being" are not sufficient to

describe the quality of life.) The WHOQOL is not anticipated to give a means of evaluating symptoms, diseases or conditions, nor disability as objectively determined, but rather the perceived effects of disease and health interventions on the individual's quality of life because it focuses on respondents' "perceived" quality of life. As a result, the WHOQOL is an evaluation of a multidimensional notion that takes into account a person's impression of their health, psychosocial well-being, and other aspects of their life.

There are numerous generic tools available to gauge life quality. The WHOQOL, a tool that measures subjective dimensions of quality of life, was created by the World Health Organization (WHO) (3-5). One of the most well-known tools for comparing the quality of life across cultures is the WHOQOL-BREF, which is accessible in more than 40 languages. The USA, the Netherlands, Poland, Bangladesh, Thailand, India, Australia, Japan, Croatia, Zimbabwe, and many more nations have adopted it (Whoqol group, 1995). In clinical trials where brief measurements are required and in epidemiological research where the quality of life may be one of several outcome variables, a 26-item version of the WHOQOL-BREF is appropriate (Lord & Novick, 2008). Four separate quality of life domains is covered by the WHOQOL BREF (Whoqol, 1998). The WHOQOL group is working to cross-culturally validate the WHOQOL (Noerholm et al, 2004).

2.7.2 Range of tools used to measure QoL in soldiers

The quality of life of soldiers has been evaluated using a variety of methodologies. These include the General Health Questionnaire-12 (GHQ-12), the Depression Anxiety Stress Scale-21, and the World Health Organization Quality of Life Instrument – short version (WHOQOL-Bref) (DASS21).

Additionally, a crucial component of healthcare evaluation is the measurement of health-related quality of life (HR-QOL). There are countless generic and specialized HR-QOL instruments available. Various populations and therapies are covered by the design of generic HR-QOL instruments. Measures of HR-QOL that are specific to certain interventions or subpopulations are intended to be applicable (e.g., individuals with rheumatoid arthritis). Seven generic HR-QOL measures are examined in this review: The Quality of Well-Being (QWB) Scale, the Health Utilities Index (HUI), the Dartmouth Primary Care Cooperative Information Project (COOP) Charts, the Sickness Impact Profile (SIP), the Nottingham Health Profile (NHP), the Sickness Impact Profile (SIP), the Medical Outcomes Study 36-Item Short Form (SF-36), and the EuroQol Instrument (EQ-5D). These pieces of music were chosen because they are frequently quoted or referenced in English-language literature. This review addresses six features of an instrument: I conceptual and measurement model; (ii) reliability; (iii) validity; (iv) respondent and administrative burden; (v) alternative forms; and (vi) cultural and linguistic adaptations. The most popular HR-QOL metric among the tools under evaluation is the SF-36 health survey. As a quick indicator of functioning and wellbeing, it was created for the Medical Outcomes Study. The Dartmouth COOP Charts were created to be used in routine clinical practice to give clinicians quick feedback regarding the patients' health status. Instead of professional views of health, lay opinions were intended to be reflected in the NHP. The SIP was developed as a sickness impact measurement for behaviour. A single value between 0 and 1 is intended to represent HR-QOL on the QWB, HUI, and EQ-5D preference-based measures. We discovered that there are no instruments that perform consistently "poor" or "excellent." The goal of the measurement will determine whether to employ one over another, a mix of two or more, a profile- and/or preferencebased measure, or a generic measure in addition to a targeted measure. As a result, the

scales we use are a reflection of the variables being evaluated, the population's characteristics, and the measurement setting.

2.7.3 General Health Questionnaire – 12

Goldberg's General Health Questionnaire served as the basis for the GHQ-12 (GHQ). The GHQ12, a screening tool for anxiety, depression, insomnia, exhaustion, social functioning, and family relationships, decreased the number of questions from 60 to 12. A self-reported screening tool is the GHQ-12. There are four alternative answers to each question, ranging from 0 (not at all) to 3 points (felt much more frequently than usual). The validity and reliability of the GHQ-12 were found to be fair in the prior study.

Dimensions	Number of Items
Social Dysfunction •GHQ: 01. Been able to concentrate on what you are doing? •GHQ: 03. Felt you are playing a useful part in things? • HQ: 04. Felt capable of making decisions about things? • HQ: 07. Been able to enjoy your normal day-to-day activities? • HQ: 08. Been able to face up to your problems? • HQ: 12. Been feeling reasonably happy, all things considered	06
Anxiety & Depression •GHQ: 02. Lost much sleep over worry? •GHQ: 05. Felt constantly under strain? •GHQ: 06. Felt you couldn't overcome your difficulties? •GHQ: 09. Been feeling unhappy or depressed?	04
Loss of Confidence •GHQ: 10. Been losing confidence in yourself? •GHQ: 11. Been thinking of yourself as a worthless person?	02
Total	12

FIG 1.0 Item details of GHQ – 12

2.7.4 World Health Organization Quality of Life Instrument-Bref, Taiwan Version

Yao et al. translated the WHOQOL-BREF, Taiwan version, which was shown to be reliable and valid. In addition to the 26 standard questions, the Taiwanese edition included two questions about the local culture. This tool can be used to evaluate a subject's environmental, social, psychological, and physical circumstances.

Domains	Item No. in short form	Corresponding facets in long form	
	1	FG.	Overall QOL
	2	FG.	Overall health
D1. Physical	3	F1.	Pain and discomfort
	10	F2.	Energy and fatigue
	16	F3.	Sleep and rest
	15	F9.	Mobility
	17	F10.	Activities of daily living
	4	F11.	Dependence on medical substances and medical aids
	18	F12.	Work capacity
D2. Psychological	5	F4.	Positive feelings
	7	F5.	Thinking, learning, memory, and concentration
	19	F6.	Self-esteem
	11	F7.	Bodily image and appearance
	26	F8.	Negative feelings
	6	F24.	Spirituality/ religion/ personal beliefs
D3. Social	20	F13.	Personal relationships
	22	F14.	Practical social support
	21	F15.	Sexual activity
	27*	F25.	Being respected/ accepted
D4. Environment	8	F16.	Freedom, physical safety, and security
	23	F17.	Home environment
	12	F18.	Financial resources
	24	F19.	Health and social care: accessibility and quality
	13	F20.	Opportunities for acquiring new information and skills
	14	F21.	Participation in and opportunities for recreation/ leisure activities
	9	F22.	Physical environment; (pollution/ noise/ traffic/ climate)
	25	F23.	Transport
	28*	F26.	Eating/ food

FIG1.1 World Health Organization of Life Instrument – Bref, Taiwan Version

2.7.5 Measuring Depression, Anxiety and Stress

The depression, anxiety, and stress scale is a three-part self-report scale including subscales for each of the three conditions. It is used to gauge emotional states rather than life satisfaction.

