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Prevalence of Anxiety and Depression Among Informal Caregivers of Patients with Mental Disorders Attending Clinics at Mathari Teaching and Referral Hospital

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Abstract

Informal caregivers face considerable psychological pressures while visiting family to facilities such as Mathari National Teaching and Referral Hospital in Kenya. With an estimated 475,633 Kenyans suffering from serious mental illnesses that necessitate full-time caregiving, the mental health of this caregiver population goes mostly ignored. The purpose of this study was to determine the prevalence of anxiety and depression among informal caregivers of patients with mental disorders who attended clinics at Mathari Teaching and Referral Hospital. The study was based on the Caregivers Stress Process Theory, which states that caregiving becomes a burden when the care recipient is a relative with mental illness, with burden levels determined by background characteristics, primary and secondary stressors, and intrapsychic strains. A descriptive survey design was used, with informal caregivers accompanying patients to Mathari Hospital. Purposive sample generated 92 caregivers, with 80 completed surveys used in the analysis. The DASS-21 anxiety and depression scales, a sociodemographic questionnaire, the Zarit Burden Interview, and the Brief COPE Scale were all used to collect data. For descriptive and inferential statistics, data was analysed using SPSS version 25. The prevalence of depression was 32.4% mild, 18.8% moderate, and anxiety was 38.8% mild, 12.4% moderate, and 3.8% severe. There was no significant relationship between sociodemographic characteristics and psychological discomfort levels. Anxiety and sadness are common among informal caregivers at Mathari Hospital, underlining the urgent need for caregiver-focused mental health efforts. Mathari Hospital should conduct systematic caregiver mental health assessments and create tailored support programs for those in moderate to severe suffering.

Keywords: *Anxiety, Depression, Informal Caregivers, Patients, Mental Disorders, Mathari Teaching and Referral Hospital*

1.0 Background of the Study

Informal caregivers, defined as individuals who provide unpaid and ongoing assistance with activities of daily living (ADLs) for those with chronic illness and disability, have long played an important role in caring for people with mental disorders in many developed countries, particularly since deinstitutionalization of mental health services began to shift care from psychiatric hospitals to community-based settings (Roth et al., 2015). This move to community care has considerably expanded the caregiving obligations of family members, resulting in many of them enduring considerable burdens of caregiving, leading to numerous psychological impacts such as anxiety and sadness. Mavundla et al. (2009). In the United Kingdom, approximately 5% of citizens over the age of 18 have severe mental illnesses that require informal caregivers to care for them in the community, with these caregivers reporting significant caregiving burdens that have resulted in psychological effects such as depression and anxiety (Clibbens et al., 2019). In Canada, approximately 8.1 million informal caregivers care for someone with a long-term health condition such as a severe mental disorder or disability, whereas available literature in India indicates that approximately 100-200/1000 of the population lives with mental disorders and is cared for by informal caregivers who have reported high levels of anxiety and depression compared to the general population (Walke et al., 2018).

A study in Ethiopia of informal caregivers of children and adolescents with mental illnesses discovered that these caregivers experienced high levels of caregiving burdens, which led to high levels of negative psychological effects such as depression and anxiety, with depression rates ranging from 19% to 79%, nearly three times higher than in the general population (Minichil et al., 2019). These conditions, known as Common Mental Disorders (CMDs) because they are the most common mental illnesses, affect a significant proportion of caregivers, with a study in the United States of America revealing that 10 to 20% of adults would visit an outpatient physician with either anxiety or a depression episode, and 50% of these adults would present with both (Cooper & C, 2017; Penning & Wu, 2015). Multiple meta-analyses and systematic reviews have found that informal caregivers were more likely to experience depression and anxiety symptoms and had poorer health than various non-caregivers, highlighting the significant psychological impact of caregiving roles on mental health and emphasizing why researchers frequently focus on anxiety and depression when studying the psychological effects of caregiving (Oshodi et al. 2012).

In Kenya, data from the Ministry of Health confirm the significant number of informal caregivers involved in caring for family members with long-term chronic illnesses, with the government estimating that approximately 475,633 Kenyans have severe mental illness and will soon require full-time caregiving by informal caregivers in communities (Ministry of Health, 2015). This demonstrates the critical role informal caregivers play in the continuum of care for people with severe mental disorders in Kenyan communities; however, despite their importance, these informal caregivers receive little attention when they bring their relatives to mental health facilities in Kenya. A study conducted by Ndeti et al. (2009) at Mathari National Teaching and Referral Hospital found that caregivers of patients with mental disorders faced significant care burdens and high levels of distress, which led to negative psychological effects such as anxiety and depression.

