

Assessment of Psycho-social factors associated with Relapses among Mental Patients. A Cross-sectional study at Mbale Regional Referral Hospital.

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Abstract

Background:

WHO (1996) estimated that 12.5% of the global burden of disease is caused by mental and neurological disorders. In a few studies carried out in Uganda mental illnesses seem to claim a big share of medical costs because of relapses.

Objectives:

The major objective was to assess Psycho-social factors associated with relapses among Mental patients and reduce readmission at the Psychiatric ward, Mbale Regional Referral Hospital. The specific objectives were: to identify demographic characteristics of relapsed mental patients and to determine psychological and social factors associated with relapses among mental patients.

Methodology:

A descriptive cross-sectional design was employed to target all mentally relapses patients who had improved using consecutive sampling on a sample of 168 respondents. Data were collected using structured questionnaires and analyzed using spss18 software and manually, presented in frequency tables and charts. Data were managed by storage in hard copies and electronically under lock and key.

Results:

The study findings revealed that females (51.2%) of young aged 15-24 years had more mental relapses. Most respondents had attained secondary education (41.7%) with many peasants (33.6%) staying single (53.0%). The commonest mental disorder was bipolar mania (25.6%). The majority also accepted that psychologically they had improved (57.1%) with highly expressed emotions and socially medicines were expensive (78.6%).

Conclusion:

Mental illnesses start early in life, and incapacitate patients through relapses but psychosocial factors can be importantly considered to remedy their plight.

Recommendations:

Health care providers should strengthen the health education given to mental patients and their caretakers to reduce the vice of relapses. The government put up ring funding to community health programs to improve school mental health important in the prevention of mental disorders.

Keywords: Relapses, Mental Patients, Mbale Regional Referral Hospital, Psycho-Social, Date

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1. BACKGROUND

A relapse is defined in the Macquarie Dictionary as “to fall or slip back into a former state or practice”. In Australia’s concise oxford dictionary, it is defined as deterioration in a patient’s condition after a period of partial recovery. The National Institute of Mental Health (NIMH) as the federation agency for research on mental and behavioral disorders highlights that there is scanty literature on the prevalence rates of relapses among mental patients.

A mental patient is an individual suffering from a mental illness, arrested or incomplete development of mind, leading to a lack of capacity for social adaptation, fulfilling social roles and responsibilities, enjoying life, and lacking the ability to cope with most daily life challenges and has impaired level of functioning (Draft Mental Health Policy for Uganda (2000 – 2005). This is expected to be the second leading burden of disease by the year 2020.

It was reported that 60 – 70% of patients relapsed within one year without the maintenance of treatment and almost 90% relapsed within two years without treatment at all. In 2004, 22.8% of the total burden of disease (BOD) in the UK was attributable to Mental disorders (including self-injury), compared to 16.2% of Cardiovascular diseases and 15.9% of cancer as measured by Disability Adjusted Life Years (DALYs).

The relapse rates vary from condition to condition and from patient to patient. The schizophrenia relapse rate ranges from 50 – 92% and is generally similar in developed and developing countries, despite the former having well-established mental health services (Gathaiya, 2011). These findings suggest a high index that other mental illnesses could take a similar trend.

A study that was carried out in Zomba Hospital Malawi to track relapses in mental patients found that 25% of subjects were admitted to the acute care unit three months before admission.

In a few studies carried out in Uganda mental illnesses seem to claim a big share of medical costs because of relapses. Strong evidence for this claim is found in a study carried out in the western districts of Kisoro and Kabarole which indicated a relapse rate of 30.7% in 2047 adult patients with mental illnesses (Ovuga, Ndyabangi and Nsereko 2010). Such a scenario may not be a rare finding in other regions as well.

In conclusion, there is evidence that shows that treatment decreases the illness duration, and chronicity and helps curb the burdens of relapses among mental patients. This is envisaged in the study objective which is to assess psychosocial factors associated with relapses among mental patients and reduce readmissions at Mbale Regional Referral Hospital.

2. METHODOLOGY

STUDY DESIGN

This was a descriptive cross-sectional study that employed mainly quantitative approaches. This was because it was carried out in a short time interval without following up.

STUDY SETTING:

The study was carried out in Psychiatry Unit (Ward 12) at Mbale Regional Referral Hospital (MRRH) in Mbale district Eastern Uganda. MRRH is located in the Northern division along Pallisa road within the center of Mbale town in Mbale Municipality.

Ward 12 is a well-established ward with 25 rooms in which they can handle both in-patients and out-patients. It has an inpatient capacity of over 60 patients and three outpatient clinics running from 9.00 am – 1.00 pm with an average of 100 patients.

