

Exploring Barriers to the Utilization of Mental Health Services at the Policy and Facility Levels in
Khartoum State, Sudan

Elsadig Abdelgadir

A thesis
submitted in partial fulfillment of the
requirements for the degree of

Master of Public Health

University of Washington

2012

Committee

Randall C Kyes

Deepa Rao

Program Authorized to Offer Degree:
Department of Global Health

Table of contents

Introduction:-----	1
Conceptual Framework:-----	5
Methods:-----	7
Study Site and Population:-----	7
Study Design:-----	8
Data Collection:-----	8
Evaluation of Mental Health Service Utilization Data:-----	9
Ethical review and recruitment:-----	9
Results:-----	10
Policy Maker/Health Care Provider Interview Process:-----	10
Evaluation of Mental Health Service Utilization Data:-----	18
Discussion:-----	21
Researcher's recommendations:-----	26
Dissemination of the research findings:-----	27
References-----	28
Appendix A: Policymakers Questions-----	30
Appendix B: Care providers Questions-----	31
Appendix C: Policymakers Questions Arabic.-----	32
Appendix D: Health Care Providers Questions Arabic:-----	33

List of Figures

<i>Figure 1: Conceptual framework of the potential factors affecting the utilization of mental health services.</i>	5
<i>Figure 2: Sudan Map illustrates the three psychiatric hospitals in Khartoum state.</i>	7
<i>Figure 3: Total number of patients seen in the emergency and referred clinics of Alidrisi psychiatric hospital between 2007 and 2010.</i>	18
<i>Figure 4: Total number of patients seen in the emergency and referred clinics of Taha Bashar psychiatric hospital between 2007 and 2010.</i>	19
<i>Figure 5: Total number of patients admitted between January and December 2010 at Taha Bashar Psychiatric Hospital according to Diagnosis.</i>	19
<i>Figure 6: Total number of patients seen at Altigani Almahi psychiatric hospital between 2007 and 2010.</i>	20
<i>Figure 7: Total number of patients' admitted between 2009 and 2010 at Altigani Almahi Hospital according to diagnosis.</i>	20

Acknowledgements

I would like to acknowledge the support and guidance of my thesis chair Randy Kyes, and my committee member Deepa Rao. I am grateful to the faculty and staff members in the Department of Global Health at University of Washington. My thanks also go to the managers of Altigani Almahi, Alidrisi and Taha Bashir psychiatric hospitals in Khartoum state in Sudan. I would like to express my deep appreciation and gratitude to my friends and colleagues in Sudan for their support over the research period.

Dedication

This thesis is dedicated to my parents, for their prayers, care, and love. I lovingly dedicate this thesis to my wife, for her support and inspiration, and to all my friends and colleagues.

Introduction:

The World Health Organization (WHO) defines mental health as (a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community. In this positive sense, mental health is the foundation for individual well-being and the effective functioning of a community).(1) However, mental health is not a priority in many developing countries in terms of presence of policies, services and research. While 92% of people living in high income countries are covered with mental health legislation, only 36 percent of people living in low income countries are covered.(2) The WHO mental health Atlas 2011, also states that the number of outpatient is 58 times prevalent in high income compared with low income countries.(2)

Globally, there is inadequate financial support for mental health programs. The average global expenditure on mental health-related services is less than US\$3.00 per capita per year. This reflects the generally low spending on mental health. However the spending in developing countries could be less than US\$0.25 per person per year.(3) Early detection of mental illness requires more intervention and spending on mental health at all levels, especially the primary health care level.

Many people think that mental health can wait and we should prioritize to address bigger health problems like malaria and vaccination to prevent other health problems. However, others argue that mental health is an important component of physical health. (4)For example, Studies showed a strong correlation between depression and obesity.(5) In addition, more depressive symptoms were associated with non adherence of type 2 diabetes medication.(6)

While the WHO recommends that mental health services should be made available at the community level, only 32% of countries around the world have access to community care facilities and this includes any type of care to mental health patients outside hospitals that is provided by social workers. Furthermore, 30% of countries worldwide do not have a budget for mental health at all.(7)For example, in Uganda, the national spending on mental health is not more than 1% of the total budget allocated for health.(3)

Barriers to mental health service use:

Worldwide, 450 million people are estimated to suffer from mental disorders and other associated consequences.(8) The high level of stigma and discrimination toward mental health patients may affect their access to health care and can worsen their mental disorders. Poverty could be a cause or a consequence of mental disorders. Stigma could impact not only access to mental health services, but also adherence to medication. A study showed that HIV stigma affected youth adherence to anti retroviral therapy and 50 percent of the respondents skipped doses to avoid discovering their status.(9)

A recent study in the US examined the rates of mental health services utilization among Active Duty and National Guard soldiers who returned from Iraq. The study revealed that elevated feeling of stigma is connected to lower mental health utilization of services. (10)Studies showed that mental health interventions were associated with improved economic outcomes.(11)Furthermore, a strong relationship was found between the percentage of people with mental illness and countries with unequal income.(12).

In many Arab countries, mental health resources and budgets allocated for mental health services are still insufficient. Out of the twenty two Arab countries, Sudan and six other Arab countries have less than 0.5 psychiatrists per 100,000 people. Two Arab countries do not have a mental health policy and six do not have any legislation.(13)

Low and middle income countries suffer from shortage of mental health professionals. There is a need to involve psychiatrists in managing programs and capacity building of other clinical staff in order to improve mental health services and referral.(14)

Current Events:

In January 2005, the Government of Sudan and Sudan's People Liberation Movement signed the comprehensive peace agreement at Naivasha resort in Kenya. The agreement ended the longest civil war in Africa. A referendum was held in January 2011, the people of the South voted for independence from the North. This resulted in a birth of two new states, Sudan and South Sudan. After the separation of South Sudan, Sudan became the third largest country in Africa with 1.8 million sq. km. Sudan population is 33,419,625 (2011 estimates). Sudan GDP per capita is \$2,380 and the average population growth rate is 2.8 %.(15) Life expectancy at birth is 61.4 years for females and 58.3 years for males.(16) Sudan total expenditure on health as a percent of its gross domestic product is 6.9%.(17)

In 1976, the Ministry of Health in Sudan adopted a primary health care strategy. The facilities include primary health care units, dressing stations, dispensaries, and rural hospitals. Health centers are the main referral points. At the tertiary level there are public teaching facilities located in the state capitals. (18)Health services are centralized in Khartoum state, with 72% of the physicians located in Khartoum and the surrounding region. There are 72 beds and 19 physicians per 100,000 people.(19)

In 2001 The Health Education Department within Federal Ministry of Health became the General Directorate of Health Promotion. This directorate is an umbrella for mental health along with other six health-related programs including Cancer Prevention, School Health, National Diabetes Program, Sudan Initiative for Tobacco control, , and Oral Health and Health of the Elderly. (18).

