

Factors Contributing to The Relapse of Mental Illnesses Among Clients Attending the Mental Clinic at Kambuga Hospital.

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Abstract: Relapses of mental illness have continued to be a global problem despite various treatment options instituted to lower down the burden of mental illnesses, relapses remain a great stumbling block in psychiatric care hindering the effectiveness of care to achieve complete recovery among patients. The purpose of this study was to establish the factors contributing to the relapse of symptoms among clients attending the mental health clinic at Kambuga Hospital. A descriptive cross-sectional study among 83 clients who were selected using a convenient sampling technique, data was collected using a researcher administered questionnaire, analyzed using Microsoft excel and presented in form of tables. Results revealed poverty (94%) and poor relationship with family caregivers (80%) as the most prevalent socio-economic factors contributing to relapses, among individual factors, lack of insight about the illness (81%), poor drug adherence (95%) and Alcohol and substance abuse (87%) were the significant individual factors contributed to relapses, the most mentioned health service factors were; major mental diagnosis (96%), Short duration of hospitalization (70%), high cost of services (75%), attitude of health workers (52%) and Unavailability of drugs (87%). Basing on the study findings, both socio- demographic, individual and health service factors by the respondents contributed to the relapse of mental illnesses with poverty and poor drug adherence being the most prevalent. Therefore, there is need to engage mentally ill clients in occupation therapy in order to eradicate poverty among clients as well as intensifying interventions to monitor patient's drug adherence during therapy.

Keywords: Mental Health, Relapse, Mental Illness, Southwestern Uganda

Background

Mental disorders are characterized by disturbances in cognition, emotional regulation, or behavior, often leading to distress or impairment in daily functioning (Millan et al., 2012). Good mental health is recognized as a basic human right, with significant emphasis on its importance by the Health and Human Rights Journal (Cosgrove & Shaughnessy, 2020). Despite efforts to improve mental health worldwide, the Global Burden of Diseases (GBD) report indicates that mental disorders remain a leading cause of global disease burden, with an increase in DALYs from 80.8 million in 1990 to 125.3 million in 2019 (GBD 2019 Mental Disorders Collaborators, 2022). In 2019, approximately 970 million people were living with mental disorders globally (Institute of Health Metrics and Evaluation, 2019).

Mental healthcare in sub-Saharan Africa is generally inefficient and inequitable, with about 85% of mentally ill individuals in low-income countries receiving no treatment. High treatment costs force many young people to live with untreated mental disorders or seek help from traditional or religious leaders, which often leads to poor health outcomes (Barriers to Mental Health Care in Africa, 2023).

Relapses in psychiatric patients pose significant challenges, imposing burdens on patients, families, and society, and increasing the risk of treatment resistance (Moges et al., 2021). Many patients experience multiple relapses before recovery, with nearly a third readmitted shortly after discharge (Osborn et al., 2021). Socio-demographic factors such as age, sex, and education level are linked to relapses. Some studies have found that a majority of relapsed patients were males and had lower education levels (Portela et al., 2022; Msiska, 2019). Relatedly younger patients, particularly those aged 15-24, also showed higher relapse rates (Kabasa, 2022a). Other studies have found that marital status is significant, with single individuals more likely to be readmitted (Kazemi et al., 2021; Mukazungu, 2014). Employment status is another factor, with unemployed individuals at higher risk of relapse (Adebisi et al., 2018a; Msiska, 2019; Parami et al., 2021). Individual factors such as non-adherence to medication (Eticha et al., 2015; Sariah et al., 2014; Zhang et al., 2015), comorbid conditions (Moges et al., 2021), substance abuse, particularly alcohol (Muhindo, 2017; Moges et al., 2021), poverty and lack of insight into one's condition further contribute to relapses (Deborah et al., 2023; Msiska, 2019). Other scholars have found that healthcare service-related factors such as hospitalization duration such shorter hospitalization periods are associated with higher relapse rates (Owusu et al., 2022; Moges et al., 2021), availability (Mukazungu, 2014; Kabasa, 2022a), relationships with healthcare workers (Mukazungu, 2014; Kabasa, 2022a), and high costs of mental health services are significant barriers to access and contribute to relapses (Muhorakeye & Biracyaza, 2021; Kabasa, 2022a).

