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# Factors perceived to influence the relapse of depression among patients receiving mental health services at Bwindi Community Hospital

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Abstract: Depression is one of the most common and seriously disabling mental health disorders worldwide. The World Health Organization through different approaches aims at achieving a sustained remitting phase. Despite this, relapses still occur quite rampantly in depressed patients. This study was aimed to determine factors perceived to influence the relapse of depression among patients receiving mental health services at Bwindi community hospital. The study was a descriptive cross-sectional study using convenience sampling technique that enrolled 40 participants. Data was collected using a researcher administered structured questionnaire, analyzed using STATA 18 and results presented in frequency tables. The health facility-related factors perceived to influence depression relapse included absence of mental health providers (100%) and lack of medications in the health facilities (95.0%) as the most prominent factors. The patient-related factors included patients not being on treatment (95.0%), poor social support (95.0%), stressful life events (95.0%) and poor drug adherence (92.5%). According to this study both individual related and health care related factors are perceived to contribute to the relapse of depression. Mental health programs should ensure medicine and qualified personnel availability, thorough patient education about the need for treatment and proper adherence and need for good social support like joining social groups.

Keywords: Depression, Relapse, Perception, Mental Health Services, Primary care

## Introduction and background

Depression is one of the most common and seriously disabling mental health disorders worldwide (Rehm & Shield, 2019). People suffering from depression or otherwise known as clinical depression or major depression experience persistent feelings of sadness, hopelessness, or loss of interest in activities that were once pleasurable to them (Anandhi, 2020). According to the Diagnostic and Statistical Manual of mental disorders (DSM-V) Edition, (2013), depression is diagnosed when an individual is experiencing five or more of the following symptoms during a period of two weeks and one of the symptoms should at least be either depressed mood or loss of interest or pleasure (Vahia, 2013). According to the World Health Organization (WHO, 2017), the estimated number of people living with depression was 322 million, with an estimated increase of 18.4% between 2005 and 2015. WHO, (2017) also ranked depressive disorders as the single largest contributor to non-fatal health loss which is a total of over 50 million Years Lived with Disability (YLDs) or 7.5% of all YLDs.

The mental health sector has greatly improved and boasts of a large diversity of workers ranging from psychiatrists, psychologists, psychiatry nurses, and clinical officers to non-specialized doctors and nurses, occupational therapists, and social workers among others. Mental health training has also been extended to non-psychiatric students, like nurses and midwives (WHO, 2022). This is so to ensure adequate assessment, diagnosis, and management of mental health disorders including depression. Different treatment modalities; pharmacological and non-pharmacological are constantly put in place to ensure proper management of depression and prevention of relapse (Keynejad et al., 2018). These treatment modalities have been made widely available to cover even primary health care centers, through the formulation and implementation of the sustainable development goals (SDGs) (WHO, 2016).

Despite all the above efforts to ensure proper management of depression, relapses still manifest. A meta-analysis study by Steinert, Hofmann, Kruse, and Leichsenring (2014) showed that 53.1% of patients treated with psychotherapy for depression relapse in a two years period as compared to 71.1% of patients treated with other treatment modalities for depression. In a similar study, 51.1% of patients relapse after successful initial treatment with electroconvulsive therapy (ECT) with the majority relapsing within a six-month period (Jelovac, Kolshus, & McLoughlin, 2013).

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Depressive disorders in Uganda are relatively high with 4.6% of its population living with depressive disorders and is among the top six countries with depressive disorders in Africa (Miller et al., 2020). A study in northern Uganda in the districts of Gulu, Amuru, and Nwoya showed that the prevalence of major depressive disorder was at 24.7% (Mugisha et al., 2015). According to Atuhaire et al., (2021), there is a prevalence of 27.1% of depression among postpartum mothers in southwestern Uganda. Another similar study by Kiconco et al., (2021) concluded that there is a 27.7% prevalence of depression among adults in Mbarara district.

Another study carried out among school-going adolescents concluded that 2.9% of the adolescents had depressive disorders while of those, 3.1% had current suicidal ideation (Nalugya-Sserunjogi, et al 2016). According to Kinyanda et al., (2016), the incidence of major depressive disorder was at 14% and its persistence was at 24.6% among people living with Human immunodeficiency virus (HIV) in Uganda. A cross-sectional study by Agenagnew, (2020) shows that more than half of patients (58.4%) diagnosed with depression in Uganda have relapsed at least twice in their lifetime.