Scale/Item Summary
DASS-Depression
3 Couldn't experience positive
5 Couldn't get going
10 Nothing to look forward
13 Sad and depressed
16 Lost interest in everything
17 Not worth much as person
21 Life not worthwhile
DASS-Anxiety
2 Dryness of mouth
4 Breathing difficulty
7 Shakiness
9 Situations made anxious
15 Feeling faint
19 Perspired noticeably
20 Scared for no good reason
DASS-Stress
1 Upset by trivial things
6 Overreact to situations
8 Difficult to relax
11 Upset easily
12 Using nervous energy
14 Impatient when delayed
18 Touchy

FIG1.2 The depression, anxiety, and stress scale

2.7.6 The WHOQOL Tool

The WHOQOL-BREF is a 26-item questionnaire that measures both QOL and general health. It consists of four domains: social relationships (3 items), environmental health (1 item), and physical health (7 items) (8 items).

A distinctive cross-cultural methodology was used to construct the WHOQOL-100. The WHOQOL development approach includes a few distinctive characteristics. First, the legislation incorporated a cooperative method for creating international instruments (Bullinger, 1994; Kuyken, Orley, Hudelson and Sartorius, 1994). The aim was to develop a single quality of life instrument jointly in multiple settings. Thus, the operationalization of the instrument's areas of quality of life, question writing, question selection, response scale derivation, and pilot testing involved numerous culturally different centres. With this method, standardization, setting equivalence, and translation difficulties were prioritized throughout the development process. Field centres were chosen to give disparities in the degree of industrialization, the availability of health services, and other indicators important to the measuring of quality of life to ensure that the collaboration was truly international (e.g., the role of the family, perception of time, and perception of self, dominant religion).

The iterative input of quality-of-life researchers and the consolidation and refinement of this data at the grassroots level at each stage of the instrument's development were two additional features of the WHOQOL method. By doing this, it was made sure that the instrument's design reflected both the state of the art in quality-of-life assessment as well as the opinions of working healthcare professionals and patients. The acceptability of the measure to patients is crucial in quality-of-life assessment, where there is an increasing recognition that the patients' perspective is crucial (Smart and Yates, 1987; Calman, 1987; Breslin, 1991; Gerin, Dazord, Boissel et al, 1992; Patrick and Erikson, 1993). The WHOQOL instrument must also be acceptable to these groups as they are the ones who will use it the most—health professionals and researchers. The WHOQOL method's utilization of a tried-and-true WHO translation technique is its third component. The WHO has accumulated a lot of expertise translating health status measures.

2.7.7 Combat exposure and quality of life

Combat-exposed soldiers are at risk for ill health and long-term consequences during deployment (Sheffler et al, 2016). Combat can harm one's mental, physical, social, and emotional health, which can lead to poor QOL. Evidence suggests that troops who have deployed, especially those who have engaged in traumatic warfare, have worse QOL than soldiers who have never gone. Military hospitalization research reveals that spinal injuries and psychiatric illnesses (Wojcik et al 2009) requiring inpatient care are common among deployed soldiers. Deployed military personnel are affected by a wide range of physical and mental issues that have the potential to reduce QOL. According to Wojcik et al. (2009), troops with service-related diseases such as post-traumatic stress disorder, traumatic brain injury, and depression experience more severe declines in QOL. This shows that the more traumatizing the combat exposure, the worse the QOL post-deployment. Veterans who have served in battle are also more likely to have other chronic illnesses such as asthma, arthritis, lung issues, and pain [3], which can harm both physical and mental health.

2.7.8 Substance Use and Quality of Life

Substance use can either result in a self-medication mechanism that may improve some QOL outcomes or a system of maladaptive coping that leads to worse QOL outcomes. People who take opioids for non-medical reasons have decreased QOL compared to the general population (Griffin et al, 2015). According to Rona et al. (2010), problem drinking is linked to functional impairment in British soldiers and poor social and emotional functioning in Polish soldiers (Polak, 2001). On the other hand, research suggests that marijuana users may enhance the quality of life (QOL) among US military veterans with post-traumatic stress disorder by lowering anxiety and insomnia and enhancing coping mechanisms (Betthauser et al, 2015). However, there isn't much research on the connection between substance use and quality of life among US Army Reserve/National

Guard (USAR/NG) soldiers. This is crucial to keep in mind because reservists make up 40% of the US military, and they differ significantly from US active-duty personnel, veterans, and military populations abroad (Thomas et al, 2010). Again, even though the military is a young and active force, military service can develop sexual functioning issues (SFPs) in service members and veterans. Physical, psychological, and social factors can all affect sexual function, which in turn can affect one's quality of life (QOL) and enjoyment. Numerous demographic, physical, and psychosocial risk factors are linked to SFPs. For male military members aged 21 to 40, the rates of sexual dysfunction and erectile dysfunction were 8.45 per cent and 33.24 per cent, respectively (Wilcox et al, 2014). The largest rates of SFPs were reported by those who were between the ages of 36 and 40, single, non-White, and less educated. The largest risk for ED and SD was among male military members with poor physical and mental conditions. SFPs were linked to lower QOL and happiness, and social obstacles were frequently a factor in treatment resistance (Wilcox et al 2014).

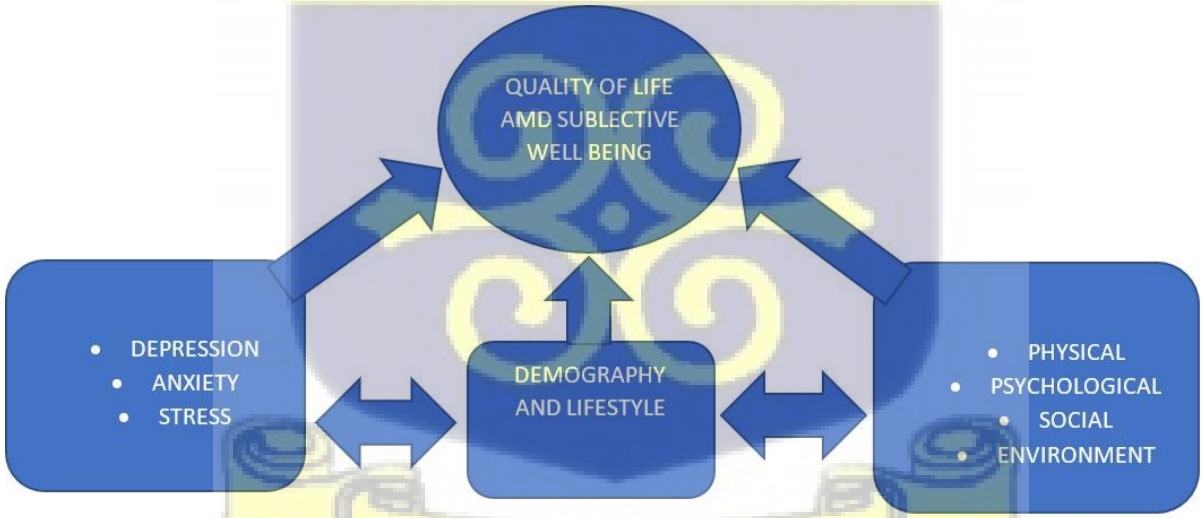

FIG 1.3 Conceptual Framework

2.8 Post Deployment Transition

To identify the many problems or difficulties encountered by the military couple during the postdeployment transition, Knobloch and Theiss (2012) undertook a qualitative study under the guidance of the Relational Turbulence Model. They performed an open-ended online poll with personnel who had recently returned from a deployment to their partners' homes. 259 people in all, including 137 service members and 122 partners of returning military members, took part in the study. The survey's findings revealed that the majority of Personnel had trouble reintegrating after returning to their homes. It was also noted that few people said they had no difficulties with family reintegration. Military soldiers once more encountered conflicts between their roles and identities while deployed and at home. This was explained by the possibility that behaviours that are considered to be functional while deployment may turn out to be problematic upon reintegration. Additionally, it was observed that 91 per cent of military personnel who returned from deployment experienced relationship difficulties such as communication difficulties, difficulties reuniting with family members, difficulties reintegrating into regular life at home, and increased conflict. In addition, 89 per cent of the workforce reported having relational insecurities about things like commitment, transitioning to life after deployment, difficulties in the home, and personality changes. 81 per cent of the troops also listed parenting concerns as a reintegration challenge, along with interference from partners such as control issues, feeling smothered, interference in daily tasks, and domestic responsibilities.