Given the high relapse rates and the associated burden, it is crucial to identify factors contributing to relapses among mental health patients. This study aims to investigate these factors among patients attending the mental health clinic at Kambuga Hospital, providing insights that can inform better management strategies and improve mental health outcomes in the region.

Kenya, in East Africa, has the highest rates of depression, with 1.9 million diagnosed cases of clinical depression by the end of 2016. The country also faces a significant suicide problem annually among individuals aged 15 to 30 (Otieno, 2019.). Despite these challenges, Kenya's mental health workforce is inadequate, comprising only about 80 psychiatrists, 30 clinical psychologists, and fewer than 500 psychiatric nurses for a population of 50 million (Marangu, 2018). The government invests a mere 0.01% of the health budget on mental health (AfricaHealth, 2022).

Methods

Study design and setting

The study employed a descriptive, institutional-based cross-sectional design using quantitative methods. This design was chosen for its cost-effectiveness and time efficiency, allowing data to be collected at a single point without the need for follow-up. The research was conducted at the mental health clinic of Kambuga Hospital, located in Kambuga T/C, Kanungu district, southwestern Uganda. The hospital serves a population of approximately 120,000 people, with the mental clinic receiving about 105 patients monthly, many of whom experience relapses (Mental health records, Kambuga Hospital HMIS report, 2023). The clinic operates under psychiatric clinical officers, medical officers, and psychiatric nurses, offering a range of mental health services.

Sample size estimation and recruitment of participants

The sample size was determined using Yamane's (1967) formula. This calculation resulted in a sample size of 83 respondents. Participants were selected using a purposive convenient sampling technique. This method ensured the inclusion of respondents who could provide reliable information and excluded those with impaired cognition who might give inaccurate responses.

Data collection instrument and data collectors

Data was collected using an interviewer-administered structured questionnaire, written in simple English and comprising three sections: Section A: Seven structured questions on socio-demographic characteristics. Section B: Seven structured questions on individual factors contributing to relapse. Section C: Five structured questions on health service factors influencing relapse. The questionnaire was pretested with nine individuals, and adjustments were made to enhance clarity and reliability. The data collection process was conducted by the researcher and a trained assistant. Ethical clearance was obtained, and participants provided both verbal and written consent. Interviews were conducted in a private setting, ensuring confidentiality and comfort for the respondents.

Data analysis

Data Analysis Quantitative data from the questionnaires was coded and analyzed using Microsoft Excel. Results were presented in figures and tables. To determine significant factors contributing to relapse, any variable scoring 50% and above was considered significant, in line with the University grading system that treats below 50% as a failure. All data was securely stored, with completed questionnaires kept in a lockable case and electronic data protected by passwords. The study adhered to ethical principles, including obtaining informed consent and ensuring the confidentiality of participant information.

Results

Social-demographic Characteristics of the Study Participants

The majority of participants were males (49/83, 59%), and nearly half of the respondents (42/83, 48%) were in the age bracket of 18-24 years. Regarding marital status, the largest group of participants was single (36/83, 43%). Over half of the participants (44/83, 53%) had attained primary education, while 29% (24/83) had never attended school. The Bakiga were the predominant tribe (44/83, 53%), followed by the Batwa (21/83, 25%). A significant majority (69/83, 83%) lived beyond a 5 km radius from the hospital. Employment status showed that more than half of the participants (44/83, 53%) were unemployed. *See Table 1.*

Individual-related factors that contribute to relapse of symptoms

From the findings summarized in Table 2, almost all participants (96%) indicated that the type of diagnosis was a significant factor in the relapse of mental illness. Additionally, a majority of participants (81%) cited the failure of patients to accept the treatment provided by health workers as a contributing factor to relapse. About half of the participants (51%) disagreed that comorbidity with other mental or medical conditions contributes to relapse. The study identified several key individual-related factors contributing to

relapse such as poor adherence to psychiatric medications was mentioned by 95% of respondents, alcohol and substance abuse by 87%, poverty by 94%, and poor relationships with caregivers by 80%. *See table 2.*

Health service related that contribute to relapse of symptoms.

According to Table 3, the majority of participants identified several key health-related factors contributing to the recurrence of mental illness. Specifically, 70% of participants mentioned the duration of the patient's most recent hospitalization as a significant factor. Additionally, 75% pointed to the affordability of mental illness treatment, and 87% highlighted the availability of mental health drugs as critical factors influencing the relapse of mental diseases.