The services provided include Outpatient care, Inpatient care, Psycho-therapy, Health Education Occupational therapy, Outreach activities, and Training.

The services are provided by three Senior Psychiatric clinical officers, three psychiatric clinical officers, twelve nurses, two social workers, one occupational therapist, and other volunteers from

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the user organization [Mental Health Uganda Mbale Branch (MHUMA)].

It serves the population of the people of Mbale district and 10 other districts within the region which include Pallisa, Butaleja, Tororo, Sironko, Bulambuli, Manafwa, Bududa, Kapchorwa, Budaka, Bukwo districts, and some patients from Western Kenya.

STUDY POPULATION

The study targeted all relapsed patients who had already been diagnosed with a mental disorder, were on treatment, and have come back to the psychiatric unit to seek medical services again. It considered outpatients and inpatients who had improved and were available at the time of data collection.

INCLUSION CRITERIA

The study mainly targeted improved mental patients over fifteen years for easy cooperation and communication. In this study, all patients both outpatient and inpatients available at the time of data collection were enrolled for the study. All mental patients with relapses were given information about the research objectives to obtain informed consent. The minors (15 – 18 years) consent was obtained from their caretakers. The mental patients enrolled would have medical records that could prove that they have relapsed.

EXCLUSION CRITERIA

The study excluded patients below fifteen years of age (minors), the acute mentally very sick, those who could not cooperate, and those who would opt out of the study for their reasons. It also excluded those patients who had no medical records to show their previous diagnoses because it was crucial in determining relapses.

STUDY VARIABLES

The study included both independent and dependent variables.

The independent variables were demographic characteristics of patients (age, gender, tribe, religion, occupation, level of education, marital status, and address), psychological factors, and social factors associated with relapses among mental patients.

The dependent variable was the relapses of mental illnesses.

SAMPLING PROCEDURE

This study employed consecutive sampling. Every patient found in the department who would meet the inclusion criteria would be selected and enrolled in the study.

SAMPLE SIZE

The sample size was calculated from the Kish and Leslie (1998) determination methods (formulae) for the cross-sectional descriptive studies.

Sample size (n) = z^2pq/d^2

Z - Standard deviation = 1.96, p = Prevalence of mental illness 12.5% of the general population WHO (1996) Disease burden. q = 1-p, d = confidence interval of 5%

Therefore sample size (n) = $1.96 \times 1.96 \times 0.125 \times 0.875 / 0.05^2$
= 167.49376.

Approximately 168 respondents served as the study sample size.

STUDY INSTRUMENTS

The structured questionnaire was the main tool used in this study. It contained simple well-edited questions but was able to examine all the variables intended in the study. The questions were closed-ended, open-ended, and semi-structured, divided into subsections: (A) Demographic characteristics, (B) Commonly diagnosed mental disorders, (C) Psychological factors, and (D) Social factors. Respondents were able to participate with ease as translations in local languages were made whenever necessary. There was pre-testing of the questionnaire so that proper editing and appropriate corrections were made before administering it.

DATA COLLECTION

The data was collected using questionnaires by the researcher as the principal investigator, research assistants were recruited, and trained to also aid in some instances. It was mainly a self-administered questionnaire and/or administered by someone where interpretations were necessary. Whenever I got to the psychiatric ward in the hospital, I would first introduce myself to the head of the department, and show the permission letter to collect data in the department so that I could be given a go-ahead. Together with my research assistants we could approach different patients we came across and those who would meet the inclusion criteria were requested to participate in the

study.

QUALITY CONTROL

A sample of questions from the questionnaire was pre-tested, and corrections were made for accuracy and precision to ensure both validity and reliability. Research assistants were recruited from trainee students on the ward and trained on how to administer questionnaires. After collecting data the questionnaires were checked for completeness and a double entry was mandatory.

DATA MANAGEMENT

The data was cleaned, edited, and coded to minimize errors. Double entries were also made before analysis and interpretation and then stored both electronically as well as hard copies in files under lock and key. The researcher reserved the right to be solely responsible for the data.

STATISTICAL ANALYSIS

Spss18 software program and manual analysis of data were used. The analyzed data was presented in frequency tables, bar graphs, and pie charts to bring out each specific objective of the study. Frequency tables for demographic characteristics were made and the mean, mode, and standard deviations were analyzed. Commonly diagnosed mental disorders and psychological and social factors were expressed using percentage proportions. Data editing was done to ensure completeness, accuracy, and uniformity for better records.

