# The prevalence and severity of mental illnesses handled by traditional healers in two districts in Uganda

Catherine Abbo<sup>1,2</sup>, Solvig Ekblad <sup>3,1</sup>, Paul Waako<sup>2</sup>, Elialilia Okello<sup>2</sup>, Seggane Musisi<sup>2</sup>

#### Abstract

**Background:** Little is known about the prevalence and severity of DSM-IV mental disorders treated by traditional healers in Uganda.

**Objective:** To describe the prevalence and severity of DSM-IV disorders handled by traditional healers in Jinja and Iganga districts, Eastern Uganda.

**Method:** Between January and March 2008, Face-to-Face Interviews were conducted with 400 patients attending traditional healers' shrines for mental health problems, using Self Rating Questionnaire 25 (SRQ-25) for screening, the Mini International Neuropsychiatric Interview (MINI-Plus) for specific DSM-IV diagnosis and the Global Assessment of Functioning (GAF) for severity of illness. Descriptive data analysis and frequency estimates were performed using SPSS version 15.0 for Windows. Pearson's chi–square tests and odds ratios were used to explore the relationship between severity and combined use of biomedical services and traditional healing.

**Results:** Of 387 respondents, 60.2% had diagnosable current mental illness and 16.3% had had one disorder in their lifetime. Of the diagnosable current mental illnesses, 29.7% were Psychosis; 5.4% Major depressive episode; 5.6% Anxiety disorders; 3.6% mixed Anxiety-Depression; and 3.9% Suicidality. In terms of severity, 37.7% of the current mental illnesses were severe, 35.1% moderate and 13.2% mild. Patients with moderate to severe symptoms were more likely to use both biomedical services and traditional healers. **Conclusion:** These findings suggest that a considerable number of patients with DSM-IV diagnosable mental disorders attend traditional healing shrines; the majority had moderate to severe symptoms. Mental health professionals therefore need to come up with ways to co-operate with traditional healers, e.g. as officially designated Traditional Mental Attendants (TMA), for the benefit of their patients.

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### Introduction

Populations throughout Africa use traditional healers to help meet their primary health care needs <sup>1, 2</sup>. Besides being accessible and available, traditional healers are often part of the wider cultural belief system and are considered integral to everyday details and well being. Mental illnesses are a major public health concern in Uganda, both in communities and in health care facilities. Yet very few reliable prevalence studies are available with which to estimate the burden of mental illnesses in Uganda <sup>3</sup>.

The bulk of epidemiological research in Uganda has focused on primary care settings, where most psychiatric disorders are non-psychotic <sup>4,5</sup>. The reported prevalence rates vary widely, from 10% to nearly half of

### $Corresponding \ Author:$

Catherine Abbo

Karolinska Institutet

Department of Clinical Neuroscience, Section of Psychiatry, SE-171 77 Stockholm, Sweden, and Department of Psychiatry, Makerere University, College of Health Sciences, P.O. BOX 7072, Kampala, Uganda.

Emails: Catherine. Abbo@ki.se, cathya 180@gmail.com

all primary care attendees (the quoted figures range from 10-25% of patients attending with a psychiatric problem, with or without a co-existing physical problem). The most common diagnoses are Depression and Anxiety 6-8. A community study from rural Uganda by Orley and Wing found the following prevalences: Depression 9.3%, Anxiety 8.5%, Bipolar disorder 4.9% and Schizophrenia 1.5 % 9. In a study of households in the Kabarole district of Uganda, Kasoro and others found that 30.7% of adults had psychiatric disorders <sup>10</sup>. On the basis of the UNHS 2005/2006 Qualitative Module Report, the Uganda Bureau of Statistics found, for example, that 58% of all the households with disabled members (an estimated 7 % of all households in Uganda), had at least one member with a mental disorder 11. None of these Ugandan studies specifically addressed traditional healers' practices, neither did they highlight severe psychiatric illnesses (Psychosis). Instead, they concentrated on common mental disorders. Furthermore, it is possible that many patients with psychosis do not spontaneously seek primary health care 12. Thus, there is a paucity of literature on the prevalence of mental health care provided by traditional healer centres/shrines in Uganda. However, a study in urban Tanzania found that among persons