#### **Problem statement**

Depression is a common and serious mental health disorder that affects over 350 million people in the world and is the leading cause of years lost due to disability as compared to other conditions as well as disability-adjusted life years (Rehm & Shield, 2019 and Smith, 2014). Moreover, depression is a risk for the development and exacerbation of other illnesses like hypertension (Rubio-Guerra et al., 2013). Several mental health and medical personnel have been trained to diagnose and treat such mental health issues at all levels.

Different treatment modalities have also been put in place to ensure proper and complete management of depression. Despite this, a lot of patients continue to have relapses even after proper treatment. For example, a randomized controlled trial study by Nordenskjöld et al., (2013), showed that 61% of patients were treated with pharmacotherapy and 32% of patients treated with pharmacotherapy plus electroconvulsive therapy (ECT) relapsed in one year. Uganda is ranked among the top six countries in Africa in rates of depressive disorders (Miller et al., 2020).

At Bwindi Community Hospital (BCH), relapse rates are estimated to be relatively high (72.5%) according to the hospital statistics. Several factors are believed by patients and care takers to contribute to the relapse of symptoms of depression.

## Specific objectives

- 1. To identify the individual-related factors perceived to influence the relapse of depression among patients receiving care at Bwindi Community Hospital.
- 2. To identify the healthcare-related factors perceived to influence the relapse of depression among patients receiving care at Bwindi Community Hospital.

## **Research Methodology**

## Study design

The study used a descriptive and cross-sectional survey design approach. Only a quantitative data collection method was employed for this study because of the limited time set aside to achieve the intended results.

## Study setting

The study was conducted in the mental Health clinic of BCH, which is located approximately 445 km from Kampala, the capital city of Uganda, in Mukono Parish, Kayonza Sub- County, Kinkizi west constituency, Kanungu district. BCH study setting was selected because its mental health clinic serves a large population of mental health clients in its inpatient and outpatient mental health clinics and community-based mental health program. Its outpatient department serves a wide population of this hospital's immediate catchment area and beyond. The results of this study are representative of the population in the immediate catchment area and beyond. There is also no published data on a similar topic in the BCH catchment area as well as the nearby communities and the district at large. Findings of this study would be useful to future researchers in the field of mental health depression.

# Study population

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The study was conducted among patients diagnosed with depression attending mental health clinic BCH who are at least 18 years of age.

## Sample size calculation.

The simple sayings of the study will be determined using the Yamane Formula (1967).

The formula is denoted as

 $n=N/(1+N(e)^2)$ 

Where n is the sample size

N is the population size (in this case, the average number of patients with depression who attend a mental health clinic in a month is 45).

e is the margin of error = (0.05)

 $n=45/(1+45(0.05)^2)$ 

n= 40 respondents.

# Sampling technique

The researcher used convenience sampling techniques to obtain the sample size required. Mental health clients come to the clinics on scheduled appointments and this approach was the most applicable for data collection. Participants were enrolled as they came in for the scheduled clinic appointments.

**Inclusion criteria** – The study included participants aged at least 18 years both male and female who had ever been diagnosed with depression of any type and receiving care at BCH.

#### Research instrument

Data were collected using a researcher administered questionnaire with closed-ended questions was used to collect data. It had three sections that included section a) social-demographic characteristics of the participants; b) individual-related factors perceived to influence the relapse of depression among patients receiving care at BCH, and c) health service-related factors perceived to influence the relapse of depression. Data quality was emphasized through pretesting, and training of research assistants

#### Data analysis

Data analysis was done using STATA 18 a computer-based program and was then presented as frequencies and percentages using frequency tables.

#### **Ethical considerations**

Ethics clearance was obtained through Bwindi Community Hospital (BCH/REC/2022\_2305). All participants were informed about their rights as participants and that they could withdraw from the study without this affecting how they access their health care.

## **RESULTS**

# **Social Demographic Characteristics of the participants**

More than half of the participants 26(65%) were female, approximately a third 14(35%) of the participants were aged 45 years and above, 33% had their first admission between the ages 35 -44 years, almost a half 19(45%), a third (33%) had attended primary as their highest level of education, 15(37.5%) of the participants were unemployed, and half of the participants 20(50%) respondents lived far from the health facility that provided mental health services.