ETHICAL CONSIDERATION

Confidentiality, privacy, and safety were key in dealing with respondents. An introductory letter was obtained from the college, presented to the study area and a research committee approved and gave permission before getting into contact with respondents. Informed consent was obtained from the respondents either to participate in the study or even to opt-out. The study could not interfere with the unit's routine work and no patients names were recorded on the questionnaires.

STUDY FINDINGS:

From the table 1 86 females (51.2%) were slightly more than 82 males (48.8%).

The majority of respondents 64 were aged between 15 – 24 years (38.1%), followed by 44 aged between 25-34 (26.2%) and the least 2 being above

65 years (1.2%), with their mean age being 30 years and standard deviation of 1.302.

Most of the participants 104 were Gishus (61.9%), followed by the 26 Gweres (15.5%), 16 Itesots (9.5%), 9 Nyoles (9.5%), 5 Gandas (3.0%) then 4 Sogas and 4 others 2.4%.

There were 67 Protestants (39.9%) as the majority of the participants, followed by 43 Islam (25.6%), 27 Catholics (16.1%), 25 Born again (14.9%), and 6 minority others (3.6%).

The majority of the respondents were singles 89 (53%), followed by the married 46 (27.4%), then separated 22 (13.1%), divorced 6 (3.6%), others 4 (2.4%), and the least cohabiting1 (0.6%).

The majority of respondents had attained secondary education 70 (41.7%), followed by primary level 59 (35.1%), then certificate18 (10.7%), diploma and bachelor 10 (6.0%), the small minority had no education 1(0.6%).

Most respondents were peasant farmers 52 (33.6%), followed by students 49 (30.0%), civil servants 23 (13.7%), housewives 12 (7.1%), business and those with none 10 (6.0%) and very few NGO employees 2 (1.2%).

The majority of respondents were from Mbale district 85 (50.6%), then Sironko and Budaka15 (8.9%), Pallisa 11 (6.5%) Manafwa and Kibuku 9 (5.4%), the least number from Bulambuli district 2 (1.2%).

The majority of respondents' diagnosis was Bipolar mania 38 (25.6%), followed by Schizophrenia 32 (24.4%), Epilepsy 30 (20.2%), depression 24 (16.7%), the least being HIV/AIDS mental disorder 3 (3.0%).

The majority of respondents gave improvement 96 (57.1%), followed by highly expressed emotions 94 (56.0%) and the least negative attitudes of health workers 12 (7.1%) as the psychological factors related to relapses among mental patients. A significant number of participants 156 (92.9%) did not accept that the negative attitudes of health workers contributed to their mental relapses. Other 155 (92.3%) could not give other psychological factors that they thought contributed to their relapses.

Most of the respondents132 (78.6%) accepted that there were high costs of the medicines, fol-

Table 1: Shows demographic characteristics of relapsed mental respondents with improvement.

Variables	Frequency (N = 168)	Percentages (100%)
Gender	82	48.8
Male	86	51.2
female		
Age	64	38.1
15 – 24	44	26.2
25 -34	30	17.9
35 – 44	17	10.1
45 – 54	11	6.5
55 – 64	2	1.2
Above 65		
Tribe	104	61.9
Gishu	26	15.5
Gwere	16	9.5
Itesot	9	5.4
Nyole	5	3.0
Ganda	4	2.4
Soga	4	2.4
Others		
Religion	67	39.9
Protestant	43	25.6
Islam	27	16.1
Catholic	25	14.9
Born again	6	3.6
Others		

Table 2: Shows the distribution of Psychological factors contributing to mental relapses of participants

Variables	YES (N = 168)		NO (N= 168)	
	Frequency	Percentage	Frequency	Percentage
Non drug compliance	59	34	110	66
Family discord	44	26.2	124	73.8
Co-morbid illnesses	56	33.3	112	66.7
Stigma and discrimination	78	46.4	90	53.6
Highly expressed emotions	94	56.0	74	44.0
Fear of losing job	29	17.3	139	82.7
Negative attitudes of health workers	12	7.1	156	92.9
I had improved	96	57.1	72	42.9
Pill burden	60	35.7	108	64.3
Education stress	24	14.3	144	85.7
Others	13	7.7	155	92.3