Additionally, Verey and Smith (2012) examined the qualitative experiences of fifteen (15) military people who had just returned from a deployment and how deployment-related events had affected their adjustment to life in the UK. Information about stressful deployment experiences and their effects on employment, family relationships, civil society, and emotional health was gathered from

informants via a semi-structured interview. The transcripts were analyzed using thematic analysis. The value of sharing a common experience with others, help-seeking, professionalism and emotional processing, relationships, family, and civil society are just a few of the six themes that emerged from the investigation. Military soldiers had a feeling of communal identity when deployed as contrasted to their identity as a spouse or parent at home because of the importance of belonging to a group. This gave them the confidence to use violence that was sanctioned because the circumstances called for it. Another issue was having a shared experience with partners and asking for assistance. When returning from a deployment, military members tended to seek assistance from their peers and other people who had gone through similar situations again, military members chose to ask their friends and fellow soldiers for advice over going to a professional. There were also problems with professionalism, handling emotions, relationships, and family. Because of this, the majority of military people believe they are “tough”,"macho," and capable of solving problems on their own. They were unable to get the support they needed to deal with their emotional challenges because of this. Family relationships were impacted by their failure to control their emotions and differentiate between appropriate and inappropriate emotions. Additionally, it was difficult to make changes in one's connections. The paper makes the case that pre-and post-deployment training is necessary for a successful transition after deployment.

Additionally, a 16-item transition scale was subjected to an exploratory and confirmatory component analysis by Adler, Britt, Castro, McGurk, and Bliese (2011) with individuals from a US Army base. Soldiers from active-duty brigade combat teams who had been at home for four months made up 1,000 (651; N=1,651) of the sample. following the completion of a one-year deployment. PTSD symptoms and previous survey data on combat experiences were obtained from a subgroup of the sample (N=1,051) four months earlier, during the initial reintegration phase. The

shift that took place four months later served as Time 2 and thus served as the baseline for comparison (Time 1). Four categories that contributed 60% of the variation were kept from the analysis: benefit (=.83), appreciation (=.73), anger/alienation (=.73), and guilt (=.74). Military members indicated moderately high degrees of benefit, resentment, and estrangement, moderate levels of gratitude, and low levels of guilt and regret. However, non-commissioned or junior rank soldiers scored higher on anger/alienation (M=3.24, SD.70), as well as guilt/remorse (M=2.33; SD.77), whereas commissioned officers scored significantly higher on benefit (M=3.62; SD.69). This demonstrated the significance of ranks in post-deployment difficulties. Once more, anger/alienation had a low to moderate correlation with PTSD condition and a sort of war experience. According to the literature, living after serving in a deployment can be difficult—possibly even more difficult—than the actual deployment (Morse, 2006; Sareen et al, 2010). In this regard, the majority of non-commissioned officers frequently experience hyperarousal upon deployment. When returning from deployment to being at home, symptoms like anger may cause emotional withdrawal or estrangement from a family, which can be difficult (Yosick et al, 2012).

2.8.1 Post-Deployment Social Support as a Moderator

PTSD symptoms are typically a danger for military members returning from deployment operations (Milliken et al., 2007). Combat-related stressors were found to be less associated with PTSD than current stressors like post-deployment non-traumatic stressors, making combat stressors necessary but not sufficient for PTSD severity (Possemato, McKenzie, McDevitt-Murphy, Williams & Ouimette, 2014). PTSD severity is typically a result of non-traumatic stressors as well as post-deployment transition stressors. The amount of social support provided to returning service members can, however, control the severity of PTSD regardless of the sort of stress-related event (Charuvastra & Cloitre, 2008). According to Ozer et al. (2003, quoted in

Possemato et al., 2014), returning service members who do not receive any kind of social assistance are susceptible to a range of psychiatric disorders. Possemato et al. (2014) conducted a cross-sectional quantitative study to analyze pre-, peri-, and post-deployment factors that are connected to post-deployment PTSD symptoms to better understand the function of social support in controlling post-deployment PTSD symptoms. 150 war veterans who had been diagnosed with PTSD symptoms and dangerous alcohol usage served as 'he study's participants. Before, during, and after deployment, PTSD risk factors as well as the amount of post-deployment social support provided to personnel were assessed. Hierarchical linear regression was used to examine the data that was collected.

After accounting for combat-related trauma, the results showed that risk factors for each of the three deployment cycles exclusively predicted the degree of PTSD. After adjusting for combatrelated stressors, post-deployment characteristics such as post-deployment social support, postdeployment life events, job, and alcohol consumption independently predicted PTSD severity. This shows a strong correlation between the severity of PTSD and non-traumatic post-deployment stressors.

Additionally, current post-deployment stressors were discovered to be associated with PTSD severity, whereas combat stressors did not predict PTSD severity. To improve psychological wellbeing, family and friends can help returning service members and lessen the intensity of PTSD symptoms. With this in mind, Welsh, Olson, Perkins, Travis, and Ormsby (2015) looked at the effects of three different sources of social support on the well-being of service members: romantic partners, friends, and neighbours, as well as unit leaders. According to thr study's findings, depressed symptoms were less affected by adverse deployment experiences when all three types of social support were present.

Additionally, Griffith and West (2010) found that a sizable proportion of soldiers who had just returned from a deployment reported experiencing difficulties with adjustment, such as postdeployment negative emotions and post-deployment loss of personal relationships, all of which were connected to risky behaviours like aggression and alcohol use. The negative impacts of these transition pressures on military members were, however, significantly mitigated by social support. Additionally, Smith et al. (2013) observed that social support from the unit and family members was significant in lowering the incidence of Depression symptoms as well as PTSD symptoms among service members at greater levels of post-deployment stress. The interaction effect of time spent at home following deployment and post-deployment social support on suicide risk characteristics such as hopelessness and suicidal thoughts as well as resolved plans and preparations was also examined by Martin, Houtsma, Green, and Anestis (2015). They discovered that while the Interaction effect did not predict suicide ideation, it did predict despondency and resolved plans and preparations. According to their findings, soldiers are more likely to be hopeless and have poorly resolved plans and preparations when they do not have access to both unit support and support from family and friends, but when soldiers do receive the necessary social support, they are more likely to be hopeful and have better-resolved plans and preparations.