<sup>&</sup>lt;sup>1</sup>Karolinska Institutet, Stockholm, Sweden

<sup>&</sup>lt;sup>2</sup> Makerere University, Kampala, Uganda

<sup>&</sup>lt;sup>3</sup> Stress Research Institute, Stockholm University, Stockholm, Sweden

attending a traditional healer centre in Dar-Es-Salaam, the capital, the prevalence of common mental disorders was 48%, which was twice the prevalence among persons attending the neighboring primary health clinic <sup>13</sup>. Patel and others found a prevalence of 40 % in Harare <sup>14</sup>. None of the studies reported on the severity of disorders among person attending traditional healer's shrines.

The aim of this study was therefore to try to document the prevalence and severity of various specific mental illnesses among persons attending traditional healers, with the emphasis on major psychiatric disorders, the Psychoses, with the aim of providing policy makers with information about the burden of mental health problems born by traditional healers.

### **Objective**

To determine the prevalence and severity of various specific mental illnesses handled by traditional healers in Jinja and Iganga districts, Eastern Uganda.

### Methods and materials

This study was carried out in two districts of Uganda, namely Jinja and Iganga, located in the Busoga region of Eastern Uganda. The population of two districts totals 1,234,248 (2002 national census).

### The setting:The shrine

The setting of this study was the shrine, the place for the practice of traditional healers. The shrine is usually located within the community. The details of the study setting have been described in a previous preliminary study <sup>15</sup>.

### Study Design

This was a cross-sectional descriptive survey of patients who attend traditional healers' shrines. The Self Reporting Questionnaire (SRQ-25) was used as the screening instrument to consecutively screen patients for psychological distress. A psychiatric diagnostic instrument, the Mini International Neuropsychiatry Interview (MINI plus), was administered to make specific psychiatric diagnosis and the Global Assessment of Functioning was used to measure severity.

### Sample size calculation

Sample size was calculated using the Kish Leslie formula for single proportions for descriptive study. The calculation assumed a frequency of 48 % for mental disorders at the traditional healer's facility <sup>13</sup>. For a 95% confidence interval and a precision of 0.05, a total of

400 patients were consecutively screened and administered the MINI. Candidates were included if they were 18 years and above and did not have signs of lifethreatening illness, e.g. convulsions, altered consciousness, coma etc. Patients who were not competent to give their consent and whose relatives declined to consent on their behalf were excluded from the study.

### Sampling of traditional healers

All traditional healers who admitted to treating clients with mental health problems and could be reached in the two districts were included in the study. Iganga had 60 registered healers and Jinja had 180. For inclusion, the traditional healers also had to be registered with their organization and to have practiced in the district for more than six months. The number of patients per traditional healer per district was worked out proportionally.

### Measures

The study instruments consisted of:

### a) A socio-demographic questionnaire

This was a prepared socio-demographic questionnaire comprising age, gender, marital status, tribe, religious affiliation, educational attainment, number of children, employment and household monthly income. This information was obtained through completion of the questionnaire. Additional questions were included on the number of episodes, family history and type of help sought for the same symptoms.

### b) The Self Reporting Questionnaire (SRQ-25)

This was used for screening patients. The SRQ-25 is a WHO research instrument developed to screen for mental disorders in the community. The SRQ-25 consists of SRQ-20, which was derived from four psychiatric morbid instruments from a wide variety of cultural backgrounds <sup>16</sup>, plus five questions to screen for Psychotic disorders and Epilepsy. Further details are reported elsewhere <sup>15</sup>. Although only 65% of the screened patients had psychological distress and were therefore eligible for administration of MINI (see below), the diagnostic instrument was administered to all screened patients. This is because over 80% of the screened patients answered 'yes' to at least one of the four questions that screened for psychosis.