Recent study has shown significant shifts in the demography of caregivers, with men becoming more active as caregivers for the mentally ill, which can be ascribed to variables such as women taking on greater economic roles and lower family sizes (Sharma et al., 2016). While women remained the majority of caregivers in the 1980s, about 20 to 33% of caregivers were men, and more recent studies have reported an increase of up to 60 to 70% of male caregivers in modern

homes (National Alliance for Caregiving and AARP, 2004). Despite this emerging trend of an increase in male informal caregivers, most research studies continue to focus on female caregivers, potentially at the expense of male caregivers' mental health, leaving a gap in understanding the prevalence and specific manifestations of anxiety and depression among male caregivers of patients with mental disorders. This gender-based research gap is particularly concerning given that anxiety and depression can affect caregivers regardless of gender, and a comprehensive understanding of the prevalence across genders is necessary to develop targeted interventions that address the specific needs of all caregivers, especially since untreated anxiety and depression can potentially progress to more severe mental disorders that can lead to significant impairment and even death.

1.1 Statement of the Problem

Informal caregivers bear severe psychological loads when caring for patients with mental problems, which express as physical and emotional distress over extended periods of time with high levels of unpredictability and uncontrollability. This strain frequently causes severe psychological repercussions such as sadness and anxiety, which can trigger physiological responses that result in debilitating illnesses and even death of caregivers (Vitalliano et al., 2003). According to research from various countries, caregivers for patients with mental disorders frequently experience psychological distress, with studies indicating that many are on the verge of developing major mental health disorders, while others already exhibit clear symptoms of conditions such as anxiety and depression (Minichil et al., 2019). These psychological repercussions have an impact not only on caregivers' well-being, but also on the quality of care they provide to their mentally ill relatives, resulting in a troubling cycle of declining health for both parties.

Despite ample evidence of the prevalence of psychological distress among caregivers, these individuals are rarely targeted for mental health evaluation when accompanying their relatives to mental health facilities in Kenya, particularly Mathari National Teaching and Referral Hospital. With the Kenya mental health policy 2015-2030 predicting that roughly 475,633 Kenyans suffer serious mental illnesses necessitating full-time caregiving, the mental health of this sizable caregiver population is mainly overlooked (Ministry of Health, 2015). A previous study at Mathari Hospital by Ndeti et al. (2009) found that caregivers experienced high levels of psychological distress, but there has been little recent research to confirm or refute evidence from other parts of the world about the exact prevalence of anxiety and depression among these caregivers. Therefore, the purpose of this study was to look at the prevalence of anxiety and depression among caregivers at Mathari National Teaching and Referral Hospital in order to provide current, context-specific data that may be used to guide focused interventions for this vulnerable population.

1.2 Objective of the Study

The primary objective of this study was to assess the prevalence of anxiety and depression among informal caregivers of patients with mental disorders attending clinics at Mathari National Teaching and Referral Hospital.

1.3 Research Question

What is the prevalence of anxiety and depression among informal caregivers of patients attending clinics at Mathari National Teaching and Referral Hospital?

2.0 Literature Review

This chapter presents a critical review of literature relevant to understanding the prevalence of anxiety and depression among informal caregivers of patients with mental disorders. It begins

by examining the Caregivers Stress Process Theory as a theoretical framework that explains how psychological effects develop among caregivers, followed by a comprehensive review of empirical studies on prevalence rates of anxiety and depression in caregivers across different regions and contexts.

2.1 Theoretical Framework

The Caregivers Stress Process Theory evolved from Lazarus and Folkman's (1984) transactional stress theory and has been widely used in caregiving research in a variety of contexts, including African countries, to investigate stress and coping processes across varied people. According to Pearlin et al. (1990), caregiving can cause significant stress when the care recipient is a relative or spouse with mental illness, since it becomes a burden on the informal caregiver. This transformation occurs because the care recipient's impairment increases dependency on activities of daily living, causing caregiving roles to consume the caregiver's entire time and resulting in increased burdens manifested as stress, anxiety, and depression (Pearlin, 1981). The theory's primary claim is that informal caregivers are psychologically affected differently under similar caring circumstances—some may feel negative psychological impacts as a result of caregiving, while others may report favourable outcomes. Pearlin et al. (1990) explain that these variances are caused by a variety of factors, including background and context, caregiver qualities, stressor types (both primary and secondary), and intrapsychic stresses. This theoretical framework provides a comprehensive explanation for why prevalence rates of anxiety and depression may differ among caregivers even when caring for patients with similar conditions, making it especially relevant to understanding the first goal of this study, which is to determine the precise prevalence of these conditions in a specific population.