Discussion

The findings of this study reveal significant insights into the socio-demographic and individual-related factors contributing to the relapse of mental illness among patients attending the mental health clinic at Kambuga Hospital. The majority of respondents (51%) with mental illnesses were between the ages of 18-24. This aligns with a study conducted at Mbale Regional Referral Hospital, where a substantial proportion of patients who relapsed were within the 15-24 age bracket (Kabasa, 2022a). The transition from childhood to adulthood brings various challenges, including taking on new responsibilities, striving to achieve personal goals, and establishing families. These pressures can lead to stress and, consequently, the onset of relapses and mental illness within this age group.

In this study, males constituted the majority (59%) of the respondents with mental illnesses. This finding is consistent with a descriptive longitudinal cohort study that assessed the risk factors associated with the readmission of patients under antipsychotic treatment, where a similar majority (51.5%) were males (Portela et al., 2022). The higher prevalence among males may be attributed to poor health-seeking behaviors and lifestyle habits, such as substance abuse, which are more common among males. However, this contrasts with Kabasa's (2022a) findings, which indicated a higher relapse rate among females (51.2%).

The marital status of the participants also played a role, with most being single, divorced, or widowed, contributing to the relapse of mental symptoms. This correlates with a retrospective study in Iran that found a significant relationship between marital status and the frequency of psychiatric readmissions, with a majority of the participants being single (Kazemi et al., 2021). Single individuals might lack the social support that family caregivers provide, increasing their vulnerability to relapse. Educational status emerged as another significant factor, with most respondents (53%) having only attended primary-level education. This is similar to findings from a quantitative descriptive cross-sectional study, where the majority of patients (68%) had just a primary level of formal education (Muhindo, 2017). Additionally, Portela et al. (2022) found that a majority of readmitted patients (64.7%) were illiterate. Early onset of psychiatric illness often disrupts education, leading to school dropout.

Ethnic background was also notable, with a majority (53%) of respondents being Bakiga. This contrasts with Muhindo's (2017) study, where a majority of the patients who relapsed were Banyankole. The location of the study setting, predominantly occupied by these ethnic groups, might explain this variation. Employment status was another critical factor, with many participants identifying unemployment as a contributor to relapse. Lin et al. (2021) found that patients who relapsed had greater work impairment and a poor quality of life. Adebisi et al. (2018) also identified unemployment as a significant factor, with 60.7% of relapsed patients being unemployed at the time of data collection. Employed individuals might face work-related stress leading to relapse, while unemployed individuals might struggle with the financial burdens of treatment, contributing to their relapse.

The geographical location of the participants significantly impacted their mental health outcomes. Most participants lived more than 5km away from the health facility, which is similar to Mukazungu's (2014) findings that most patients resided farther than 5km from the hospital. This distance increases the cost and effort required to access healthcare, contributing to relapses. Muhorakeye and Biracyaza (2021) also highlighted geographical accessibility as a barrier to utilizing mental health services.

Poor adherence to psychiatric medications was identified by 95% of the respondents as a major factor contributing to relapse. Sariah et al. (2014) and Emsley et al. (2013) similarly found that non-adherence to medication significantly increased relapse rates. The lack of compliance disrupts treatment continuity, reducing drug effectiveness and increasing relapse risk. Alcohol and substance abuse were mentioned by 87% of participants as leading factors. This is supported by Owusu et al. (2022) and Muhindo (2017), who also found high rates of substance abuse among relapsed patients. The interaction between alcohol and psychiatric medications can diminish drug efficacy and exacerbate side effects, further complicating treatment adherence. Poverty was identified by 94% of participants as a major contributing factor. Seyedfatemi and Saber (2022) similarly found that low socio-economic status was linked to higher relapse rates. Financial constraints hinder patients' ability to afford necessary treatments, leading to interruptions in care and subsequent relapse. A poor relationship with caregivers was noted by 80% of participants. Chadda (2014) highlighted the crucial role of family caregivers in managing and supporting patients with mental illness. Deborah et al. (2023) also found that lack of social support was a major factor in mental health relapses. Without adequate family support, patients are more vulnerable to relapse.