## c) The Mini International Neuropsychiatric Interview (MINI)

The MINI is a short structured diagnostic interview for DSM-1V (Diagnostic and Statistical Manual Fourth

Edition) and ICD10 (International Classification of Disease, Tenth Edition) for psychiatric disorders <sup>17, 18</sup>. It covers 17 Axis 1 categories in a shortened format and is designed to meet the need for a short but accurate structured interview. It was developed to address the shortcomings of SCID-1 (Structured Clinical Interview for DSM-IV) and CIDI (Composite International Diagnostic Interview), with which it shows good correlations, and has higher reliability and validity scores than either of them <sup>17, 19</sup>. In Uganda, the MINI has been translated and backtranslated in Luganda and repeatedly used <sup>20</sup>. For the purposes of this study, the MINI was translated into Lusoga, the language of the study area, and back translated by an independent clinician from Busoga.

### d) The Global Assessment of Functioning (GAF)

This instrument was used to measure the severity of mental illness. The GAF values range from 0 (most severe) to 100 (least severe), with 10 anchor points at equal intervals 21. Each interval of the GAF is accompanied by a behavioral descriptor, ranging from "superior functioning in a wide range of activities ... no symptoms" to "persistent danger of severely hurting self or others ... persistent inability to maintain minimal personal hygiene." The interviewer first determines the descriptor that summarizes the client's current difficulties, and then indicates the severity of impairment with a nine-point range <sup>21</sup>. Functioning according to GAF was rated by trained research assistants on the basis of information gathered from the patients at the traditional healer's shrine. GAF assessments referred to the current symptoms. All the four assessors attended a one-hour session which provided a description of the scale and instruction on its use. The good interrater reliablity of the GAF when used by research assistants has been demonstrated in previous studies 21. In this study, interrater reliability between psychiatrists and the research assistants after training was satisfactory (Intraclass Correlation Coefficient between 60 and 83). For the purpose of this study, GAF was classified as follows, based on previous studies  $^{22,23}$ : GAF  $\leq$  70=Mild ; GAF  $\leq$  50=moderate ; GAF  $\leq$  30 =severe.

### Data collection

Psychiatric Clinical Assistants working in Jinja and Iganga districts collected data. They were guided by individuals who were acquainted with the area's traditional healers. District officials and the traditional healers were officially contacted before the data collection began to inform them about the purposes of the study and ask for permission. A standard set of procedures and statements

was prepared for the interviewers to introduce themselves to the traditional healers. The traditional healers were asked for permission to talk to their clients or patients, while the clients/patients or their relatives were requested to consent to participate. In case of need for referrals or advice, the trained psychiatric clinical assistants gave the advice and referred the patient after agreeing with the healer in charge. Strategies used to decrease embarrassment included: empathetic tone, initial allaying of anxiety, and enquiring about significant areas of life.

The research assistants were themselves clinically competent to make psychiatric diagnosis. They used their clinical competence to confirm the diagnosis of the MINI Plus. When in doubt; the first author, a psychiatrist, was called in to double check the clinical diagnosis.

Ethical clearances were obtained from the necessary sources, including the Faculty of Medicine Higher Degree Research and Ethical Committee (HDREC); the National Council of Science and Technology (NCST), Leader of traditional healers, the Resident District Commissioners of the two districts, and the Research Committee Ethical Council, Karolinska Institutet (Permission number 05/07).

Concerning consent from the mentally ill patient, the research assistants assessed the patient's capacity to understand the purpose, nature, risks, benefits, and alternatives of the research. If this was found to be lacking, relatives or guardians who had accompanied the patient were requested to consent on behalf of the patient.

### **Data analysis**

Completed forms were checked for completeness, consistency and accuracy on a daily basis and before data entry into a computer. We used Epidata for data entry and the descriptive data analysis and calculation of frequencies were performed using SPSS version 15.0 for Windows. To explore the relationship between severity and the combined use of biomedical services and traditional healers, we used Pearson's chi—square tests and odds ratios. The level of statistical significance was set at 5% (i.e. P < 0.05).