Table 1: Social Demographic Characteristics of the participants (n=40)

Parameter/Variable	Frequency (f)	Percentage (%)
Gender		
Female	26	65.0
Male	14	35.0
Age in years		
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25-34	11	27.5
35-44	9	22.5
45 and above	14	35.0
Age at diagnosis in years		
18-24	3	7.5
25-34	9	22.5
35-44	13	32.5
45 and above	7	17.5
Below 18	8	20.0
Marital Status		
Cohabiting	2	5.0
Divorced	6	15.0
Married	19	47.5
Separated	5	12.5
Single	8	20.0
Education status		
None	12	30.0
Primary	13	32.5
Secondary	11	27.5
Tertiary	4	10.0
Employment status		
Casual laborer	8	20.0
Employee	5	12.5
Self employed	12	30.0
Unemployed	15	37.5
Distance from health facility		
Within 5km	20	50.0
More than 5km	20	50.0
F: 11 1 4 0000		·

Field data, 2022

# Individual related factors perceived to influence the relapse of depression among patients

According to the study findings, participant thought that the following caused relapse of depression among clients receiving mental health services at BCH. These included not being on treatment can cause relapse 38(95%), missing prescribed doses of treatment 37(92.5%), having chronic illnesses 27(67.5%), stressful life events 38(95%), alcohol and substance use 30(75%), poor social support 38(95%), having other psychiatric illnesses 23(57.5%)and being bewitched 17(47.5).

Table 2: Individual related factors perceived to influence the relapse of depression (n=40)

Parameter	Frequency (f)	Percentage (%)
Patient not being on Treatment		
No	2	5.0
Yes	38	95.0
Poor adherence to treatment		
No	3	7.5
Yes	37	92.5
Having other Chronic Illness		
No	13	32.5
Yes	27	67.5
Having Stressful life events		
No	2	5.0
Yes	38	95.0

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Substance abuse		
No	10	25.0
Yes	30	75.0
Poor social support		
No	2	5.0
Yes	38	95.0
Having comorbid psychiatric illnesses		
No	17	42.5
Yes	23	57.5
Being bewitched		
No	23	57.5
Yes	17	42.5
Evil spirits attack		
No	28	70.0
Yes	12	30.0
Being cursed		
No	33	82.5
Yes	7	17.5
Lack of information on depression		
No	14	35.0
Yes	26	65.0
Patients' personality		
No	32	80.0
Yes	8	20.0

Field data, 2022

# Health Facility related factors perceived to influence the relapse of depression

As summarized in table 3, the following are what participants thought were facility related factors that caused depression relapse. These included medicine availability at the health facilities 38(95%), patients' relationship with healthcare providers 25(62.5%), number of days the mental health clinic opens in a week 31(77.5%) drug affordability 26(65%) and accessibility of health facilities that provide mental health services 24(60%).

Table 1: Health Facility Related factors perceived to influence the relapse of depression (n=40).

Parameter	Frequency (f)	Percentage (%)
Availability of medicine for depression in health facilities		
No	38	95
Yes	2	5
Availability of mental health care providers		
Yes	40	100
No	0	0
Relationship of patients with health workers		
No	25	62.5
Yes	15	37.5
Number of days and amount of time mental health clinic is open		
No	31	77.5
Yes	9	22.5
Affordability of treatment for depression		
No	26	65
Yes	14	35
Accessibility of treatment for depression		

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No	24	60
Yes	16	40

Source: Field data

#### DISCUSSION

The results of the study showed that the majority (95.0%) of the participants perceived that not receiving any treatment for depression can lead to its relapse. This is similar to a study carried out in the United Kingdom (UK) that showed that patients who did not receive effective treatment experienced recurrent depressive episodes (Rycroft-Malone et al., 2014). On the contrary, results of a retrospective descriptive study by Nuggerud-Galeas et al., (2020), about depressive episodes, their recurrence and pharmacologic treatment in primary care patients in Zaragoza (Spain) between October 2017 and February 2018, majority (80.9%) of the patients who did not receive drug treatment in the first depression episode did not experience subsequent episodes. However, this decision, made by the family physician, to not prescribe anything, may be related to the severity of the depressive episode. Majority of participants (95.0%) perceived stressful life events to lead to depression relapse. Some studies have showed an association between stressful life events and the development and relapse of depression. A study conducted to find out the association between stressful life events and depressive symptoms showed that individuals who have significantly been stressed by stressful life events are at an increased risk for severe manifestation of depressive symptoms and relapse (Sokratous, Merkouris, Middleton & Karanikola, 2013). Hovens et al., (2015) found that stressful life events like childhood maltreatment to be a risk for the development and relapse of depression. Most of the participants (95.0%) perceived poor social support to be a major factor that can lead to the relapse of depression. Similarly, research done by Cruwys et al., (2013) showed that patients who joined one social group reduced relapse rates by 24%, and those who joined three groups reduced relapse rates by 63%. Another study showed that difficult social relationships, interpersonal problems and social isolation was a huge factor that can impeded recovery from depression and also led to its relapse (Van den, et al., 2018). A related study also showed that patients with depression whose social support was poor have poor outcomes in terms of symptoms, recovery and social functioning (Wang, Mann, Lloyd-Evans & Johnson, 2018). This means that such patients are very likely to experience recurrent relapses. This study showed that 74% of the participants thought that relapse of depression to be due to substance abuse. In a cohort systematic review study to analyze the association between cannabis use and depression severity, results concluded that increased use of cannabis led to a subsequent increase in severity of depressive symptoms, poor drug adherence and relapse (Horwood et al., 2012). In a similar study to determine the association between alcohol dependence and depression before and detoxification, concluded that depression prevalence and relapse before detoxification were high but they significantly reduced after alcohol detoxification. This shows a relation between substance use and depression relapse (Kuria et al., 2012).