Health service-related factors also played a significant role in relapse. Most participants (70%) mentioned the duration of the patient's most recent hospitalization as a critical factor. Moges et al. (2021) found that shorter treatment durations were associated with higher relapse rates. Longer hospital stays allow for more comprehensive treatment and stabilization, reducing relapse risk. The affordability and availability of mental health treatment were significant issues for 75% and 87% of participants, respectively. Kabasa (2022) and

Muhorakeye and Biracyaza (2021) found that financial barriers and the scarcity of psychotropic medications were major challenges for patients. These financial and logistical obstacles prevent consistent treatment, leading to higher relapse rates. Lastly, the relationship between patients and health workers was noted by 52% of participants as a factor contributing to relapse. Positive patient-provider relationships are crucial for effective treatment adherence and management. The difference in findings across studies might be due to individual variations among healthcare providers and their interactions with patients.

Conclusion

This study highlights the complex interplay of socio-demographic, individual, and health service-related factors contributing to the relapse of mental illness among patients at Kambuga Hospital. Key factors include young age, male gender, single marital status, low educational attainment, unemployment, distance from healthcare facilities, poor medication adherence, substance abuse, poverty, and inadequate caregiver support. Addressing these multifaceted issues through targeted interventions and improved healthcare accessibility is essential to reduce relapse rates and enhance the overall mental health outcomes for these patients.

Limitations of the study

This study had a number of limitations. Firstly, the cross-sectional design only provides a snapshot of factors associated with relapse, which limits the ability to infer causality. The study was conducted in a single hospital, potentially limiting the generalizability of the findings to other settings or populations. Some variables that could influence relapse, such as genetic factors and detailed medical histories, were not thoroughly explored. Future research should address these limitations by incorporating longitudinal designs, multiple study sites, and a broader range of influencing factors.

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Authors' contributions

AA and GM were involved in the conception, design, analysis, data interpretation and report writing. HN, AA, GM, AJF were involved in the statistical analysis, write-up and final editing for English language. All authors read and approved the final manuscript.

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Availability of data and materials

The dataset pertaining to this study will be shared upon reasonable request.

Ethics approval and consent to participate

Before data collection, ethical clearance letter was obtained from the ethical clearance committee of Kabale University, School of Medicine. Oral and written informed consent was requested from the study participant after clearly explaining the objectives of the study. The participants were also informed that they may withdraw themselves at any stage of the data collection period.

Consent for publication

Not applicable.

Competing interest

The authors declare that they have no competing interests.

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Table 1: Socio-demographic characteristics of the study participants (n=83).

Variable	Frequency (n)	Percentage (%)
Age		
18-24	42	51
25-34	16	19
35-44	17	20
45-above	08	10
Sex		
Female	34	41
Male	49	59
Marital status		
Married	26	31
Single	36	43
Divorced	08	10
Widowed	13	16
Education status		
Didn't go to school	24	29
Primary education	44	53
Secondary level	09	11
Tertiary	06	07
Tribe		
Mukiga	44	53
Mutwa	21	25
Mufumbira	06	07
Others	12	15
Occupation		
Employed	10	12
Casual laborer	17	21
Self employed	11	13
Un employed	45	54
Distance from the health facility		
Beyond 5km	69	83
With in 5km	14	17

Source: Primary data

Table 2 Individual-related factors that contribute to relapse of symptoms

Variable	Frequency (n)	Percentage (%)
Major mental diagnosis of mental illness contributes to relapse.		
Yes	80	96
No	3	4

Failure of patient to accept treatment given by the health workers contributed to the onset of relapse Yes No	67 16	81 19
Comorbidity with any other illness or medical condition Yes No	41 42	49 51
Poor drug adherence Yes No	79 04	95 05
Alcohol and substances abuse Yes No	72 11	87 13
Poverty Yes No	78 05	94 06
Poor relationship of the patient with the family Caregivers Yes No	66 17	80 20
Seeking other forms of treatment other than the ones offered/encouraged in the hospital contributes to mental illness relapses. Yes No	29 54	35 65

Source: Primary data

Table 3: Table showing the health service-related factors contributing to the relapse of symptoms among clients attending the mental health clinics at Kambuga Hospital (n=83)

Variable	Frequency (n)	Percentage (%)
Bad Relationship of patients with health workers. Yes No	43 40	52 48
Short Period of last hospitalization of the patient. Yes No	58 25	70 30
Accessibility of treatment of mental illness. Yes No	34 49	41 59
Affordability of treatment of mental illness Yes No	62 21	75 25
Availability of medication for mental health drugs Yes No	72 11	87 13
Availability of mental health care providers Yes No	42 41	51 49