### Results

### Socio-demographic characteristics

The numbers of males and females were nearly equal (46% and 54%, respectively); the patients mainly belonged to the Basoga tribe (86.6%) and a majority were Christians (61.6%). Three-quarters of the

respondents (297, 76.7%) were below 45 years of age and the mean age was 34.8 years (S.D. 13.55).

A majority (350, 90.4%) earned the equivalent of less than 1 dollar a day and 223 (57.6%) were not in gainful employment. Four-fifths had obtained some education (311, 80.9%; primary school 50.9%, secondary school 29.5%). There were nearly equal numbers of married and non married: 196 (50.6%) and 191 (49.4%), respectively.

### Prevalence and severity of mental illness

Of the 387 respondents, 233 (60.2%) had at least one current diagnosed disorder. There were 63 (16.3%) who had experienced at least one disorder in their lifetime, while 170 (44%) had had two or more episodes. Psychosis was most frequent, occurring in 115 (29.7%) of the sample. Table 1 presents the distribution of the patients' current mental illnesses. The rates of the other disorders (common mental disorders) were lower.

Table 1: Prevalence of (current) DSM-IV disorders

Disorder (current)	Number (%) 95% CI
Major depressive disorder	21 (5.4) [3.87-8.15]
Mood disorder due to general	33 (8.5) [6.14-11.74]
medical condition	
Dysthymia	3 (0.7) [0.28-2.24]
Suicidal	15 (3.9) [2.37-6.30]
Anxiety disorders	22 (5.7) [3.79-8.46]
Mixed anxiety depression	14 (3.6) [2.18-5.98]
Mania	41(10.6) [7.91-14.06]
Schizophrenia	28 (7.2) [5.06-10.26]
Psychotic depression	46 (12.4) [9.49-6.07]
Schizophreniform disorder	10 (2.6) [1.42-4.69]

Most of the disorders were moderate to severe (72.8%) as shown in table 2.

Table 2. Severity of disorder as measured by Global Assessment of Functioning, number of episodes and family history of mental illness

Severity	Number (%) [95% CI]
*GAF> 70 (Normal)	54 (14.0) [10.86-17.77]
$GAF \le 70 \text{ (mild)}$	51 (13.2) [10.17-16.92]
$*GAF \le 50 \text{ (moderate)}$	136 (35.1) [30.55-40.03]
$*GAF \le 30 \text{ (severe)}$	146 (37.7) [33.04-42.66]
2 or more episodes	170 (44.0) [39.06-46.91]
Positive family history of	136 (35.1) [30.55-40.02]
mental illness	

\*Includes those that were ranked as moderate to severe but with no diagnosis on MINI Plus and those ranked in the normal range but with a diagnosis.

The exploration of the relationship between GAF scores, number of episodes, combined use of traditional healing practices, and a positive family history reveal that patients with GAF scores in the moderate and severe range were more likely to have a family history of mental illness, to have had two or more episodes previously and to have sought help from traditional healers and biomedical services for the same problems as shown in table 3.

### Discussion

Our findings showed the rates of current mental disorders at the traditional healers' shrines were higher for psychosis but lower for anxiety and depression. This differs from findings in other studies <sup>13, 14</sup>. In those studies, traditional healers were considered to be a part of primary health care, thus offering general health care services <sup>13, 14</sup>. In this study, healers were sampled who reported that they were managing mental health problems, hence a specialised group. This may explain our finding of 29.7% for psychosis and lower rates for common mental disorders compared to previous studies <sup>13, 14</sup>. Moreover, we did not consider other physical or social problems which the traditional healer may have been treating.