Cultural Considerations around Mental Health:

Historically there have been many beliefs surrounding mental illness like "Zaar," or spirit possession, a belief that has spread widely in East and Central Africa over the past decades especially in Ethiopia and Sudan.(20) Attitudes (and related access) toward mental health services are influenced by culture and level of health-related knowledge of the population. Literature suggests that rural people opted for religious healers more often than people from urban areas.(21)

A lot of work at the community level needs to be done to improve access and utilization of mental health care services. Typical history of mental health patients is that those patients first seek care from traditional healers. Patients may stay with traditional healers for several months. They are referred to mental health facilities when there are no signs of improvement.(22) The majority of patients who access traditional healer centers were found to have specific characteristics. Most of those patients were male, jobless, and with only a primary education or illiterate. The average duration of stay at these centers was five months.(22)

Traditional and religious healers have considerable impact on a mental health patient's access to care. In many African countries families are responsible for taking care of mental illness patients, they only try modern care when traditional healing fails. (23) In Sudan this depends on patients or family members belief in the healer's (or Sheikh's) ability to treat them. In some parts of Sudan, especially in Gezira, some people believe that they are not allowed to disobey these religious healers. Whether the patient goes to a religious or non-religious healer depends in large part on the patients and co patients understanding of mental health and their own beliefs.(24)

A program implemented in 2002 in Gezira state (bordering Khartoum state) between University of Gezira, Gezira state ministry of health and the community resulted in shifting of mental health services from central hospitals to PHC level. This program proved that collaboration between medical

schools, ministries of health and the community would improve mental health service provision at primary health care level. (25)

Conceptual Framework:

We developed the study conceptual model based on different potential factors we thought might affect mental services utilization. We assumed that these factors could be at three levels: the policy, the facility and the community. Moreover, we tried to identify any possible relationship or contribution of the existing health system on utilization of mental health services. At the facility level, we listed primary care level referral, availability of services as well as health professionals' issues. On the other hand, at the community level we identified some socio cultural factors related to utilization of services like, social support, cost of treatment, awareness, culture and stigma. (See figure 1)

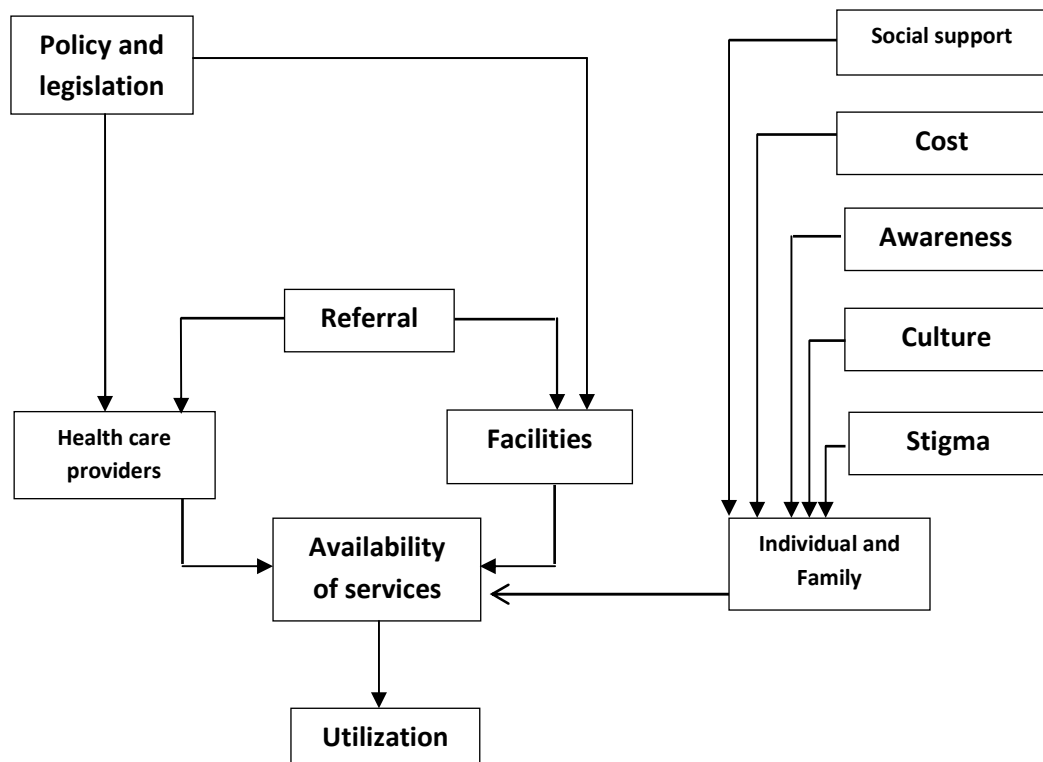


Figure 1: Conceptual framework of the potential factors affecting the utilization of mental health services.

The emphasis of this study was to explore barriers to the utilization of mental health services in Khartoum state in Sudan. The guiding research question was “What are the barriers to the utilization of mental health services in Khartoum state, Sudan as perceived by the key policy makers and care providers?”

The specific objectives of this study were as follows:

- a) To explore key factors that affect utilization of mental health services in Khartoum state at the policy level.
- b) To identify barriers to mental health care utilization in public psychiatric hospitals in Khartoum state from health care providers perspective.
- c) To examine the utilization of mental health services over the past three to five years from target hospitals.

Methods:

Study Site and Population:

This study was conducted between August 2011 and March 2012 in Khartoum state in Sudan.

Assessment of the barriers to the utilization of mental health services took place at two levels: 1) at the policy level involving key ministry staff in the Federal Ministry of Health as well as Khartoum State Ministry of Health and 2) at the facility level with health care providers from three mental health facilities located in Khartoum state: Altigani Almahi, Taha Bashar and Alidrisi hospitals (see figure 2).



Figure 2: Sudan Map illustrates the three psychiatric hospitals in Khartoum state.