The theory outlines numerous critical components that influence the development of psychological consequences in caregivers. Background and contextual features are identified as significant attributes of informal caregivers, including societal and caregiver-acquired statuses such as age, gender, education level, occupation, and economic activity. These many statuses indicate where society places a caregiver and may determine the type of support, including privileges and opportunities, that the caregiver receives while doing caregiving activities (Wilborn-Lee, 2015). Background characteristics also include the caregiver's previous relationship with the patient and the length of time they have provided care. The theory also distinguishes between primary stressors—those that arise directly from patient needs such as problematic behaviour, the need for increased surveillance, and dependency levels—and secondary stressors, which emerge as a result of primary stressors and frequently manifest as economic strains and decreased social engagement. Economic pressures arise as a result of the strain caregiving roles place on family financial well-being, when resources are redirected to caregiving demands such as hospital transportation and pharmaceutical bills. Secondary stressors might also manifest as a reduced social life for the informal caregiver due to the pressures of completing daily chores for the care recipient, potentially leading to narrower social circles and networks (Wilborn-Lee, 2015). These diverse stressors contribute to understanding the mechanisms by which caregiving causes anxiety and depression, as well as why prevalence rates may be especially high in resource-constrained situations.

The third component of stress process theory is intrapsychic strains, which affect the caregiver's self-concept and psychological condition. According to caregiver research, difficult situations such as providing caring tasks to a relative with mental illness can result in lowered or even destroyed self-concept, which can lead to psychological impacts such as anxiety and sadness (Pearlin et al., 1981). The theory's third component focuses on outcomes, specifically caregivers' physical and mental well-being. Anxiety, depression, cognitive function

disturbance, and irritability are among the most common mental health consequences observed among caregivers, according to this theoretical paradigm (Wilborn-Lee, 2015). Anxiety and depression are among the most common mental illnesses globally, but they sometimes go unnoticed, despite their potentially disastrous implications if not treated appropriately. This theory is especially useful for the study's first purpose since it provides a systematic framework for understanding how and why anxiety and depression develop in caregivers, as well as explanatory power for interpreting observed prevalence rates. The Caregivers Stress Process Theory highlights the multifaceted pathways through which caregiving can affect mental health, which helps contextualize the importance of accurately assessing prevalence rates as a first step toward developing targeted interventions that address the specific mechanisms contributing to caregiver distress.

2.2 Empirical Review

Schulz and Edu (2016) conducted research on the psychological effects experienced by informal caregivers in the United States. Their study revealed that up to 48.8% of caregivers reported negative psychological effects, with those caring for patients with stroke and dementia experiencing the highest levels of depression and anxiety. Despite these challenges, some caregivers reported positive outcomes, including greater appreciation for life, development of new competencies, and improved relationships with care recipients. Collins and Kishita (2019) performed a meta-analysis examining the prevalence of depression among informal caregivers of patients with dementia in the UK. Using assessment tools such as the Hospital Anxiety and Depression scale and Beck's Depression Inventory, they found a 36% prevalence of depression among caregivers. Their analysis revealed that female caregivers experienced depression 1.45 times more frequently than males, with no significant difference in depression prevalence between non-spousal and spousal caregivers.

Sallim et al. (2015) investigated depression prevalence among different caregiver relationships. Their findings contradicted those of Collins and Kishita, reporting that spousal caregivers were likely to experience more depression compared to non-spousal caregivers, highlighting the complexity of caregiver experiences based on relationship dynamics. Wan and Wong (2019) examined the psychological impact on caregivers of relatives with schizophrenia in Hong Kong through a study of 484 caregivers. They found that 78% of caregivers experienced anxiety and 45% experienced sleep disturbances. The researchers noted that anxiety was primarily attributed to fear, distrust, and insecurity, especially when relatives were non-compliant with medication regimens. Rachamim et al. (2021) focused on depression among informal caregivers of relatives with psychosis in Israel. The study used 78 participants, they discovered that 26% of caregivers reported depression, representing a lower rate than many other studies in the literature.

Ong et al. (2016) conducted a cross-sectional study on psychological distress among caregivers of patients with schizophrenia in Malaysia. Their research found that 31% of caregivers experienced psychological distress, including symptoms of anxiety and depression, contributing to the body of evidence on caregiver burden in Asian contexts. Ae Ngebise et al. (2015) investigated psychological morbidities among caregivers of patients with mental illnesses in Ghana. Their study revealed that approximately half of the caregivers had psychological morbidities due to caregiving experiences, reflecting the significant challenges faced by caregivers in African settings. Udoh et al. (2021) performed a descriptive hospital-based survey on psychiatric morbidities among caregivers at a neuropsychiatric hospital in Nigeria. They found that up to 50% of caregivers had psychiatric morbidities, with the type of illness (schizophrenia, mental retardation, epilepsy) correlating with higher levels of psychological distress in caregivers.