2.9 Conclusion

This chapter covered the historical necessity of international peacekeeping as well as Ghana's role in peacekeeping over the years. The scope of peacekeeping and difficulties related to stress were also covered in this chapter. Military personnel's ideas on quality of life, coping strategies, and determinants of quality of life were also evaluated. However, literature on the coping mechanism and predictors of the quality of life among military personnel is woefully inadequate and almost all the literature reviewed was scholarly work done by scholars in the global north. It says nothing

about the African situation and for this work, the quality of life and subjective well-being of the Ghanaian military personnel; are the gaps this scholarly work seeks to address.

CHAPTER THREE

3.0 METHODS

3.1 Introduction

The method that will best help to address the research objectives is discussed in this chapter. The study region, study population, inclusion and exclusion standards, sample size, sampling, data collection methods and tools, and finally, the study variables will all be covered.

3.2 Study Design

A quantitative cross-sectional study was used in this investigation. Self-administered questionnaires were used to gather information from these soldiers. The questionnaires were administered in the month of March during padre hour, a period where all soldiers gather for mental and spiritual upliftment. They administered questionnaires were retrieved the week after during the same gathering.

3.3 Study Area

The study was undertaken t the 4th Infantry Battalion in Kumasi. The battalion is under the Central Command of the Ghana Army. The Unit traces its origin to the Gold Coast Constabulary and has undergone various reforms. It was the first infantry battalion to be formed after Ghana gained its Republican status. The Unit has partaken in numerous Peacekeeping missions since 1961 till date. Examples of such missions include the Economic Community of West African States Monitoring Group (ECOMOG GHANBATT 6 & 10), United Nations Mission in Sierra Leone (UNAMSIL

GHANBATT 8), United Nations Emergency Force (UNEF GHANBATT 5), United Nations Interim Force in Lebanon (UNIFIL GHANBATTS 12, 34, 39, 54, 68 & 79), and United Nations Organization Mission in the Democratic Republic of the Congo (UNOMDRC) (MONUC GHANBATT 10). The most recent mission the unit participated in was the United Nations Organization Stabilization Mission in the Democratic Republic of the Congo (MONUSCO GHANBATT 15), which took place in the Congo between 21 March 2019 and 6 November 2020. During this mission, about 100 soldiers from the 4th Infantry Battalion served as the core of a battalion along with 300 others from various units across the nation. Nonetheless, soldiers within the unit are nominated individually yearly to join other units on peacekeeping missions.

3.4 Study Population

In this work, the study population was 569 military personnel in the 4th Infantry battalion, Kumasi. The population is comprised of both male and female military personnel who are in active service and have been on peacekeeping operations before and still participate in peacekeeping missions. The subjects of this research were serving soldiers and officers of the 4th Infantry Battalion who have been on peacekeeping missions

3.5 Inclusion Criteria

Well-informed and consenting soldiers who were above 18 years, belonged to the 4th Infantry Battalion in Kumasi and have no known history of mental health illnesses. Participants were also in active service and have been part of peacekeeping missions. Only soldiers who had been on a peacekeeping mission in the past five years participated in this research.

3.6 Exclusion Criteria

The study did not consider veterans nor active military personnel who have never participated in any peacekeeping missions. The study also excluded personnel with history of mental health issues prior to peacekeeping. The study did not also engage military personnel who were not part of the study setting though they may have peacekeeping experience. The study excluded any soldier who has not been on a peacekeeping mission within the last five years.

3.7 Sample Size and Justification

About 2400 military personnel go on international peacekeeping missions annually in Ghana. Of the 569 personnel in the sample population, about 50% of them have been on peacekeeping missions in the past five 5years. In all, a total sample size of 285 respondents was considered from a population of 569 service personnel. The sample size was determined by using Slovin's Formula with an error margin of 5% as illustrated below:

n= N/(1+Ne2) n= 569/ (1+569*0.052) n= 234.88 n=235Non response =

estimated sample size x nonresponse rate anticipated

= 235 x0.1

= 23.5

Final sample size = 235+23.5 = 258.5 =259

3.7.1 Sampling Method

A non-probability sampling method was used. Precisely a convenient sampling method where only available soldiers in the Unit who fitted the inclusion criteria were sampled.

3.8 Data Collection Technique

A self-administered questionnaire was used to gather the data. Information on military members who are currently on active duty and have participated in peacekeeping missions was gathered through the questionnaire. The WHO Quality of Life (WHOQOL-BREF) measure was used to evaluate the quality of life (QoL). The Depression, Anxiety and Stress scale was also administered to assess the emotional state as well as psychological stress of these peacekeepers. These scales were then used as a predictor of the Quality of life of the military personnel.

3.9 Variables

The key independent variables from the DASS- 21 scales, stress, anxiety, and depression, were measured using the depression, anxiety, and stress scale. The depression, anxiety, and stress scale consist of three self-report subscales. It is used to gauge how depressed, anxious, and stressed people are emotional.

Age (in years) as of last birthday, rank, marital status, level of education, number of years in service, missions attended, and appointments held are among the independent variables utilized in the study.

The WHO Quality of Life (WHOQOL-BREF) test was used to evaluate the overall quality of life. The WHOQOL-BREF consists of 26 items: two items measuring overall quality of life and general health, 24 items measuring satisfaction in four main domains (physical health, psychological health, social relationships, and environmental health), and seven items measuring physical health, six items measuring psychological health, and three items measuring social relationships. Each item was given a score between 1 and 5, with 5 representing the highest quality of life. The domain mean was calculated using the average score of the items in each domain. To make it comparable

with the entire WHOQOL test, the mean score for each domain was then multiplied by 4 (four) (WHOQOL-100). A higher score implies a higher quality of life according to the scaled positive scores. The Depression Anxiety Stress Scale (DASS-21), which has three subscales: Depression (DASS-D), Anxiety (DASS-A), and Stress, will be used to measure subjective well-being (DASSS). Responses varied from 0 (did not apply to me at all) to 3 for each item (applied to me very much).

3.9.1 Statistical Analysis

STATA (version 16) was used for the data analysis at significance after the data is loaded into the software. There will be descriptive statistics used. For continuous variables like age, income, and years of military service means and standard deviations will be presented. Additionally, the mean WHOQOL-BREF score and its 95% confidence interval will be provided. We'll compute the frequencies and proportions of categorical variables like marital status, level of education, and sex. The DASS-S scale will categorize the stress level as follows: normal (0–14), mild (15–18), moderate (19–25), severe (26-33), and extremely severe (34+).

A test of normality of the outcome variable was conducted with the Shapiro Wilk test. The square transformation was done for the WHOQOL-BREF score and the transformation was confirmed to be normal with quintile-quintile plots.

To investigate the association between depression, anxiety, stress, and quality of life (WHOQOLBREF score) and other potential confounders, inferential statistics were conducted using Pearson's correlation between the WHOQOL-BREF domains and simple linear regression as bivariate analysis. For linear regressions, WHOQOL-BREF score values that had been square transformed were employed. With statistical significance set at p0.05, a final multiple linear

regression model will be constructed to account for all potential confounders found in the bivariate analysis.