All three psychiatric hospitals were public health facilities that provided mental health services within their emergency and referred clinics. There were total 34 respondents interviewed in this study: four at the policy level and 30 at the facility level. The key policy makers are responsible for making decisions related to mental health services in the country. The mental health facilities in Khartoum state used to be under direct supervision of the Federal Ministry of Health but a recent administrative change

placed them under the supervision of the Khartoum State Ministry of Health. Therefore, we recruited policymakers from both ministries, two from the federal ministry and two from the Khartoum state Ministry of Health. Within each of three mental health facilities we interviewed 10 health care provider including two psychiatrists, two medical officers, two medical assistants, two psychologists, and two nurses.

Study Design:

This study was descriptive in nature, and involved a mixed design applying both qualitative and quantitative research methods. Qualitative methods involved interviews with the four policy makers and 30 health care providers in order to assess the barriers to utilization of mental health services as perceived by those two groups. The quantitative assessment involved examination of mental health services utilization data obtained from hospital records. This was done to help provide some understanding of the pattern of utilization over the past three to five years.

Data Collection:

Policy Maker/Health Care Provider Interview Process: We used open ended questions to interview the key policymakers and health care providers. One researcher (EA) conducted all the interviews with the respondents. The questionnaire consisted of eight questions targeted for the policy makers and 10 questions targeted for the health care providers. These questions were developed based on the potential factors that we assumed might affect utilization and access to mental health services. Moreover we wanted to understand the relationship of mental health services with the health system in general according to the understanding of the policy makers and health care providers. Several of the same questions were given to both groups. Appendix A and B provide a listing of the interview questions given to the policymakers and health care providers respectively. All interviews were

conducted in Arabic (see appendix C and D for a copy of the interview questions in Arabic). The interviews also were audio recorded if a respondent gave consent. All recordings were destroyed following written translation, within a four-week period of time following the interview date.

Evaluation of Mental Health Service Utilization Data:

We examined hospital records at Alidrisi, Taha Bashar and Altigani Almahi psychiatric hospitals to assess the utilization of mental health services. We did not identify patient names nor did we have access to the patients' personal information. The data were of the annual number of patients seen at the emergency or referred clinics of each hospital. We also got information from two of the three facilities regarding the diagnosis of admitted cases.

Ethical review and recruitment:

We obtained Human Subject Division approval from the University of Washington. We also received approval from the local Ethical committee at Khartoum state Ministry of Health. The Directorate of Research in the Ministry of Health issued official introductory letters to the three mental health facilities. We used purposive sampling to recruit respondents to the study.

We gave the managers of these health care facilities an overview of the scope and purpose of the research. We used oral scripts to recruit health care providers. Also, the managers of these facilities introduced us to the statistics units' officers and data clerks to facilitate access to mental health services utilization data.

Results:

Policy Maker/Health Care Provider Interview Process:

We conducted a total of 34 interviews during the study period. All interviews were conducted in Arabic. We had two different set of questions for policymakers and care providers (with some overlap of the questions). We audio recorded 28 out of the 34 interviews based on the consent. We transcribed all interviews in Arabic then translated the responses from Arabic into English.

Qualitative Analysis: We conducted open coding for all detailed responses. (26) Based on these codes we grouped similar responses and ideas in order to come up with themes. We identified 11 themes based on the analysis process. We also provide below selected response quotes by some of the policymakers and care providers that we thought were important and representative.

1. Impression of mental health services in Khartoum state:

Policymakers: Three out of the four interviewed policy makers 75% (n=3) stated that existing mental health services in Khartoum state are not adequate, while one policymaker said mental health is not a priority at policy level. Two of them (50%) highlighted the issue of integration into primary health care and as a unit in other hospitals. All interviewed policymakers 100% (n=4) agreed that the provided mental health services are not up to international standards in terms of quality of service.

Health care providers: Out of the 30 health care providers interviewed from the three facilities, 33.3% (n=10) mentioned that mental health services are improving. However 30% (n=9) stated that services were not adequate when compared to the actual need. Furthermore, some of the providers mentioned that there is poor awareness about mental health within communities as well as shortage of health staffs providing these services. Some of them had other concerns related to capacity building of health staff and the very high level of stigma with both health facilities and the community. Other issues included lack of staff recognition, poor infrastructure and high work load for the current staff.

One nurse made an insightful remark on peoples' attitudes toward seeking mental care *"Even educated people ignore how to deal with mental illness patients even University graduates sometimes seek care at Sheikhs places and believe in Zaar"*. (Personal communication, a nurse at Taha Bashar)

2. Challenges facing mental health services:

Policymakers: All interviewed policymakers (n=4) considered stigma and poor health education programs as the major obstacles facing mental health within the community in Khartoum state. Moreover, the scarcity of funding allocated for health and training of care providers were two important constrains. Other areas addressed were lack of research in mental health, integration of mental health services into primary care level and treatment cost.

A federal policy maker admitted that mental health services are not provided free of charge *"Free services cover emergency cases, under five years as well and delivery but does not cover mental health"* (Personal communication, a federal policymaker).

Health care providers: Regarding major challenges and constrains facing mental health services, poor community awareness was the main constrain mentioned by 90 % (n= 27) of the health care providers. Moreover, 63% (n= 19) agreed that there is a very high level of stigma. Other challenges included staff training and recognition, facility infrastructure and equipments, treatment cost, lack of integration as well as unavailability of occupational therapy and amusement. A considerable number of them mentioned that mental health is not a priority area to policy makers and does not have enough funding. They said that services should be expanded and made accessible especially in rural areas. Some said that the community is suffering from quackery and charlatanism in some areas. The impact of lack of awareness on mental health and the role of people believes is reflected on the following quote by a psychiatrist.

“Awareness about mental health issues is still poor, there is stigma and ignorance about mental health, as well as exploitation of religion sometimes even within psychiatric clinics”. (Personal communication, a psychiatrist at Alidrisi)

3. Factors contributing to the existing pattern of utilization:

Policymakers: All interviewed policy makers (n=4) considered the level of knowledge and awareness about mental health as the major factor that is contributing to the existing pattern of utilization. They also pointed out that access to services and availability of free medications also contributes to utilization. Moreover, policymakers mentioned that the quality of services and good reputation of the facility would encourage people to access services.

Health care providers: A total of 46.7 % (n=14) of the interviewed health care providers from the three facilities pointed out that stigma plays a crucial role as a contributor to the existing pattern of utilization. Sixty percent (n=18) of health care providers said that the level of education and knowledge of the family is another key factor. However, 40 % (n=12) agreed that the cost of services and the socioeconomic status of the family is another important factor. Some families seek care only when patient state deteriorates or when becomes violent. Some issues were mentioned related to the facilities including the good reputation, health care provider attitude, accessibility of services, treatment duration and availability of free medication.