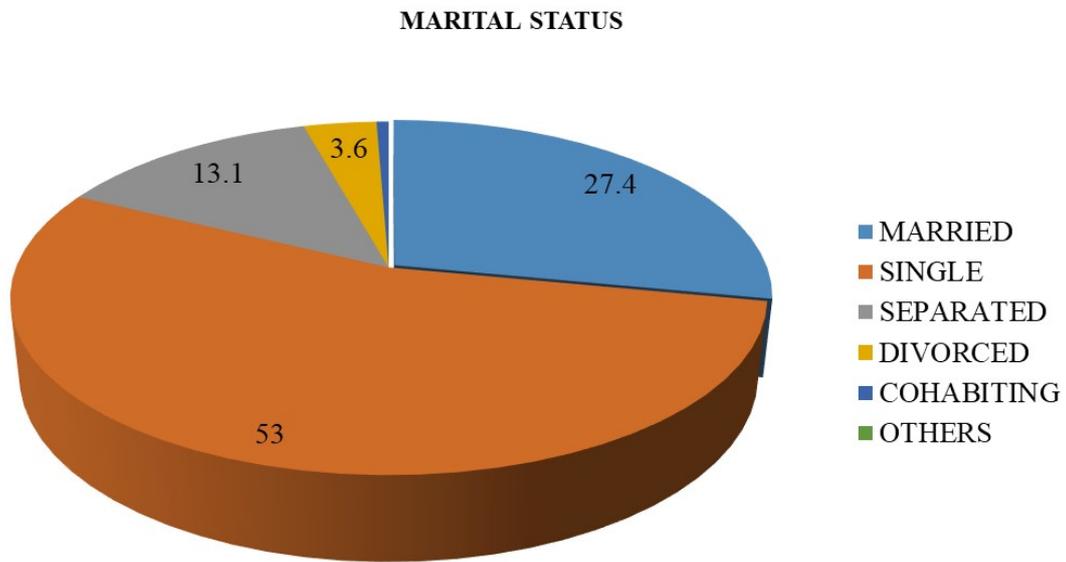


Figure 1: Pie chart showing distribution of marital status of respondents

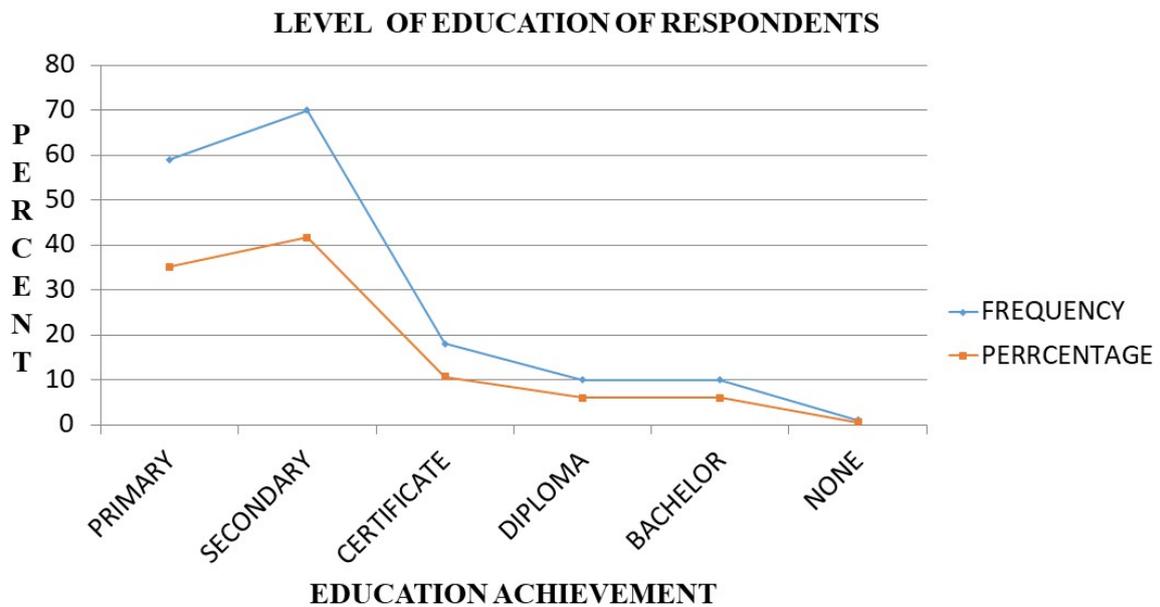


Figure 2: Line graph showing distribution of level of education of respondents

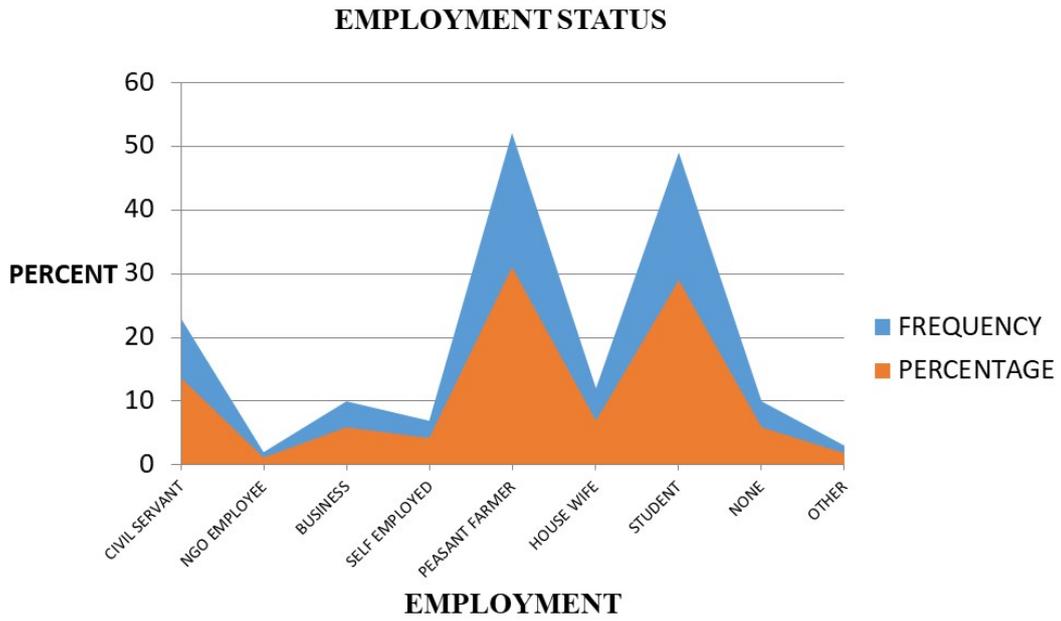


Figure 3: Bar graph showing distribution of employment status of respondents

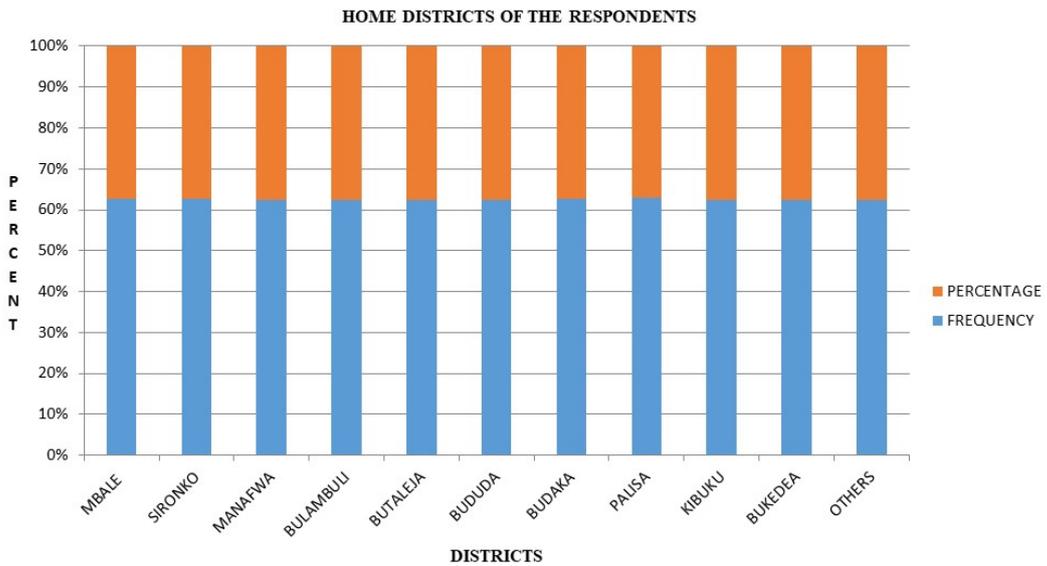


Figure 4: Bar graph showing distribution of home districts of respondents

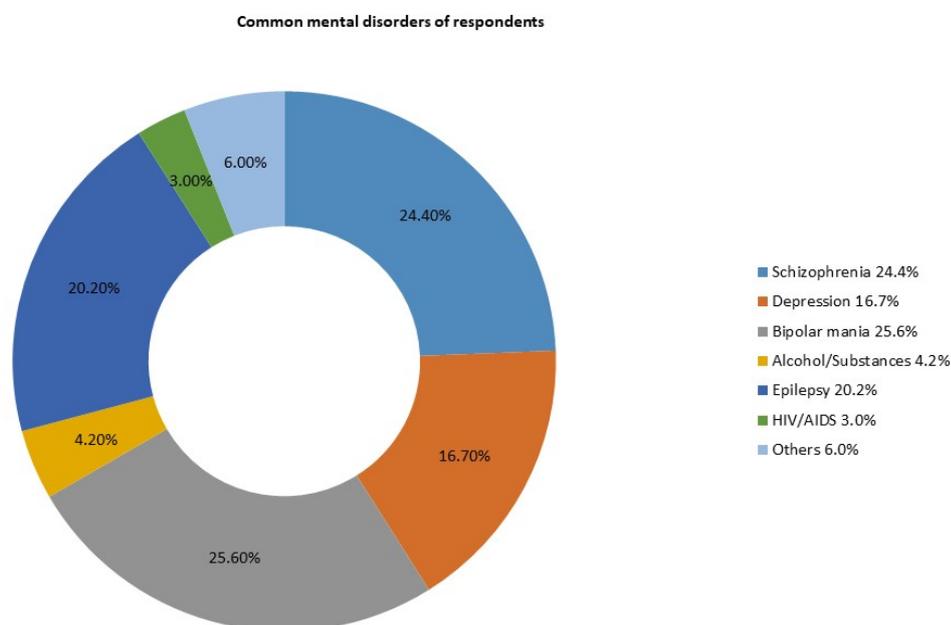


Figure 5: A chart showing distribution of the commonest mental disorders of respondents

Table 3: hows the distribution of social factors contributing to mental relapses among respondents

Variables	YES (N= 168)		NO (N =168)	
	Frequency	Percentage	Frequency	Percentage
Treatment other than hospital	72	42.9	96	57.1
Scarcity of psychotropic medicine	128	76.2	40	23.8
Lack of social support	49	29.2	119	70.9
High cost of medicine	132	78.6	36	21.4
Distance from health unit	108	64.3	60	35.7
Difficult season of the year	78	46.4	90	53.6
Discouraged from medicine	31	18.5	137	81.5
Domestic violence	42	25	126	75
Beliefs attached to mental illness	79	47	89	53
Use of traditional healer	47	28	121	72
Others	55	33	113	67

lowed by 128 (76.2%) participants' scarcity of psychotropic medicines, and those discouraged from medicines 31 (18.5%) contributed the least number of the respondents. Also, many of the respondents did not accept domestic violence (75%) as a contributing social factor to relapses among mental patients.

3. DISCUSSION:

DEMOGRAPHIC CHARACTERISTICS OF MENTALLY RELAPSED PATIENTS