This study findings showed that majority of the participants (95%) believed that medicine availability in health facilities could influence depression relapse. The results agree with those of a randomized controlled trial about antidepressant medication to prevent depression relapse in primary care conducted by Duffy et al., (2021), where 238 participants were randomized to antidepressant continuation (the maintenance group) and 240 participants to antidepressant discontinuation (the discontinuation group) showed that the time to relapse of depression was shorter in the discontinuation group. By 52 weeks, relapse was experienced by 39% of those who continued antidepressants and 56% of those who discontinued antidepressants. This implies that absence of such medication in the health facilities may cause of discontinuation of treatment leading to depression relapse. This study found that all (100%) of participants believed availability of enough mental healthcare providers can prevent relapse. On a sad note, an overview of Uganda's mental health care system had results showing the total personnel working in mental health units were 310 (1.13 per 100,000 population). Only 0.8% of the medical doctors and 4% of the nurses had specialized in psychiatry. These health workers may be overwhelmed by the number of patients around with limited time, given the above statistics very few patients with depression, if at all, may have a chance to receive the care they deserve by a mental health care provider, hence leading to relapses (Kigozi et al., 2010). Another study about the barriers and facilitators to the integration of mental health services into primary healthcare using the COM-B framework, showed that the health care providers in mental health facilities had inadequate knowledge about mental disorders and were more comfortable managing patients with a mental problem diagnosis than making a new one; knowledge about mental health was gained during pre-service training; no senior cadre to consultations in mental health (Wakida at al., 2018). This makes it difficult for patients to be properly diagnosed and amply treated for depression which causes the relapses of depression to be on the rise. More than three quarters of the respondents (77.5%) believed that the number of days the mental health clinic is operating can influence relapse. These findings are similar to findings of other studies that believed that the amount of time the mental health service is available for access can influence the relapse of mental health disorders, especially depression. A study by Wakida et al., (2019), identified limited time as a factor that leads to low interest in providing mental health services to patients. This may in turn relapse of depression. Relatedly, two thirds (65.0%) of respondents believed that drug affordability can influence depression relapse. These findings agree with findings of other studies which believed

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that the affordability of medication for depression plays a major role in depression relapse. In the Uganda National budget, a very little percentage is allocated to Health (9.8% of Gross domestic product (GDP)) and especially mental health (1%), majority of which goes to the National referral hospital, Butabika Hospital (Molodynski et al., 2017). This increases the need for mental health medicines to be purchased using alternative sources other than the public health facilities where it is free. Sources of funding for mental health services are out of pocket expenditure (40%), donor funding (34%) and general government expenditure (26%) and health insurance (2%) (Molodynski et al., 2017). Because depression treatment is taken over long periods of time, payments out of pocket for mental health medicines can be expensive and therefore only bought when symptoms of mental health illness become severe. Inability to afford these medicines increased risk of relapse of mental health illnesses including depression (Ssebunnya et al., 2018). This means that most of the patients have to contribute financially to their own care which may be challenging since depression runs a chronic course and this may subsequently lead to relapses.

The patient treatment package for depression should include thorough patient education about the disorder, especially about the need for treatment and proper adherence, and demystifying myths about depression. Patients and their caregivers should also be educated about the need for good social support in depression like joining social groups. Mental health programs should ensure medicine and qualified personnel availability but as well focus on improving patient-health worker relationships.

## Limitations of the study

All participants were patients diagnosed with depression. This limited the study from getting information from people without experience of depression, for example caretakers of people with depression. Because of this, the findings could not be generalized to the entire population within which the study was conducted.

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