Serving in mental health facilities could sometimes be a source of stigma for health care providers :*“Even working as a health care provider in mental health facilities used to be a source of stigma, some people think that mental illness is due to evil spirits”. (Personal communication, Medical assistant at Taha Bashar)*

4. Improving utilization of mental health services in Khartoum state:

Policymakers: In order to improve utilization of services, all policy makers (n=4) mentioned integration into primary health care and health education of the community. They also stressed the importance of staff qualification as well as private sector and civil society involvement.

One of the policy makers also suggested screening for mental disorders within the community:

“Specialized mental health programs should be made available like screening and integration into school health program, occupational health and among university students”. (Personal communication, a Khartoum Policymaker).

Health care providers: A total of 46.7 (n=14) health care providers agreed that community health education programs on mental health are essential to improve utilization of services. Forty percent (n=12) focused on rehabilitation of existing facilities and improving quality of services. Only 26.7 % (n=8) were in favor of training of health providers and six were supporting provision of free medication for at least some of the items. Other opinions were about expansion of mental health services, and screening for mental illness and integration of mental health in other programs like school health. Some addressed the issue of making use of Sheikhs and traditional healers by more sensitization and training to improve referral.

Some psychologists said that it would be good to involve religious and traditional healers in patients' referral *“Some Sheikhs like Umdawan ban and Kadabas send patients because they have been sensitized by some medical staff that visited them and gave them some information on the importance of referral”. (Personal communication, Psychologist at Taha Bashar)*

5. Linkage between mental health facilities and health system:

Policymakers: Integration of mental health into other health facilities was on top of the measures that all interviewed policymakers (n=4) indicated in order to improve linkage with health system.

Furthermore they were strongly supporting referral activation and community health education.

Khartoum State Ministry is supporting referral from medical centers as mentioned by one of the policymakers: *"We have trained fifty doctors in family medicine, then we distributed them to serve in medical centers, our plan is collect information for each family and then family doctor would be responsible for referral"*. (Personal communication, Khartoum Policymaker)

Health care providers: When they were asked about improvement of linkage with health system, 60% (n= 18) mentioned referral activation. On the other hand 36.7% (n=11) raised the issue of integration of mental health services into primary health care, and ten supported training of medical assistants who work in peripheral health centers on mental health. A considerable number of interviewees said that their facilities were lacking communication and transportation means, like ambulance to transfer emergency cases. Other issues raised include taking measures to guard against staff turnover, supportive supervision and improving linkage between health facilities.

Psychiatric Hospitals needs are well explained by the following quote by one of the respondents: *"There are no phones or ambulance to help with patients transfer. There is no visiting specialist program for other units like medicine, surgery and Obstetric and Gynecology once a week to help improve patients' conditions"*. (Personal communication, Psychiatrist at Taha Bashar).

6. Areas for improvement in mental health:

Health care providers only: The two main areas that health care providers wanted to see improved in mental health were capacity building of health care professionals: 26.7% (n=8), and awareness raising of the general population: 23.3% (n=7) of the respondents . Other areas addressed were integration of services within the health system, recognition of the working staff, research, rehabilitative therapy as well as clinical psychology. Moreover, some of them pointed out that it is necessary to increase health insurance coverage and strengthen referral mechanism to and from mental health facilities. However, some of them called for sector collaboration and involvement of civil society organizations in scaling up mental health services.

The following quote by one of the interviewed psychologists reflects the inadequate training opportunities *“I have been working for 25 years and didn't get a chance for training”*. (Personal Communication, Psychologist at Altigani)

Patients' delay with religious healers could result in more complications for the patients as demonstrated by this quote by one of the medical assistant: *“Patients stay with Sheikhs (religious healers), sometimes they seek mental care in late stages, they present with severe anemia”*. (Personal Communication. Medical assistant at Taha Bashar).

7. Facility challenges and constraints:

Health care providers only: The main challenges within these three facilities were mainly the infrastructure and buildings as well as the equipment (mentioned by 26.7%, n=8). Staff recognition 23.3% (n= 7) and training for working health staff 23.3% (n= 7). Furthermore, there were other complaints around high work load, poor funding and provision of services up to the international standards like electroconvulsive therapy.

8. Patient referral according to referral point:

Health care providers only: A total of 73.3 % (n=22) of the health care providers stated that the majority of patients are referred by their families. While 53.3 % (n=16) mentioned that they received patients from religious healers (Sheikhs), while 40 (n=12) said some are referred from private clinics. However, Alidrisi hospital receives most of the patients from police forces and prisons because it is mainly responsible for forensic cases. Fewer amounts of patients is referred from other health facilities or readmitted due to relapse of cases. The three facilities have committees for forensic cases.

9. Integrating mental health services into primary care:

Policymakers: Regarding integration of mental health into primary care and other programs, all policymakers interviewed (n=4) were of the same opinion and strongly supported integration. They said integration would improve referral, decrease load, improve early diagnosis and increase coverage. Responses indicated that the ministry of health would be open to integration (n=4). However, they considered funding for training as a major obstacle. They also mentioned that research and evidence would facilitate convincing policy maker to advocate for integration.

Health care: There have been different opinions regarding integration however the majority of the respondents agreed on supporting integration of mental health services into primary health care. Forty percent (n=12) mentioned this is going to decrease the work load on existing facilities. Furthermore, 20% (n=6) declared this is going to improve and activate referral mechanisms, as well as improving early diagnosis and screening of psychological disorders. On the other hand 20% (n=6) of them stated that this could be possible but there is a need to train medical officers working in peripheral health facilities. Most of interviewed health care professionals were in favor of establishing some mental health units within other health facilities. However, some had certain concerns around possible noise and insecurity that may occur to other medical and surgical unit.

10. Training of lay persons to treat people with mental illness:

Health care providers: The vast majority of health care providers' responses 93.3 % (n=28) were strongly supportive of training of lay people to help treat mental disorder people. However, there has been a consensus around helping with psychological and social support and not to prescribe medication. While some of them were in favor of making use of teachers and religious leaders, others encouraged careful selection of those people in order to ensure confidentiality and privacy. Some care providers requested to have a policy to ensure implementation of integration.