The study findings revealed that females (51.2%) relapsed more than males (48.8%). These findings showed a similar comparison with Marta (2003) in his co-morbidity study about gender differences in mental health USA, who reported that women exhibited higher rates of mental relapses (60%) compared to men (29.6%) in their lifetime. The majority of respondents were aged between 15 – 24 years (38.1%), followed by ages between 25 – 34 (26.2%), the mean age of 30 years, and the least being above 65 years (1.2%). The study findings were also in agreement with a study by Sneed and Koc (2006) which stated that relatively young adults below 30 years were prone to mental relapses caused by fewer coping mechanisms. The majority of tribes were the Gishus (61.9%), followed by the Gweres (15.5%), then the Sagas and others (2.4%). The study was carried out in the Mbale district where most inhabitants of this region (50.6%) Bagisu are the most predominant tribe. The Protestants (39.9%) were the majority of respondents, followed by Islam (25.6%), Catholics (16.1%), born again (14.9%), and minority others (3.6%). Being part of religion especially if it is an organized one provides formal and informal opportunities to connect socially with others and to secure social support (Natascha, Brigid, and Kim 2011). The results revealed that probably Protestants lack that social cohesion and associated religious beliefs which are similar to others in the prevention of relapses among mental patients. The majority of the respondents were singles (53%), followed by the married (27.4%), and the least cohabiting

(0.6%). Koranyi (2000) in a study among US couples stated that stable relationships build strong support networks and being single paves way for mental ill health. Similarly, the study showed that singles were more affected for reasons that they lack partners who could provide social protective support. It is also possible that before the mental illness probably these patients may not have yet been married. Cohabiting is said to be a recent phenomenon, with very few cultures recognizing it a little wonder that it had the least respondents. The majority of respondents had attained secondary education (41.7%) and primary level (35.1%), and a small minority had no education (0.6%). Education provides not only protective factors against mental relapses but also enriches the mental sufferer with the knowledge base to seek and comply with care Kramer (2003). Prominently most patients had not attained higher education which compromises their recovery and mental illness nature could be another obstacle to higher achievement in education. The minority who had no education (0.6%) could be that their parents did not take them to school or become victims of mental stigma and discrimination. Most respondents were peasant farmers (36.6%), followed by students (30.0%) and very few NGO employees (1.2%). There could be many factors that influence employment opportunities, by just being mentally unstable may not favor one in the employment arena (Brown, Paykel 2001). There is a less educational achievement by the sufferers of mental illness which is quite a big contributing factor towards unemployment both in the formal and informal sectors.