Sintayehu et al. (2016) studied psychological distress among caregivers of patients with severe mental illness in Ethiopia. Their research revealed that 56% of caregivers experienced psychological distress, a rate slightly higher than reported in the Nigerian study, further supporting the trend of elevated psychological burden among caregivers in developing countries. Most studies indicate a prevalence of anxiety and depression among informal caregivers between 30-40%, with higher rates (up to 56%) found in developing countries compared to developed countries. Limitations of African studies include potential use of psychological assessment tools not validated for African populations, and few studies have been conducted in Kenya specifically to determine the prevalence of common mental disorders among caregivers.

2.3 Conceptual Framework

The conceptual framework for this study illustrates the relationship between key variables relevant to the prevalence of anxiety and depression among informal caregivers of patients with mental disorders. As defined by Robson (2002), a conceptual framework provides a diagrammatic representation of research variables and their interrelationships, helping to visualize the theoretical underpinnings of the study. For the first objective focusing on prevalence assessment, this framework depicts how sociodemographic characteristics (age, gender, education level, marital status, income) and caregiving context factors (relationship to patient, duration of caregiving, patient's diagnosis, dependency level) function as independent variables that influence the dependent variables of anxiety and depression, which are measured using the DASS-21 scale. This structured visualization guides the research process by identifying potential factors associated with varying prevalence rates of psychological distress among caregivers.

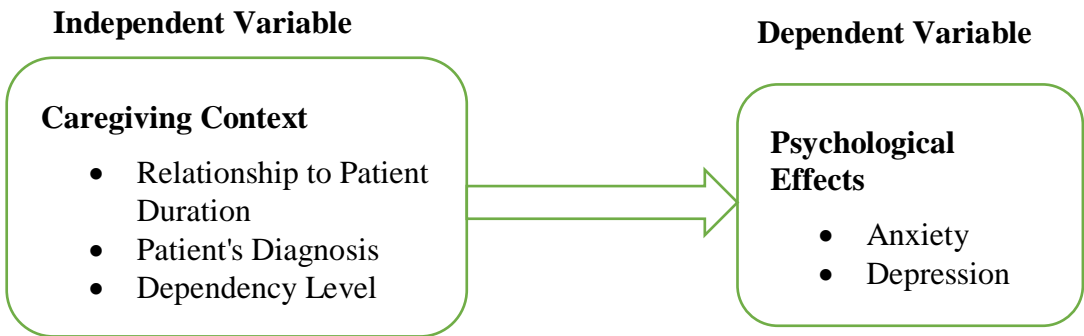


Figure 1: Conceptual Framework

3.0 Research Methodology

This study employed a descriptive survey design to investigate the prevalence of anxiety and depression among informal caregivers of patients with mental disorders attending clinics at Mathari National Teaching and Referral Hospital. The target population comprised informal caregivers who had accompanied their relatives with mental disorders to the hospital's clinics, selected because it is Kenya's largest psychiatric referral facility. Using purposive sampling, 92 caregivers were selected from the target population of 120 based on the Krejcie and Morgan table guide. Data collection utilized three validated psychological tools: The Depression Anxiety Stress Scale (DASS-21) which was central for measuring the prevalence of anxiety and depression, a researcher-designed sociodemographic questionnaire, the Zarit Burden Interview (ZBI), and the Brief COPE Scale. All data was collected at Mathari Hospital over a two-week period by the researcher and two trained research assistants after obtaining ethical clearance from the Daystar Committee DU-ISERC and NACOSTI. Participation was voluntary, with respondents providing informed consent before enrollment. For data analysis,

SPSS version 25 was employed to generate descriptive statistics (frequencies, percentages, means, and standard deviations) to determine prevalence rates of anxiety and depression, while inferential statistics established relationships between sociodemographic variables and psychological distress levels.

4.0 Findings and Discussion

The study was to assess the prevalence of anxiety and depression among informal caregivers of patients with mental disorders attending clinics at Mathari National Teaching and Referral hospital. The Depression Anxiety and Stress Scale 21 (DASS-21) was used in the study to assess symptoms of depression, anxiety and stress. The study results are presented in table 1.