Health care providers believed that it would be good to focus on the religious aspect within communities. They pointed out that religious healers (Sheiks) could be trained on mental health. This is expressed by the following two statements by two of the respondents:

"If it is possible to train Sheikhs and Imams, we can fight hypocrisy and charlatanism". (Psychiatrist Taha Bashar said).

"Religious aspect is extremely important to prevent mental disorders. Good religious believes will help health care providers provide quality mental health services". (Personal communication, Psychologist at Taha Bashar).

11. Policies that work:

Policymakers only: The two main successful policies mentioned by all of the policy makers (n=4) were integration of services into school health and collaboration and coordination with religious healers. Another important point was improving coverage with health insurance. Unsuccessful policies mentioned included adopting other countries policies and relying on private sector.

Evaluation of Mental Health Service Utilization Data:

We assessed the data on mental health service utilization from the three mental health facilities (Alidrisi, Taha Bashar, and Altigani Almahi) between 2007 and 2010. Unfortunately, the utilization data among the hospitals was not complete. For example, details like stratification of data by gender, age, or diagnosis of admission was not always available for all facilities for all four years.

We obtained data from Alidrisi and Taha Bashar hospitals that reflects the annual number of patients seen at the hospital's emergency and referred clinics between 2007 and 2010. However, for Altigani Almahi hospital we could only obtain the total number of patients seen without stratification by type of clinic.

Alidrisi: Data from Alidrisi psychiatric hospital on the total number of patients seen shows an increase during 2008 and 2009 when compared with 2007 and 2010 (see Figure 3).

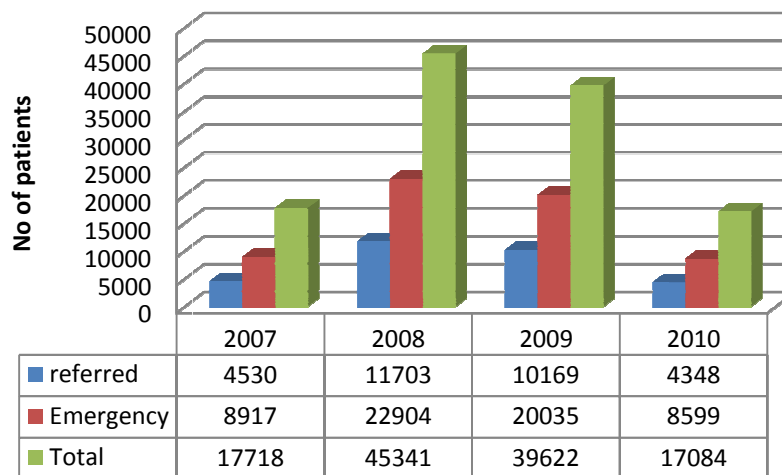


Figure 3: Total number of patients seen in the emergency and referred clinics of Alidrisi psychiatric hospital between 2007 and 2010.

Taha Bashar: Figure 4 illustrates the total number of patients seen between 2007 and 2010 in Taha Bashar psychiatric hospital. The bar graph shows the number of patients for these years in the emergency and referred clinics. The figure doesn't show great difference in the total number of patient seen for each of the four years.

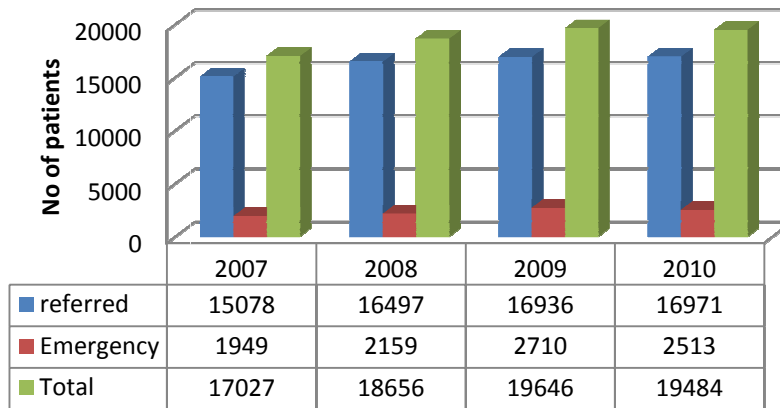


Figure 4: Total number of patients seen in the emergency and referred clinics of Taha Bashar psychiatric hospital between 2007 and 2010.

Figure 5 shows the number of patients admitted in Taha Bashar Hospital stratified by the diagnosis. The largest number of patients admitted was diagnosed with schizophrenia followed by mania and then depression.

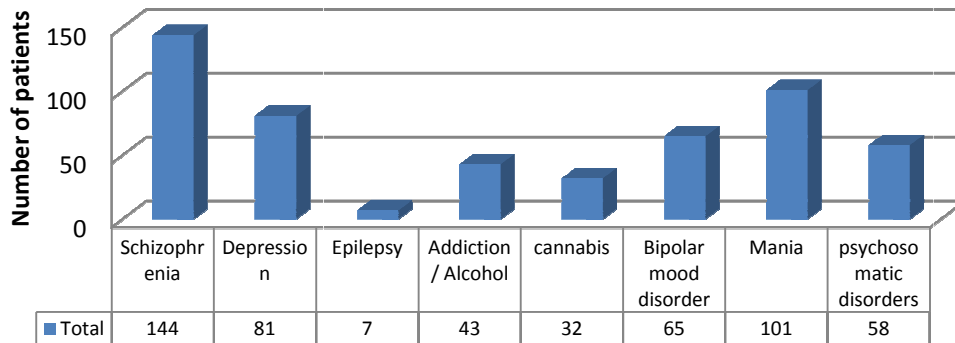


Figure 5: Total number of patients admitted between January and December 2010 at Taha Bashar Psychiatric Hospital according to Diagnosis.

Altigani Almahi: The following two figures show data from Altigani Almahi Psychiatric hospital. Data on the total number of patients seen was obtained. We didn't manage to get data on the total number of patients sorted by referred clinic or emergency patients. Figure 6 shows the total number of patients between 2007 and 2010, while figure 7 illustrates Altigani Almahi admission for 2009 – 2010 stratified by diagnosis. Again, schizophrenia, affective disorders, mania and depression are the highest compared to other categories.