CHAPTER FOUR

4.0 RESULTS

4.1 Socio-demographic characteristics of respondents

The sociodemographic characteristics of the study participants are shown in Table 4.1 below. The military personnel's average age was 33.1 years, plus or minus 7.1 SD. 221 (85.3%) men and 14.7% women out of the 259 responders were male. Most of the respondents (30.1%) having been on peacekeeping missions rank as privates, 20.5% as corporals and 17.0% as sergeants. More than half of the respondents (54.4%) were single. The number of children of the military personnel ranged from 0 to 6 with a median of 1. The highest serving military personnel with peacekeeping experience had served for 30 years with the least being a year. Furthermore, the highest number of UN Missions Ghanaian military personnel had been on was 5 with a minimum of 1.

Table 4.1 **Socio-demographic characteristics of respondents (n = 259)**

Variables	Frequency	Percent (%)
Mean age of military personnel (years)	33.1 ± 7.1	
Gender		
Male	221	85.3
Female	38	14.7
Rank		
Captain	7	2.7
Lieutenant	21	8.1
Warrant officer	19	7.3
Sergeant	44	17.0

Single	141	54.4
Married	99	38.2
Divorced	11	4.3
Separated	4	1.5
Widowed	4	1.5
Median number of children **Range (0 , 6)**	1	
Median number of years in service **Range (1 , 30)**	7	
Median Number of UN missions **Range (1 , 5)**	1	

Corporal	53	20.5
Lance corporal	37	14.3
Private	78	30.1
Marital status		

4.2 Level of Stress, Anxiety and Depression among Ghanaian Military Personnel on Peacekeeping Missions

The table shows the level of stress, anxiety and depression among military personnel having done peacekeeping missions. About 44% of the respondents had some level of stress with nearly eighteen percent, 17.7% (46/259) of the respondents having severe to extreme stress. Anxiety was

recorded among more than half of the military personnel with 43.7% (113/259) having severe or extreme anxiety. Also, more than half (55.8%) of the respondents had some degree of depression, 32.1% (83/259) of whom were severely or extremely depressed.

Table 4.2 **Level of Stress, Anxiety and Depression among Ghanaian Military Personnel on Peacekeeping Missions (n = 259)**

Variables	Frequency	Percent (%)
Stress		
Normal	146	56.4
Mild stress	16	6.2
Moderate stress	51	19.7
Severe stress	27	10.4
Extremely severe	19	7.3
Anxiety		
Normal	109	42.1
Mild anxiety	7	2.7
Moderate anxiety	30	11.6
Severe anxiety	30	11.6
Extreme anxiety	83	32.1
Depression		
Normal	116	44.8
Mild depression	30	11.6
Moderate depression	30	11.6
Severe depression	45	17.4
Extreme depression	38	14.7

4.3 Quality of Life Assessment

The mean scores and standard deviations of QOL assessment for the Ghanaian military personnel having done peacekeeping missions is shown below in table 4.3. The mean overall quality of life WHOQOLBREF score was 73.68 ± 14.94 and the mean general health score was 74.67 ± 19.47 indicating high satisfaction with QOL among the military personnel. Of all the seven items used to assess the mean physical health score, the third item "the extent of pain and discomfort" had the lowest mean score of 10.16 ± 4.56SD while the capacity for work of the military personnel had the highest mean score of 14.36 ± 3.56SD. The overall QOL mean physical health score was 89.59 ± 16.62SD.

The overall QOL mean psychological health score was 78.02 ± 15.80SD. The twenty sixth item "negative feelings such as blue mood, despair, anxiety, depression" used to assess psychological health score had the lowest mean score of 9.92 ± 4.0SD.

The social wellbeing of Ghanaian military personnel having had peacekeeping experience within the last 5 years was assessed using three items. Of the three items, "satisfaction with social support" had the lowest mean score of 12.48 ± 3.76SD while "satisfaction with personal relationships" had the highest mean score of 13.68 ± 4.36SD. The overall QOL social wellbeing mean score, however, was 39.40 10.13, the lowest of the domains.

The overall QOL mean environmental health score of the military personnel was 99.58 ± 24.83SD. Eight items were used to assess the environmental health of respondents. Of the eight items, "physical environment" had the highest mean score of 14.36 ± 4.48SD while "participation in and opportunities for recreation/leisure" had the lowest mean score of 11.16 ± 4.00SD. (see appendix III)

Table 4.3 **Quality of Life Assessment**

Items	Mean score	Standard deviation
Mean physical health score	**89.59**	**16.62**
Mean psychological health score	**78.02**	**15.8**
Mean social relationship score	**39.40**	**10.13**
Mean environmental health score	**99.58**	**24.83**
Overall quality of life and General health		
1. Overall quality of life	**73.68**	**14.94**
2. General health	**74.67**	**19.47**

4.4 Correlation coefficients between 4 QOL domains, overall QOL and general health

The correlation of the four domains of QOL as shown in table 4.4 among the military personnel revealed that environmental domain was the highest with a mean score of 99.58 ± 24.83 while the social relationships was the lowest with a mean score of 39.40 ± 10.13. To assess low quality of life, one standard deviation below the mean was used as the cut-off standard. The proportion of the military personnel with low quality of life in the physical domain was 10.4%, psychological domain (18.2%), social domain (18.5%), and environmental domain (16.2%). In addition, there was a strong positive correlation among the four QOL domains, overall QOL and general health with statistically significant correlation coefficient ($r > 0.5$) across each pairwise correlation of all the domains, overall quality of life and general health.

Table 4.4 **Correlation coefficients between 4 QOL domains, overall QOL and general health**

	Mean	SD	Number of participants with poor scores n (%)	General health	General quality of life	Overall QOL	Environmental QOL	Social relationships	Psychological QOL	Physical QOL
						Pearson's correlation coefficient, (r)				
Domain 1 Physical QOL	89.59	16.62	27(10.4)							1.00
Domain 2 Psychological QOL	78.02	15.80	47(18.2)						1.00	**0.75***
Domain 3 Social Relationships QOL	39.40	10.13	48(18.5)					1.00	**0.67***	**0.71***
Domain 4 Environmental QOL	99.58	24.83	42(16.2)				1.00	**0.73***	**0.77***	**0.78***
General Quality Of Life	73.68	14.94	29(11.2)		1.00		**0.62***	**0.57***	**0.62***	**0.65***
General Health	74.67	19.47	12(4.6)	1.00	**0.58***		**0.66***	**0.57***	**0.66***	**0.59***

*(statistical significance, $p < 0.05$)

4.5 Factors associated with QOL among Ghanaian military personnel post peacekeeping missions.

Table 4.5 below shows the results from a multiple linear regression of factors associated with QOL among Ghanaian military personnel who have been on peacekeeping missions. After adjusting for relevant factors, the rank of military personnel was a significant predictor of QOL, as lieutenants had a significant reduction in their quality of life as compared to captains (adj. mean diff = 1054.16; p = 0.035). Furthermore, sergeants had a significantly lower quality of life as compared to captains (adj. mean diff = -1417.04; p = 0.003). Also, the quality of life of corporals was significantly reduced as compared to the quality of life of captains (adj. mean diff = -1228.37; p = 0.010).