Table 1: Prevalence of Depression, Stress and Anxiety (DASS 21)

Prevalence of Stress and Anxiety (DASS 21)	Depression		Anxiety		Stress	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Normal	39	48.8	36	45.0	42	52.5
Mild	26	32.4	31	38.8	24	30.0
Moderate	15	18.8	10	12.4	9	11.3
Severe	0	0	3	3.8	5	6.2
Extremely Severe	0	0	0	0	0	0
Total	80	100	80	100	80	100

Table 1 present the findings on the prevalence of depression, stress, and anxiety among caregivers as measured by the DASS-21 scale. In the depression section, it was found that 48.8% of caregivers fall within the normal range as measured by the DASS-21. Moreover, 32.4% reported experiencing mild depression, and another 18.8% reported moderate levels of depression. No caregivers were in the severe or extremely severe categories for depression. This data suggested that while caregiving is a challenging role that can lead to emotional stress, severe forms of depression were not present in this sample. However, over 50% reported some level of depressive symptoms, ranging from mild to moderate. For anxiety, 45% of caregivers were in the normal range, but 38.8% reported experiencing mild anxiety symptoms. Additionally, 12.4% reported moderate anxiety, and 3.8% reported severe levels. No caregivers were in the extremely severe category. The statistics suggested that while some caregivers manage their anxiety well, over half of them faced some level of anxiety, with a small group experiencing severe symptoms. This subset of caregivers might benefit from targeted support to manage their anxiety. In the stress section, 52.5% of caregivers reported normal levels, indicating that they were not facing debilitating stress. However, 30% reported mild stress, 11.3% were in the moderate category, and 6.2% reported severe levels of stress. Unlike Depression and Anxiety, the stress category had individuals in the severe range. The presence of caregivers in the severe category shows the physical and emotional toll that long-term caregiving can place on individuals. Considering that stress can be a precursor to other health issues, both mental and physical, the data suggested that interventions to help caregivers manage stress could be beneficial.

The study's findings on depression reveal that, while a considerable number of caregivers maintain some level of emotional well-being, more than half experience varied levels of depressive symptoms. This was troubling because mild to severe depression can have a major influence on a person's quality of life, work performance, and interactions with the person for whom they care. Further, depression can be a precursor to more serious mental health

difficulties, as well as exacerbate pre-existing physiological conditions. The absence of caretakers in severe and extremely severe categories could be seen positively. However, it is possible some caregivers suffering from severe depression were unable or unable to participate in the study, implying that the true situation is worse than the results reflect. In addition, the low rates of depression could be due to gender socialization, as men tend to adopt problem-focused coping when confronted with stressful conditions compared to women. The results for anxiety were equally concerning. While a sizable proportion of caregivers fall into the normal range, the fact that more than half experience some level of anxiety cannot be ignored. Anxiety can substantially affect decision-making and problem-solving abilities, which are essential for effective caregiving. For the 3.8% who experienced significant anxiety, the consequences are considerably more concerning.

The stress data was likely the most concerning, especially because there were caregivers in the severe range. Chronic stress is linked to a variety of unfavorable health outcomes, including an increased risk of heart disease, high blood pressure, and reduced immunological function. Stress can also worsen mental health issues such as depression and anxiety. Given that over 20% of caregivers experience moderate to severe stress, there is an urgent need for therapies to help them manage their stress levels. Long-term stress may result in caregiver burnout, compromising the quality of care delivered and creating a vicious cycle of decreasing mental health for both the caregiver and the patient. The research highlights the need for structural reforms, such as respite care services, mental health support, or financial assistance, to help caregivers manage their jobs more sustainably.

5.0 Conclusion

The study concluded that a significant proportion of informal caregivers attending clinics at Mathari National Referral Hospital are dealing with anxiety and depression. This not only affects the well-being of the caregivers but also has the potential to impact the quality of care provided to patients with mental disorders. The high prevalence of these emotional struggles highlights an urgent need for mental health initiatives geared specifically towards caregivers. Such programs could range from therapy and counselling services to stress-management workshops, all aimed at mitigating the mental health challenges faced by caregivers.

6.0 Recommendations of the Study

Given the significant prevalence of anxiety and depression among informal caregivers attending clinics at Mathari National Teaching Hospital, urgent attention is required. A comprehensive mental health support framework specifically targeting this group should be established. This framework could consist of specialized therapy programs, stress-management workshops, and even mindfulness-based stress reduction courses tailored for caregivers. Hospitals, including Mathari National Teaching Hospital, should collaborate with mental health organizations and the government to offer these services either free of charge or at a subsidized cost. Such an initiative not only serves to alleviate the caregivers' emotional burden but could also positively impact the patients they care for.

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