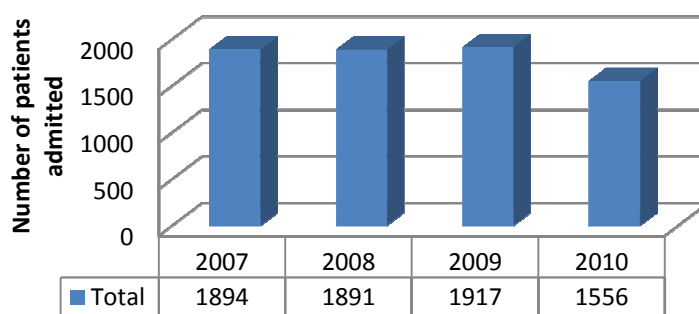


Figure 6: Total number of patients seen at Altigani Almahi psychiatric hospital between 2007 and 2010.

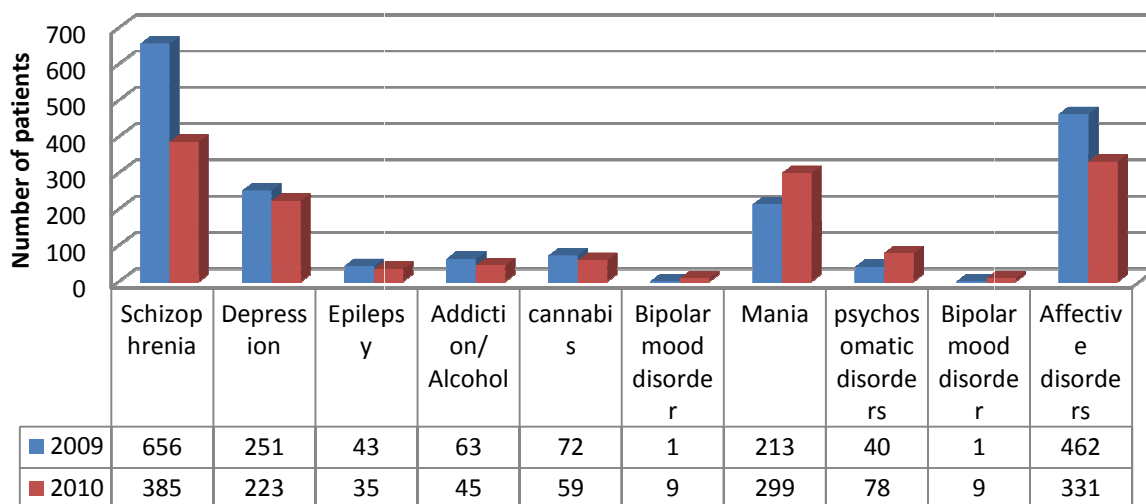


Figure 7: Total number of patients' admitted between 2009 and 2010 at Altigani Almahi Hospital according to diagnosis.

Discussion:**Policy Maker/Health Care Provider Interviews:**

The results from the interviews of the 34 respondents revealed a number of similar ideas regarding barriers to the utilization of mental health services in Khartoum. Both policymakers and health care providers agreed that there was some improvement in service provision compared to the past. However, they were of the same opinion that existing services are not up to international minimal standards. This could be due in part to issues related to policy making level like funding and allocation of services. On the other hand, there were some obstacles related to the community and family. All interviewees agreed upon the very high level of stigma not only within the community but even among some of the health care providers.

Poor health education and social stigma within the community were the main constraints revealed by these qualitative interviews, this could be handled by more involvement of other sectors to improve health education and fight stigma. Stigma is not only confined to the community but also by health care providers as in many other African countries. A study in Zambia for 111 health providers showed discriminatory and stigmatizing behavior among health providers towards people with mental illness.(27)

This in fact is influenced by many socio cultural and historical factors. In some cases communities relate mental disorders to evil spirits. In addition stigma and poor education and awareness about mental illness are two major contributors to the existing pattern of utilization. Furthermore, we should emphasize what has been mentioned by policymakers and care providers regarding the socioeconomic status of the family, treatment cost, and the long duration of the stay as well as burden of their families.

Qualitative interview findings revealed that both policymakers and health care providers support the integration of mental health services into primary health level and into other facilities. One of 2001 World Health Report recommendations was to integrate mental health into primary health care. In addition, challenges related to integration of mental health into primary health care are similar in many African countries. Accesses to essential drugs, poor implementation of policy as well as availability of specialized staff were the main challenges for integration. This was revealed by a situation analysis study in Ghana, South Africa and Uganda.(28)

The main areas that interviewees suggested for improvement were integration of services as well as increasing peoples' awareness on mental illness. Some proposed to make use of the existing religious leaders in order to improve referral and help with delivering awareness messages to the general population. Studies from neighboring countries indicated that traditional healers played a crucial role in giving care to mental health patients in Africa.(29) For this reason it would be wise to engage them in scaling up mental health services and improving referral to health facilities.

Interviews revealed that the working staff in mental health facilities in Khartoum state lack recognition and financial support in order to improve their performance. Most of the existing staff could be interested in mental health but when compared to other hospitals, they could be underpaid. Interviews revealed that most of patients who access mental health facilities are admitted by families. A fewer amount are admitted by the Sheiks (From religious healing places). However, Alidrisi facility receives its patient mainly from prisons or admitted by police forces. This is because the hospital belongs to Ministry of Interior and it deals with forensic patients). All interviews agreed that some patients are admitted only when they become violent. Or in late stages after the sheikhs or traditional healer fail in treating the case.

Regarding successful policies, policymakers mentioned some policies that they think were quite successful. Health insurance coverage would improve patients' ability to get the treatment. However, health insurance does not cover all drug items. Other successful policies include integration of mental health services into other programs like school health. This will definitely improve knowledge about mental health and facilitate identifying cases early and intervene in time.

Evaluation of Mental Health Service Utilization Data:

We evaluated quantitative data on mental health service utilization at three psychiatric hospitals (Alidrisi, Taha Bashir and Altigani Almahi) between 2007 and 2010. We obtained data on utilization as indicated by the total number of emergency and referred clinic patients seen at each facility. However, as noted earlier, the utilization data among the hospitals were not complete. Details like stratification of data by gender, age, or diagnosis of admission were not always available for all facilities for all four years.

We did obtain admissions data from two facilities (Taha Bashir and Altigani Almahi) according to the diagnosis of mental illness. However, the general utilization of these facilities for the past four years was not suggestive of specific pattern of service utilization. Most interestingly, there appeared to be a decrease in the total number of patients seen in 2010 at Alidrisi Hospital. However, we couldn't have any explanation for that.

Given the existence of several mental health determinants, like low socio economic position, unemployment and gender inequity, we were expecting a pattern suggestive of increased utilization of mental health services. However utilization of service at the three studied facilities may not reflect the prevalence in the community, since there could be other options for seeking mental care.