Table 4.5 **Factors associated with QOL among Ghanaian military personnel after peacekeeping missions**

Variables	unadjusted mean difference	p-value	adjusted mean difference	p-value

Age	10.34(-25.01-45.70)	0.565	23.48(-46.28 - 93.24)	0.508
Gender				
Male	0.000		0.000	
Female	373.85(-329.80-1077.50)	0.296	357.47(-343.18 - 1058.11)	0.316
Number of children	97.79(-85.99-281.57)	0.296	121.66(-180.56 - 423.88)	0.429
Marital status				
Single	0.000		0.000	
Married	148.12(-377.34-673.58)	0.579	173.59(-571.04 - 918.22)	0.646
Divorced	-708.45(-1962.97-546.08)	0.267	-500.63(-1837.79 - 836.53)	0.461
Separated	-653.90(-2685.83-1378.02)	0.527	309.59(-1391.69 - 2010.88)	0.720
Widowed	-1353.90(-3385.83-678.02)	0.191	-1277.99(-3180.95 - 624.96)	0.187
Educational level				
Junior high school	0.000		0.000	
Senior high school	-416.10(-1034.18-201.99)	0.186	-555.13(-1162.99 – 52.73)	0.073
Tertiary	443.88(-172.72-1060.48)	0.158	314.38(-319 - 948.74)	0.330
Rank				
Captain	0.000		0.000	
Lieutenant	-1200.00(-2947.98-547.98)	0.178	**-1054.16(-2031.09 - -77.23)**	**0.035***
Warrant officer	-526.32(-2297.15-1244.52)	0.559	-699.91(-2102.04- 702.21)	0.326
Sergeant	-972.73(-2602.50-657.04)	0.241	**-1417.04(-2343.80- -490.28)**	**0.003***
Corporal	-1026.42(-2637.08-584.25)	0.211	**-1228.37(-2157.96- -298.78)**	**0.010***
Lance corporal	-864.86(-2515.66-785.93)	0.303	-724.77(-1646.45- 196.89)	0.123
Private	-384.62(-1964.88-1195.65)	0.632	-1417.04(-2343.80- -490.28)	0.144
Number of years of service	-13.41(-52.27-25.45)	0.497	-43.95(-126.93 – 39.02)	0.298
Number of UN missions	**372.15(47.32-696.98)**	**0.025***	435.82(-81.54 – 953.18)	0.098

Depression					
Normal		0.000		0.000	
Mild	to				
moderate		-449.66(-1081.23-181.92)	0.162	-1029.33(-2869.88 – 811.22)	0.272
Severe	to				
extreme		**-736.64(-1307.64- -165.65)**	**0.012***	-1809.49(-3905.71 – 286.73)	0.090
Stress					
Normal		0.000		0.000	
Mild	to				
moderate		-326.44(-915.22 - 262.34)	0.276	1090.18(-789.07 – 2969.44)	0.254
Severe	to				
extreme		**-680.88(-1355.52 - - 6.24)**	**0.048***	1029.52(-1093.03 – 3152.06)	0.340
Anxiety					
Normal		0.000		0.000	
Mild	to				
moderate		-471.61(-1229.80-286.58)	0.222	-403.38(-1314.49 – 2121.26)	0.644
Severe	to				
extreme		**-590.24(-1125.22- -55.26)**	**0.031***	OMITTED	

CHAPTER FIVE

5.0 DISCUSSION

5.1 Quality of life of Ghanaian military personnel post international peacekeeping missions

This study examined the association between depression, stress, and anxiety levels and quality of life in Ghanaian Armed Forces military members who have been on peacekeeping deployments. According to Katsavouni, Bebetsos, Malliou, and Beneka (2016), employees of specialized professions like firefighting, rescue workers, and the military require specialized health care because their line of work exposes them to daily extreme physical, mental, and social stresses that put them at risk for a variety of health issues. It was found in this study that the military personnel on peacekeeping missions have a high quality of life recording a mean overall quality of life score was 73.68 ± 14.94 SD and a mean general health score was 74.67 ± 19.47 on the WHOQOLBREF scale similar study was carried out in Serbia with 311 randomly chosen professional military personnel (officers, non-commissioned officers, and professional soldiers) without any current mental health issues to assess the relationship between quality of life and anxiety levels in the Serbian Armed Forces (Vojvodi & Dedi, 2019). The World Health Organization Abbreviated Instrument for Quality of Life Assessment (WHOQOL-BREF) was also used in the Serbian study, which found that professional military personnel had the highest levels of satisfaction with their quality of life in the categories of social relations (82.52), psychological health (82.10), and physical health (81.68), while their scores for the environment (62.77) were the lowest. Although not limited to those working in international peacekeeping, the Serbian study's findings are similar to those from Ghana, where similar high levels of quality of life were noted in the categories of social relations (39.4), psychological health (78.02), physical health (89.5), and environmental

quality (99.5). Perhaps this is due to similarities in the physical and psychological orientation of military personnel. However, there may be anthropological distinctions between the Ghanaian and Serbian environments that contribute to the variances in social and environmental satisfaction to quality of life. According to studies, stressors in the military environment include dangerous assignments or missions, communication issues with peers and senior officers, sleep deprivation due to shift work, ongoing physical fitness assessments, impromptu deployment and separation from family, and yet another noncombat deployment such as disaster management, peacekeeping, and other humanitarian engagements (Airila, Hakanen, Luukkonen, Lusa & Punakallio, 2013; Van Eetveldt, van de Ven, van den Tooren &Versteeg, 2013). The United Nations Institute for Training and Research (2019) identified environmental health as a determinant of the quality of life of peacekeepers. The UNITAR (2019) noted a lack of political will, focus and clear priorities as environmental factors that negatively affect peacekeeping missions stating that these factors predispose peacekeepers to high levels of threats and DASS that negatively affect their health, and well-being and quality of life. In their study, Vojvodic & Dedic (2017) also noted that significant efforts leading to the improvements in the social, psychological, physical and environmental health of peacekeepers significantly increased their quality of life through their results showed that the majority of the Serbian soldiers were not pleased with the health of their environment. Authorities need to pay much attention to improving the physical, social, psychological, and environmental health of peacekeepers to improve their quality of life.

5.2 The Level of Depression, Anxiety and Stress among Ghanaian Military Personnel Having Been on International Peacekeeping

About 18% of the respondents were under severe to extreme stress whereas 32.1% experienced extreme anxiety post peacekeeping missions. Furthermore, 32.1% of the Ghanaian military

personnel were severe to extremely depressed. Similarly, a study comparing the mental health of Dutch peacekeepers to civilians (Klaassens et al., 2008) showed that only 17% of the peacekeepers suffered any form of severe to extreme levels of DASS. Additionally, they found no discernible difference in the proportion of troops and civilians with DASS other than the peacekeepers' higher levels of animosity (Klaassens et al., 2008). An earlier study by Michel et al. (2004) that assessed the mental health of a Swedish battalion serving in Bosnia found no appreciable differences in the levels of DASS before, during, or after deployment. However, they claimed that peacekeepers who went through traumatic or stressful situations while on duty or thereafter showed higher levels of DASS (Michel et al. 2004). However, research by Sun et al. (2014) indicated that Chinese peacekeeping personnel in Liberia had greater levels of DASS. They noticed that the levels of DASS experienced by the Chinese peacekeepers were unacceptably high when compared to the Chinese military norms for mental health. They also noted that peacekeepers who were in the military depicted higher levels of DASS compared to civilian peacekeepers (Sun et al., 2014). As family and friends encourage returning service members to improve psychological well-being, the intensity of PTSD symptoms can be reduced. With this in mind, Welsh, Olson, Perkins, Travis, and Ormsby (2015) looked at the effects of three different sources of social support on the wellbeing of service members: romantic partners, friends, and neighbours, as well as unit leaders. According to their study's findings, depressed symptoms were less affected by adverse deployment experiences when all three types of social support were present. As a result, Ghanaian peacekeepers need to be adequately taught and equipped to handle DASS properly.