Table 3: Relationships between GAF score, combined use of traditional healing and biomedicine, and positive family history

GAF score	2 or more episodes OR [95%CI]X <sup>2</sup> , P	Help seeking T/H and biomedicine OR [95%CI]X <sup>2</sup> , P	<b>Positive family history</b> OR [95%CI]X <sup>2</sup> , P
GAF>70(Normal)	1.00	1.00	1.00
$GAF \le 70 \text{ (mild)}$	2.10 [0.71-6.27]X <sup>2</sup> =1.58,	2.43 [1.24-4.79]X <sup>2</sup> =6.95,	2.92 [1.15-7.51]X <sup>2</sup> =5.3,
	P=0.20	P=0.008	P=0.02
$GAF \le 50 \text{ (moderate)}$	2.46 [0.96-6.11]X <sup>2</sup> =3.44,	10.11 [4.28-24.42]X <sup>2</sup> =36.86,	12.6 [4.23-39.04]X <sup>2</sup> =26.38,
	P=0.06	P=<0.0001	P=<0.0001
$GAF \le 30$ (severe)	2.63 [1.07-6.57]X <sup>2</sup> =4.56,	12.40 [4.93-32.18]X <sup>2</sup> =39.78,	26.25 [8.58-84.46]X <sup>2</sup> =47.30,
	P=0.03	P=<0.0001	P=<0.0001

The literature contains few studies that specifically document the prevalence of mental disorders, including psychosis, among persons attending traditional healers. The prevalence of about 60% for current mental disorders in our study is similar to that reported by Saeed and others in a study on native faith healers in rural Pakistan <sup>24</sup>. Neither did that study report on rates of psychosis. Our rate for current mental disorders is twice the level found in primary health care studies in Africa <sup>4,6</sup>.

Our finding of a lifetime prevalence of 16.3% is almost four times higher than the rate of 4.7% in the WHO study in Yoruba, Nigeria  $^7$ .

It appears self-evident that common mental disorders with mild symptoms are present in the community and it seems that individuals with such disorders tend to seek help only when the disorder becomes severe and that when they do so, they may first consult traditional healers or a primary health care setting that treats everything (general practitioners). When the patients become psychotic, they finally go to 'specialists': traditional healers who treat psychosis. On the other hand, in the context of limited resources, only people with socially disruptive behavior are likely to attract the attention of family and community members and therefore seek help <sup>25 26</sup>; people who are depressed and essentially bother nobody else but themselves tend to be overlooked <sup>25,26</sup>.

Regarding severity, most of the disorders in our sample were moderate to severe; just over 13% were mild cases. This finding could be explained by the suggestion that although mental disorders are common in the community, a large proportion of those with such disorders nevertheless manage to avoid considerable functional limitations 8, 27, 28. When they do become dysfunctional or disruptive, help is sought <sup>26</sup>. Patients with GAF scores in the moderate to severe range were more likely to use both biomedical services and traditional healers for their symptoms. This could mean that when people have a moderate to severe functional impairment, they will tend to look for help wherever they can find it. Previous studies have shown that communal cultural concepts of mental illness are still prevalent <sup>26</sup>. However, it seems that when it is a matter of desiring to get well, biomedical and traditional concepts are combined to fulfill this desire. Further research may be needed in the area of how concepts of health and illness determine the utilization of available services.

When considering our findings, the following four limitations should be noted:

1) This study was carried out in a particular setting: traditional healing shrines in rural areas with limited

access to Western health facilities. Each village has a traditional healer, which implies better access. This may have augmented the prevalence of psychosis as reported here.

- 2) There is a general outward public condemnation of traditional healing practices. Participants may have underreported symptoms of anxiety and depression as they may have felt uneasy about being found at the traditional healers' shrines by seemingly Western-trained health workers. However, we used strategies such as empathetic listening and allaying anxiety to make patients feel at ease and develop trust. We hope this helped to reduce unease <sup>29</sup>.
- 3) One may argue that psychosis rates were overestimated because: i) the traditional healers were said to be specialists in treating psychosis; our main interest was psychosis, so the sampling of traditional healers may have been biased; ii) lay interviewers have been reported to overestimate psychosis diagnosis <sup>30</sup>. To minimize this, we used Psychiatric Clinical Assistants with experience in clinical psychiatry. Also the diagnosis of psychosis was double-checked by the first author.
- 4) One may argue that the validity of the study may have been undermined by the use of Western instruments. We dealt with this in an earlier study by first exploring the conceptualization of psychosis by the Basoga <sup>12</sup>. We then used the information to modify our instruments. This made our instruments and results culturally sensitive.