Our findings from quantitative data indicate larger numbers of patients seen in the referred clinic compared to the emergency (Taha Bashar and Alidrisi). This could be explained by the large number of patients who are seen first in the emergency and then referred to be seen by psychiatrists in the referred clinic. Moreover, some patients come for follow up in the referred clinic. However surprisingly, the situation is quite different at Alidrisi where the number of patients in the emergency clinic was larger than the referred. This could be explained by the fact that Alidrisi hospital is the main hospital that is responsible for forensic cases in Khartoum state. Most of these patients are referred to the hospital by police forces.

Data from Taha Bashar and Altigani Almahi indicated that the most diagnosed cases were schizophrenia cases followed by mania and depression. This could be explained by the fact that seeking mental health care is impacted by the nature of the disease. For example, agitated body movements, thought disorders, delusions or violence of patients could be more alarming to the family members and lead to seeking mental care. On the other hand, people with depression may delay for a long period without seeking care. Psychosomatic disorders patients usually see physicians first and in many cases could be treated for somatic illness without being seen by psychiatrists.

The three studied mental health facilities need improvement in the recording and reporting system. This would allow studying more details and characteristics of patients and their illnesses.. Moreover, mental health is a key area for research. The major issue could be the availability of funding and the interest of researchers. Another main area is the involvement of sectors and civil society organizations in improving knowledge of the community about mental health..

Mental health in Sudan needs a lot of work in order to improve mental health services and utilization. Both policymakers and care providers admitted that there are deficient areas. However, this requires a real political will to reform health system, to coordinate with other ministry programs and to

collaborate with other sectors. For example, media could play a crucial role in delivering messages about mental health to the general population.

Study Limitations:

There are several limitations that should be considered. While this study was trying to look into barriers associated with mental health services utilization, as perceived by policy makers and health care providers in Khartoum state, there may be many other factors perceived by the general community there were not addressed in this current study. . Further, additional important facts might be identified if the study had been able to look into what traditional and religious healers think of mental illness.

Although the study attempted to address barriers to the utilization of mental health services, the finding may be somewhat biased in that only public mental health facilities were studied, not the private facilities. Some family members prefer to go to private facilities. This could be due in part to the stigma associated with mental illness, or perhaps that some believe the quality of care in public health facilities may be inferior to that provided in a private facility.

Finally, the results of this study would have been more informative and representative of the mental health care situation in Sudan if we could have included more health care facilities in other states. By focusing only on facilities in Khartoum state, the finding may be limited in terms of some socio demographic data and not representative of all of Sudan. There is likely great discrepancy and variation among states in terms of mental health services and access to health care. Moreover, there is expected variation regarding cultures and beliefs of the local communities regarding mental health.

Study strengths:

One of the advantages of this study is that it covered one of the neglected areas in Global health. Additionally, this could be the first time to conduct a similar study in Khartoum state in Sudan.

We were lucky to interview all proposed policymakers and health care providers and to have access to the existing data on the utilization from the three mental health facilities.

The study enabled both policymakers and health care providers to get a chance to express their thought and ideas. They identified the gaps and barriers to the utilization of mental health services. Moreover, they gave their own recommendations on how to improve linkage to the health system in general based on their experiences and daily practices.

The study also drew the attention to the myths and gaps within at the community level. This would give a clue on further studies at the community level

Researcher's recommendations:

We recommend further studies in Sudan on the utilization of mental health services with greater focus on the community level. For example, researchers could look into the responses and attitudes of traditional and religious healers regarding referral of mental health patients. We think that, at policy level there should be more services allocated for mental health care. The Ministry of Health should have a clear strategy on training and motivation of mental health professionals as well as integration of mental health services into primary health care. We feel that, media could play crucial roles in raising community awareness and education about mental health care needs and services. Moreover, religious and traditional healers could be trained and sensitized in order to play effective roles in the utilization of mental health of services.

Since mental health treatment is often a long process, we suggest that charitable and community based organizations could help contribute to the support of poor mental health patients, if trained properly to use behavioral and pharmacological evidence based treatments.

Among the three facilities studied some areas of mental health care need to be evaluated and improved including electroconvulsive therapy, occupational therapy and the infrastructure of these facilities. In addition, integration of mental health care into school health will improve screening of mental illness in early childhood and adolescence and help with early referral and interventions.

Health care providers should have more chances for training on mental health. Schools of Medicine, Psychology and Nursing should integrate a comprehensive curriculum on management of mental health cases.

Conclusion:

Improving access and availability of mental health services requires interventions at all levels. The commitment of policymakers is crucial for the prioritization and integration of mental health services into the Sudan health system. We believe that there are committed and cooperative health care professionals working in mental health facilities in Sudan. They will likely play significant roles in improving the quality of mental health care service once they are given appropriate recognition, adequate support and definitive direction.

Dissemination of the research findings:

We will be sharing the findings of this study with the school of public health at the University of Washington department of Global Health, the directorate of curative medicine in the Federal and Khartoum State Ministry of Health. We will also disseminate the study finding to the managers of mental health facilities, the Health Academic Institutions and other partners in Sudan who are interested in mental health.