5.3 Factors associated with quality of life of Ghanaian military personnel after an international peacekeeping

5.3.1 Demographic Factors

After returning from a peacekeeping assignment, it was discovered that the marital status of Ghanaian military members was related to their general quality of life. Compared to those who were single, military people who were widowed had a much lower quality of life. An alreadymarried person experiences trauma when their spouse passes away. Therefore, it is not unexpected that widowed peacekeepers have a lesser quality of life than single peacekeepers. Michel et al (2004) agree to emphasize that peacekeepers who experienced traumatic or stressful events during or after deployment such as losing a loved one are likely to exhibit higher levels of DASS which affect their quality of life. Bereaved peacekeepers must be given holistic psychological help to ensure full recovery before embarking on missions.

The quality of life of Ghanaian military personnel after peacekeeping deployments was found to be strongly influenced by the rank of military personnel in the current study. Lower ranked military peacekeepers reported much lower overall quality of life compared to captains. Researchers (Hotopf et al., 2003; Singh et al., 2001; Sun et al., 2014) claim that soldiers in lower military ranks struggle to deal with traumatic events during peacekeeping missions, which affects their health more negatively than their senior counterparts. The degree of experience and amount of time spent on peacekeeping missions go hand in hand with rank inequalities. It implies that officers of higher ranks may be better able to cope and have a higher quality of life since they have spent more time and have more expertise in peacekeeping than officers of lower ranks. Lower-ranked peacekeepers need to receive advanced training, be outfitted with the necessary tools, and enjoy a higher standard of living.

5.3.2 Depression, Anxiety, and Stress associated with Quality of life among Ghanaian military personnel post-peacekeeping missions.

Ghanaian military personnel post-peacekeeping missions with severe to extreme levels of DASS had a significant reduction in their overall quality of life. High levels of DASS are likely to interfere with one's ability to cope appropriately leading to lower quality of life. Similarly, Loscalzo et al. (2018) documented higher quality of life among peacekeepers with lower levels of DASS. The degree of experience and amount of time spent on peacekeeping missions go hand in hand with rank inequalities. It implies that officers of higher ranks may be better able to cope and have a higher quality of life since they have spent more time and have more expertise in peacekeeping than officers of lower ranks. Lower-ranked peacekeepers need to receive advanced training, be outfitted with the necessary tools, and enjoy a higher standard of living.

5.4 Limitations

The statistical relationships found in this study cannot be deemed to be causal due to the cross-sectional study design employed in the study. The findings cannot be generalized to the entire military since the study was conducted among only military personnel with peacekeeping experience.

The confidence interval was wide for significant factors found to be associated with DASS among the military personnel due to the small sample size used in this study. Therefore, interpretation of the findings should be considered with this limitation.

CHAPTER SIX

6.0 CONCLUSION AND RECOMMENDATION

6.1 Conclusion

The overall quality of life among Ghanaian military personnel on peacekeeping was high as expressed with a satisfaction WHOQOLBREF mean score of about 74. About 44% of the respondents had some level of stress with nearly 18% of the respondents having severe to extreme stress. Anxiety was recorded among more than half of the military personnel on peacekeeping with 43.7% having severe or extreme anxiety.

Also, more than half of the respondents had some degree of depression, 32.1% of whom were severely or extremely depressed. Depression, anxiety, and stress did not show significant association with quality of life among Ghanaian military personnel post-peacekeeping mission.

However, the marital status of Ghanaian military personnel after a peacekeeping mission was found to be associated with their overall quality of life. Widowed military personnel had a significantly lower quality of life as compared to those who were single. Compared to captains, military peacekeepers of lower ranks had a significant reduction in their overall quality of life. An increase in the physical, psychological and environmental health of peacekeepers correlated with an overall increase in quality of life.

6.2 Recommendations

The study recommends that:

1. The Ghanaian Military Command should actively involve psychologists in all three phases of the deployment process during peacekeeping missions. Also, more avenues should be created to address depression, anxiety and stress among their personnel during and after peacekeeping missions.
2. Further research should be done to explore the coping mechanisms of military personnel on peacekeeping missions.
3. Further research should also be done on the social interactions and experiences of military personnel especially lower ranks during peacekeeping and the perceived effects on their quality of life.

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APPENDICES

APPENDIX I - Informed Consent Form

Project Title: Quality of life and subjective well-being of Ghanaian military personnel on peacekeeping missions. A case study of the 4th infantry battalion, Kumasi.

Principal Investigator: Naval Lieutenant Dr Sheba Fiadzomor, a student of the School Of Public Health at the University of Ghana, Legon.

General Information about Research

Objectives

This study aims to determine the effects of peacekeeping on the mental health and quality of life of Ghanaian soldiers who have been on such missions. It further will determine the level of depression, stress and anxiety among these soldiers as well as the influence, if any of these on the quality of life of the military personnel.

Procedures

The study will involve answering questions from a structured questionnaire about the physical, social, psychosocial and environmental well being of personnel. No coercion will be used to obtain a response from participants. It will be appreciated if you could participate in this study. This is academic research which forms part of my work for the award of a Master's Degree in Public Health.

Risks and Benefits

The study population and other stakeholders including the Ghana Armed Forces will benefit from this study. The study hopes to influence the approach to mental health care in the armed forces, especially for personnel who have been on these missions. There are no risks associated with the study

Voluntary Participation and Right to Leave the Research

Participation in this study is voluntary. You are allowed to answer any individual question or all the questions. You can withdraw from the study at any time without any consequences whatsoever, however, you are encouraged to fully participate in the study.

Anonymity and confidentiality

The information obtained in this study will be kept confidential and will not be accessed by any unauthorized persons.

Termination of Participation by the Researcher

Participant's participation may be terminated without regard to the participant's consent if the participant is found to be a known mental illness patient or if the participant has not participated in any peacekeeping missions.

Contacts for Additional Information

In case of further information or any questions later please, contact me, Naval Lieutenant Sheba Fiadzomor (Tel: 0205637898 or dr.s.fiadzomor@gmail.com).

Also, this research has been reviewed and approved by the 37 Military Hospital Institutional Review (37MHIRB). If you have any questions about your rights as a research participant you can contact the IRB Office between the hours of 7:30 am-2:00 pm through the mobile phone at 0591759506 or email addresses: irbmilhosp@gmail.com

Dissemination of Results

Copies of the findings of the study will be disseminated to the Health and Wellness Department of the 37 military hospitals, Kumasi Military Hospital and the Ghana Armed Forces Medical Services.

Before taking the Consent

Do you have any concerns about the study that you wish to be addressed?