COMMON MENTAL DISORDERS RELATED TO RELAPSES

The majority of respondents' diagnosis was bipolar mania (25.6%), followed by Schizophrenia (24.4%), Epilepsy (20.2%), and depression (16.7%) the least being HIV/AIDS mental disorder (3.0%). These findings are similar to several other studies; for example, bipolar manic episodes have a high genetic influence of between 50 – 70% in the first degree siblings with relapse rates of not less than 29.2% in patients of reproductive

age (Dickey, Kinan, and Liu-seifert, 2002).

Schizophrenia a known psychotic disorder has been found to have a high relapse rate ranging between 50 to 92% in certain settings. In the majority of depressed patients, suicidal ideas are the main themes and they average at 10-25% in relapsed patients (Dickey, Kainan, and Liuseifert 2002). HIV/AIDS mental disorders usually appear in the late stages of HIV/AIDS disease with the least relapse rates recorded because it could be that most of them succumb to the disease.

PSYCHOLOGICAL FACTORS CONTRIBUTING TO MENTAL RELAPSES

The majority of respondents gave improvement (57.1%), followed by highly expressed emotions (56.0%) and the least negative attitudes of health workers (7.1%) as psychological factors. A significant number (92.9%) did not accept that negative attitudes toward health workers are associated with relapses. Others (92.3%) could not give other psychological factors that they thought contributed to their mental relapses. Poor compliance to medicines giving a reason that "I have improved" is reported in many patients who lack insight about the illness and those whose psychological beliefs have a greater influence on their feelings (Ovuga, Ndyabangi, Nsereko, Kizza and Flisher, 2010). Such negative perceptions about medications and mental illness, in general, are factors that cannot be overlooked in the subject of mental relapses. Mental patients may keep relapsing because immediately they sigh relief they associate it with a cure. Highly expressed emotions for patients with schizophrenia cause low self-esteem, a sense of helplessness, depression, and nothing to offer which predispose mental patients to relapses on many occasions (Nkangala, 2011). Negative attitudes of health workers are least implicated with mental relapses because they endeavor to be as caring as they can to erase the psychosocial gaps that exist between mental patients and their communities; even then health workers are viewed as the main source of medical care. Expressing psychological factors to strangers is one of the difficult areas to dig out of people therefore; it may not be surprising in the study findings that some respondents shied away from sharing them.

SOCIAL FACTORS CONTRIBUTING TO MENTAL RELAPSES

Most study participants (78.6%) accepted that there are high costs of the medicines, followed by (76.2%) scarcity of psychotropic medicines, and those discouraged from medicines (18.5%) contributed the least number. Many of the respondents could not accept domestic violence (75%) as a contributing social factor associated with relapses among mental patients. Victoria (2008) found out that the possible trigger factors of mental illnesses were so much related to income levels and that depressed patients are usually the most affected if they think of a blank future. Poverty and poor living conditions are major social factors as far as mental illness is concerned (Watson and Corrigan, 2001). The study findings are a true reflection of the Ugandan picture where medical costs and scarcity somehow resemble a National anthem in the way the public keeps lamenting. One would be unfair not to believe in these study findings for reasons that people live in social strife. Domestic violence scores less rating because most of our mental patients are probably so much dependent on families for social support and rarely do they perpetuate violence on the whole.

4. CONCLUSION

Mental disorders usually start early in life, especially from the tender age of adolescence affecting mainly the female gender. What this means is that inevitably mental relapses are bound to affect many spheres of their lives which include: their education, marriage, employment, and religious beliefs just to mention but a few.

Several interesting studies tend to agree with the findings on the common mental illnesses related to relapses. For example, one study by Dickey, Kainan, and Liuseifert (2002) implicated that the commonest Bipolar disorders carry a genetic link between 50-70%, Schizophrenia relapse rate about 50-92%, and Depression 10-25% respectively.

Regarding psychological factors, mental patients are known to lack insight into their illnesses. So a mere feeling of relief from the symptoms,

the assumption is that they have been cured and see no need to comply with treatment instructions leading to relapses. Important also to note are the highly expressed emotions from caretakers and relatives known to interfere with the psychological schema of patients. However, what brings a good ray of hope is that the health workers show positive attitudes to mental patients.