### Conclusion and implications

About 60% of the attendees of traditional healing practices in Jinja and Iganga had at least one diagnosable current mental illness and 16.3% had at least one disorder in their lifetime. The majority had moderate to severe symptoms. These findings represent a first step in documenting the burden that caring for patients with mental illness places on traditional healers, thus providing evidence of a need for biomedical practitioners to work together with traditional healers. Rather than competing with each another over delivery of mental health care, the scarce mental health professionals and traditional healers could try to complement each other and work together. They must learn to recognize the limits and boundaries of their respective professions and be aware of each other's strengths and weaknesses. Training for both groups in this regard may be necessary.

Initial screening for more severe psychiatric disorders could optimally occur at the traditional healer's shrine and primary health care centres, to ensure early recognition and timely referral to psychiatric professionals. When diagnosis and treatment of such patients have been initiated by the mental health professionals, the traditional healers could assist in follow up by supporting the treatment plans and providing culturally sensitive counselling, careful monitoring of treatment compliance and observation of the patient for disease exacerbation/relapse. Psychiatrists in turn could educate the traditional healers about signs of the more severe psychiatric illnesses and assist them in recognizing them and referring appropriately. Furthermore, mental health professionals could provide guidelines to help the traditional healers determine when their clients with milder psychiatric conditions should be referred for more specialised treatment. Close collaboration among psychiatrists and traditional healers offers the best hope of meeting mental health care needs in a timely, coordinated, ethical and cost-efficient manner. Thus, the creation of a new health cadre, the traditional mental health Attendant (TMA) 31, would be a useful addition to primary mental health care in Africa, where there is an alarming scarcity of western-trained mental health professionals.

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### References:

- World Health Organization: WHO Policy Perspective on Medicines-Traditional Medicine-Growing needs and potentials. Geneva, World Health Organization; 2002
- World Health Organization: WHO Traditional Medicine Strategy 2002-2005. Geneva, World Health Organization; 2002.
- Kigozi, F; Maling, S. Mental Health in Uganda today. Mental Health and Development, Basic Needs. 2004; 3:1-3
- Muhwezi, W; Agren, H; Musisi, S. Detection of Major Depression in Ugandan Primary Health Care using simple questions from a Subjective Well Being (SWB) subscale. Soc Psychiatry Psychiatr Epidemiol. 2007; 42:61-69
- Patel, V; Todd, C; Parry, C; Njenga, FG. Epidemiology of mental disorders in sub-Saharan Africa. In: Essentials of Clinical Psychiatry for Sub-Saharan Africa. Edited by Njenga, FG; Acuda, W; Patel, V; Maj, M; Milano, Masson, 2005, pp 56-61
- Gureje, O; Obikoya, B; Ikuesan, BA. Prevalence of specific psychiatric disorders in an urban primary care setting. *East African Medical Journal*. 1992; 69: 17-21
- 7. Gureje, O; Lasebikan, VO; Kola, L; Makanjoula, VA. Lifetime and 12-month prevalence of mental disorders in the Nigerian