Yes No

If yes, please indicate your concern below.

……

……

VOLUNTEER AGREEMENT

The above document describing the benefits, risks and procedures for the research title ***(****Quality of life and subjective well-being of Ghanaian military personnel on peacekeeping missions. A case study of the 4th infantry battalion, Kumasi****.)*** has been read and explained to me. I have been allowed to have any questions about the research answered to my satisfaction. I agree to participate as a volunteer.

_____ _____

Date Name and signature or mark of volunteer

If volunteers cannot read the form themselves, a witness must sign here:

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.

_____ _____

Date Name and signature of a witness

I certify that the nature and purpose, the potential benefits, and possible risks associated with participating in this research have been explained to the above individual.

_____ _____

Date Name Signature of Person Who Obtained Consent

APPENDIX II - Questionnaire

SOCIODEMOGRAPHY

Age: ……. Sex: M [ ] F [ ]

Rank: …… No. of Years in Service: …….

Religion: ……

Marital Status: Single [ ] Married [ ] Divorced [ ] Separated [ ] Widowed [ ]

Number of children: …….

Highest educational level: ……

No. of UN Missions: …… GHANBATT Appts held: ……

WHOQOL-BREF

The World Health Organization Quality of Life (WHOQOL) – BREF

The following questions ask how you feel about your quality of life, health, or other areas of your life. I will read out each question to you, along with the response options. Please choose the answer that appears most appropriate. If you are unsure about which response to give to a question, the first response you think of is often the best one.

Name Date Administered

		Very poor	Poor	Neither poor nor good	Good	Very good
1.	How would you rate your quality of life?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

		Very poor	Poor	Neither poor nor good	Good	Very good
2.	How satisfied are you with your health?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

The following questions ask about how much you have experienced certain things in the last four weeks.

		Not at all	A little	A moderate amount	Very much	Extremely
3.	To what extent do you feel that physical pain prevents you from doing what you need to do?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

4.	How much do you need any medical treatment to function in your daily life?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
5.	How much do you enjoy life?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
6.	To what extent do you feel your life to be meaningful?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
7.	How well are you able to concentrate?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
8.	How safe do you feel in your daily life?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
9.	How healthy is your physical environment?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

The following questions ask about how completely you experienced or were able to do certain things in the last four weeks.

		Not at all	A little	Moderately	Mostly	Completely
10.	Do you have enough energy for everyday life?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
11.	Are you able to accept your bodily appearance?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

12.	Have you enough money to meet your needs?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
13.	How available to you is the information that you need in your dayto-day life?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
14.	To what extent do you have the opportunity for leisure activities?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

		Very poor	Poor	Neither poor nor good	Good	Very good
15.	How well are you able to get around?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
16.	How satisfied are you with you sleep?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

17.	How satisfied are you with your ability to perform your daily living activities?	☐1	☐2	☐3	☐4	☐5
18.	How satisfied are you with your capacity for work?	☐1	☐2	☐3	☐4	☐5
19.	How satisfied are you with yourself?	☐1	☐2	☐3	☐4	☐5
20.	How satisfied are you with your personal relationships?	☐1	☐2	☐3	☐4	☐5
21.	How satisfied are you with your sex life?	☐1	☐2	☐3	☐4	☐5
22.	How satisfied are you with the support you get from your friends?	☐1	☐2	☐3	☐4	☐5
23.	How satisfied are you with the conditions of your living place?	☐1	☐2	☐3	☐4	☐5

24.	How satisfied are you with your access to health services?	☐1	☐2	☐3	☐4	☐5
25	How satisfied are you with your transport?	☐1	☐2	☐3	☐4	☐5

The following question refers to how often you have felt or experienced certain things in the last four weeks.

		Never	Seldom	Quite often	Very often	Always
26.	How often do you have negative feelings such as blue mood, despair, anxiety, and depression?	☐1	☐2	☐3	☐4	☐5

DASS 21 SCALE

PSYCHOLOGICAL WELL- BEING QUESTIONNAIRE

Kindly read each statement and circle a number 0, 1, 2 or 3 that indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement. The rating scale is as follows:

0. Does not apply to me at all.

1. Applies to me to some degree or some of the time.

2. Applies to me to a large extent, or a good part of time.

3. Applies to me very much, or most of the time.

SER	STATEMENTS	RESPONSE SCALE			
1	I found it hard to calm down	0	1	2	3
2.	I was aware that my mouth was dry	0	1	2	3
3.	I couldn't seem to experience any positive feeling at all	0	1	2	3
4.	I experienced breathing difficulty (e.g., excessively rapid breathing, breathlessness in the absence of physical effort)	0	1	2	3
5.	I found it difficult to take the initiative to do things on my own	0	1	2	3
6.	I tended to over-react to situations than normal	0	1	2	3
7.	I experienced trembling (e.g., shaking in the hands or body)	0	1	2	3
8.	I felt that I was using a lot of energy due to pressure	0	1	2	3
9.	I was worried about situations in which I might panic (lose control) and make a fool of myself (look foolish)	0	1	2	3
10.	I felt that I had nothing to look forward to or hope for	0	1	2	3

11.	I found myself getting tensed or worried	0	1	2	3
12.	I found it difficult to relax	0	1	2	3
13.	I felt sad and depressed (lost interest in usual things)	0	1	2	3
14.	I could not tolerate anything that interfered with what I was doing	0	1	2	3
15.	I felt I was close to panicking (getting frightened and losing control)	0	1	2	3
16.	I was unable to become enthusiastic (happy/excited) about anything	0	1	2	3
17.	I felt I was not worth much as a person (I felt I had little or no value)	0	1	2	3
18.	I felt that I was rather easily offended	0	1	2	3
19.	I was aware of my heart beating even though I had not been engaged in any phy activity (e.g., sense of heart rate increasing, heart missing a beat)	ical 0	1	2	3
20.	I felt scared (afraid) without any good reason	0	1	2	3
21.	I felt that life was meaningless (pointless)	0	1	2	3

APPENDIX III - Ethical Clearance

Institutional Review Board
37 Military Hospital
Neghelli Barracks
ACCRA

Tel: 059 1759506
Email: irbmilhosp@gmail.com

04 April 2022

ETHICAL CLEARANCE

37MH-IRB/MAS/IPN/600/22

On 04 April 2022 the 37 Military Hospital (37MH) Institutional Review Board (IRB) approved your protocol.

TITLE OF PROTOCOL: Quality of Life and Subjective Well-Being of Ghanaian Military Personnel on Peacekeeping Missions: A Case Study of the 4th Infantry Battalion Kumasi

PRINCIPAL INVESTIGATOR: Lieutenant Commander Sheba Afi Mansa Fiadzomor

Please note that a final review report must be submitted to the Board at the completion of the study.

Please report all serious adverse events related to this study to 37MH-IRB within seven (7) days verbally and fourteen (14) days in writing.

This certificate is valid till 03 April 2023.

INSTITUTIONAL REVIEW BOARD
04 APR 2022
37 MILITARY HOSPITAL-ACCRA

DR EDWARD ASUMANU
(37MH-IRB, Vice Chairman)

Cc: Brig Gen NA Obodai
Commander, 37 Military Hospital