Socially mental patients are dependent on their community members for social networking. Any social strife and deficits will affect their coping hence relapses. For example, they find difficulties in buying medicines whenever government supplies are inadequate. Compared with low levels of education and less formal employment, it yields rampant social insults and mischief.

IMPLICATIONS OF THE STUDY FINDINGS:

It is very relevant that such studies are carried out to unearth the hidden health hazards entangling people where simple remedies could ease human suffering. The study findings are clear but professionals assume they are aware of them yet have not done much in documentation later on the applicability, implying that the study is handy in times of its era.

STUDY LIMITATIONS

The researcher encountered difficulties dealing with mental patients who reasonably required much more time and explanations to harness their cooperation. Records from mental patients who relapsed were not easy to get to be able to ascertain their previous diagnoses before the relapse. Last but not least there were financial constraints because no external support was given for this study.

RECOMMENDATIONS:

- Health care providers should strengthen the health education given to mental patients and their caretakers to reduce the vice of relapses.
- The government put up ring funding to community health programs to improve school mental health important in the prevention of mental disorders.

Advocacy and networking with other health-related sectors to improve on modern

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OPERATIONAL DEFINITION OF TERMS

- **Mental Health:** A complete state of spiritual, emotional and cognitive well-being not merely the absence of mental disorder (2001)
- **Psychosocial:** Interrelationship between psychological and social determinants of an individual and community well being
- **Mental disorder:** A person's changes in thinking, feeling, sensation and behavior affecting the social occupational functioning
- **Relapse:** A return to a diagnosable state after a period of being declared improved
- **Mental patient:** Sufferer of mental illness or mental disorder.

6. LIST OF ABBREVIATIONS:

- APA – American Psychiatric Association
- BOD – Burden Of Disease
- DALYS – Disability Adjusted Life Years
- HMIS – Health Management Information system
- MHUMA – Mental Health Uganda Mbale Association
- MOH – Ministry of Health
- MRRH – Mbale Regional Referral Hospital

NIMH – National Institute of Mental Health
SPSS – Statistical package for social sciences

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Table 4: References:

- 1) Brown E and Paykel Y (2001): Education and health systems. *Health journal of psychology* 53(7) 861-7
- 2) Gathaiya. N. (2011) Factors associated with relapse in patients with schizophrenia at mathari Hospital Nairobi http://erepository.uonbi.ac.ke/bitstream/handle/11295/4505/Gathaiya_Factors%20Associated%20With%20Relapse%20In%20Patients%20With%20Schizophrenia%20Atmathari%20Hospital,%20Nairobi.pdf?sequence=3
- 3) Kigozi F, Ssebunnya J, Kizza D, Sara C and Nyanabangi S (2010): The mental health and poverty project. *International journal of mental health systems* vol 4:1.421 At <http://www.ijmhs.com/content/4/1/1> (cited October - 21 -2013) <https://doi.org/10.1186/1752-4458-4-1> PMID:20180979 PMCID:PMC2831025
- 4) Koranyi EK (2000): Morbidity and rate of undiagnosed physical illness in a psychiatric clinic population abstract. *Archive of general psychiatry* 36:414-9. <https://doi.org/10.1001/archpsyc.1979.01780040056006> PMID:426608
- 5) Kramer JS (2003): Preventing episodes of mental illness. The importance of early intervention and subjective tolerability in psychiatry; 60(suppl23)
- 6) Marta E (2003): Society and mental health, gender differences in health care. At <http://www.genderhealth.com> (cited October - 4 - 2013)
- 7) Natascha K, Brigid F and Kim W (2011): Building health by supporting diversity and reducing discrimination, Victoria health promotion foundation ISBN978-1-921822. At <http://www.vichealth.vic.gov.au> (Cited November/6/2013)
- 8) Ovuga E, Ndyabangi S, Nsereko J, Kizza D and Felisher A J (2010): Stake holders perception of health seeking behaviour among people with mental illnesses in Uganda. *International journal of mental health systems* June 2010 - Feb 2011, 53:894-8.
- 9) Sneed Z, Koc D S, Estes H and Quin J (2006): Employment and psychosocial outcomes for offenders with mental illness. *International journal of psychosocial rehabilitation*, 10(2);103-112. At <http://www.psychosocial.com> (cited October - 4 - 2013)
- 10) Victoria V (2008): Recognizing possible triggers of mental illness onset and relapses; the stress vulnerability coping model of mental illness. At <http://www.mita.org.au/sites> (cited October - 4 - 2013)
- 11) Watson A C and Corrigan P W (2001): The impact of stigma on service access and participation. At <http://www.bhrm.org/guidelines/stigma> (cited September - 28 - 2013)