- Survey of Mental Health and Well-Being. Br J Psychiatry. 2006; 188(5):465-471
- 8. Stock, R. Africa South of Sahara: Geographical Interpretation. NewYork, Guilford, 1989.
- Orley, J; Wing, J. Psychiatric Disorders in Two African Villages. Arch Gen. Psychiatry. 1979; 36:513-557
- Kasoro, S; Sebudde, S; Kabagambe-Rugamba, S; Ovuga, EB; Boardman, A. Mental illness in one district in Uganda. International Journal of Social Psychiatry. 2002; 48:29-37
- Uganda Bureau Statistics, UNHS. Kampala, Qualitative Module Report, 2005/2006
- Abbo, C; Okello, ES; Ekblad, S; Waako, P; Musisi, S. Lay concepts of psychosis in Busoga, Eastern Uganda: a pilot study. J World Cultural Psychiatry Research Review. 2008; 3(3):132-145
- Ngoma, MC; Prince, M; Mann, A. Common mental disorders among those attending primary health clinics and traditional healers in urban Tanzania. *Br J Psychiatry*. 2003; 183(4):349-355
- Patel, V. Use of traditional and orthodox health services in urban Zimbabwe. *Internal Journal of Epidemiology*. 1997; 32:97-103
- 15. Abbo, C; Ekblad, S; Waako, P; Okello, E; Muhwezi, W; Musisi, S. Psychological distress and associated factors among the attendees of traditional healing practices in Jinja and Iganga districts, Eastern Uganda: a cross-sectional study. *International Journal of Mental Health Systems*. 2008; 2(1):16
- World Health Organisation (WHO): A user's guide to the Self Reporting Questionnaire (SRQ). Geneva, World Health Organisation, 1994
- American Psychiatric Association (APA): Diagnostic and statistical manual of mental disorders Fourth Edition. Washington D.C USA, 1994
- World Health Organisation (WHO): The Tenth Revision of the International Classification of Disease and Related Health Problems (ICD-10). Geneva, World Health Organization, 1992
- Pinninti, RN; Madison, H; Musser, E; Rissmiller, D. MINI International Neuropsychiatric schedule: Clinical utility and patient acceptance. *European Psychiatry*. 2003; 18:361-364
- 20. Nakku, JEM; Nakasi, G; Mirembe, F. Postpartum major depression at six weeks in primary health care: prevalence and associated factors *Afr Health Sci*. 2006; 6(4): 207–214
- 21. Hall, RC. Global Assessment of Functioning: A modified scale. *Psychosomatics* 1995; 36:267-275
- 22. Ruggeri, ML; Thorncroft, G; Tansella, M; Bisoffi, G. Definition and prevalence of severe and persistent mental illness. *Br J Psychiatry*. 2000; 177:149-55
- Allanson, J; Bass, C; Wade, DT. Characteristics of patients with persistent severe disability and medically unexplained neurological symptoms: a pilot study. *J Neurol Neurosurg Psychiatry*. 2002; 73(3):307-309
- 24. Saeed, K; Gater, R; Hussain, A; Mubbashar, M. The Prevalence, classification and treatment of mental disorders among the attenders of native faith healers in rural Pakistan. Soc Psychiatry Psychiatr Epidemiol. 2000; 35:480-485

- 25. Swartz, L. Culture and Mental Health: A South African View. CapeTown, Oxford University Press, 1998
- Bijl, RV; Ravelli, A; Van Zessen, G. Prevalence of psychiatric disorder in the general population: results of the Netherlands Mental health Survey and Incidence Study (NEMESIS). Soc Psychiatry Psychiatr Epidemiol. 1998; 33:587-595
- 27. WHO: World Mental Health Survey Consortium. Prevalence, severity, and unmet need for treatment of mental disorders in the World Health Organization World Mental Health Surveys. *JAMA* 2004; 291:2581-2590
- Okello, E; Musisi, S. Depression as a clan illness (eByekika):
  An Indigenous Model of Psychotic Depression among the Baganda of Uganda. JWorld Cultural Psychiatry Research Review 2006; 1(2):60-73
- 29. Kessler, RC; Wttchen, H-U; Abelson, JM; McGonagle, KA; Swartz, N; Kendler, KS; Knauper, B; Zhao, S. Methodological studies of the Composite International Diagnostic Interview (CIDI) in the US National Comorbidity Survey Int J methods Psychiatr Res. 1998; 7:33-55
- 30. Bebbington, PE; Nayan, T. The psychosis screening questionnaire. *Int J Methods Psychiatr Res* 1995:11-19
- 31. Okello, E; Abbo, C; Musisi, S; Tusaba, C Incorporation of Traditional Practitioners in primary mental health care in Uganda *Makerere University Research Journal*, 2006: Vol 1 (2) 139-148