References

1. WHO | Mental health: strengthening our response. World Health Organization; 2012 [updated 2010-12-07 03:50:20]; Available from: <http://www.who.int/mediacentre/factsheets/fs220/en/>.
2. Organization WH. Mental Health Atlas 2011. 2012; Available from: http://whqlibdoc.who.int/publications/2011/9799241564359_eng.pdf.
3. mh GAP Newsketter - Mental Health Gap Action Programme. World Health Organization; 2012 [cited 2011]; Available from: http://www.who.int/mental_health/mhgap/mhGAP_nl_december_2011.pdf.
4. Paulson T. The Most Neglected Disease in Global Health | Humanosphere. HUMANOSPHERE News and analysis of global health and the fight against poverty2012 [cited 2010]; Available from: <http://humanosphere.kplu.org/2010/09/the-most-neglected-disease-in-global-health/>.
5. Dave DM, Tennant J, Colman G. Isolating the effect of major depression on obesity: role of selection bias. *J Ment Health Policy Econ*. 2011;14(4):165-86. Epub 2012/02/22.
6. Osborn CY, Egede LE. The relationship between depressive symptoms and medication nonadherence in type 2 diabetes: the role of social support. *Gen Hosp Psychiatry*. 2012;34(3):249-53. Epub 2012/03/10.
7. Organization WH. Promoting and Protecting the Rights of People with Mental Disorders. World Health Organization; 2012 [cited 2005 Information Sheet]; Available from: http://www.who.int/mental_health/policy/Promoting_and_protecting_rights_English1.pdf.
8. Mental Health and Development: Targeting People with mental health conditions as a vulnerable group.: Mental Health Poverty Project; 2012 [cited 2010]; Available from: http://whqlibdoc.who.int/publications/2010/9789241563949_eng.pdf.
9. Rao D, Kekwaletswe TC, Hosek S, Martinez J, Rodriguez F. Stigma and social barriers to medication adherence with urban youth living with HIV. *AIDS Care*. 2007;19(1):28-33.
10. Kim PY, Thomas JL, Wilk JE, Castro CA, Hoge CW. Stigma, barriers to care, and use of mental health services among active duty and National Guard soldiers after combat. *Psychiatr Serv*. 2010;61(6):582-8.
11. Lund C, De Silva M, Plagerson S, Cooper S, Chisholm D, Das J, et al. Poverty and mental disorders: breaking the cycle in low-income and middle-income countries. *Lancet*. 2011;378(9801):1502-14.
12. Pickett KE, Wilkinson RG. Inequality: an underacknowledged source of mental illness and distress. *Br J Psychiatry*. 2010;197(6):426-8.
13. AHMED OKASHA EK, TAREK OKASHA. Mental health services in the Arab world. *World Psychiatry*. 2012;11(1):52.
14. Patel V. The future of psychiatry in low- and middle-income countries. *Psychol Med*. 2009;39(11):1759-62.
15. STATE USDo. Background note: Sudan. 2012; Available from: <http://www.state.gov/r/pa/ei/bgn/5424.htm>.
16. UNdata | country profile | Sudan. : United Nations Statistics Division; 2012; Available from: <http://data.un.org/CountryProfile.aspx?crName=Sudan>.
17. WHO | World Health Statistics 2011. World Health Organization; 2012 [updated 2011-05-13 14:23:20]; Available from: <http://www.who.int/whosis/whostat/2011/en/index.html>.
18. Organization WH. Health System Profile Sudan. Regional Health Systems Observatory. EMRO2006.

19. WHO - AIMS Report on Mental Health System in Sudan. A Report on the Assessment on Mental Health System in Sudan Using the World Health Organization- Assessment Instruments for Mental Health Systems. Khartoum - Sudan2009.
20. [Mental disease related to belief in being possesse... [Harefuah. 1994] - PubMed - NCBI. 2012; Available from: <http://www.ncbi.nlm.nih.gov.offcampus.lib.washington.edu/pubmed/7926995>.
21. Attitudes of Sudanese urban and rural populat... [J Trop Med Hyg. 1978] - PubMed - NCBI. 2012; Available from: <http://www.ncbi.nlm.nih.gov.offcampus.lib.washington.edu/pubmed/748570>.
22. Sorketti EA, Zainal NZ, Habil MH. The characteristics of people with mental illness who are under treatment in traditional healer centres in Sudan. *Int J Soc Psychiatry*. 2012;58(2):204-16. Epub 2011/05/26.
23. Alem A. Community-based vs. hospital-based mental health care: the case of Africa. *World Psychiatry*. 2002;1(2):98-9.
24. I.M. Ahmed JJB, M.M.E. Magzoub and A.M.H. Nouri. Characteristics of visitors to traditional healers in central Sudan. 2012; Available from: <http://www.emro.who.int/publications/emhj/0501/13.htm>.
25. El-Gaili DE MM, Schmidt HG. The impact of a community-oriented me... [Educ Health (Abingdon). 2002] - PubMed - NCBI. *Educ Health (Abingdon)*. 2002;15(2):149-57.2012 [cited 2002]; Available from: <http://www.ncbi.nlm.nih.gov.offcampus.lib.washington.edu/pubmed/14741963>.
26. W.Ryan HRBG. *Analyzing Qualitative Data Systemic Approaches*. California: SAGE Publications; 2010. 265-71 p.
27. Kapungwe A, Cooper S, Mayeya J, Mwanza J, Mwape L, Sikwese A, et al. Attitudes of primary health care providers towards people with mental illness: evidence from two districts in Zambia. *Afr J Psychiatry (Johannesbg)*. 2011;14:290-7.
28. Bhana A, Petersen I, Baillie KL, Flisher AJ, The Mhapp Research Programme C. Implementing the World Health Report 2001 recommendations for integrating mental health into primary health care: a situation analysis of three African countries: Ghana, South Africa and Uganda. *Int Rev Psychiatry*. 2010;22(6):599-610. Epub 2011/01/14.
29. Abbo C. Profiles and outcome of traditional healing practices for severe mental illnesses in two districts of Eastern Uganda.: *Global Health Action*; 2011; Available from: <http://www.myendnoteweb.com/EndNoteWeb.html>.

Appendix A: Policymakers Questions

**Exploring Barriers to the Utilization of Mental Health Services at the Policy and Facility Levels in
Khartoum State, Sudan**

Date: _____

Interviewee Study ID: _____

Interviewer name: _____

Location: _____

Age:

Sex:

Occupation:

Religion:

What do you think about mental health services in Khartoum state?

What are the major challenges and obstacles in your opinion facing mental health services?

1. At the policy level
2. At the facility level
3. at the community.

What factors do you think are contributing to the existing pattern of utilization of mental health services?

How might we improve the utilization of mental health services?

How can you improve the linkage between mental health services and the health system?

What policies do you think are working and what are not in mental health?

Do you think that it is possible to integrate mental health services into primary care?

Do you think that the ministry of health will be open to this approach?

Appendix B: Care providers Questions

Exploring Barriers to the Utilization of Mental Health Services at the Policy and Facility Levels in Khartoum State, Sudan

Date: _____

Interviewee Study ID: _____

Interviewer name: _____

Location: _____

Age: Sex: Occupation: Religion:

What do you think about mental health services in Khartoum state?

What are the major challenges and obstacles in your opinion facing mental health services?

1. At the policy level
2. At the facility level.
3. at the community.

What factors do you think are contributing to the existing pattern of utilization of mental health services?

How can we improve utilization of mental health services?

How can we improve the linkage between mental health services and the health system?

What areas do you want to see improved in mental health?

What are the challenges facing service provision in your facility?

From where do you receive mental health patients?

What do you think of integrating mental health services into primary care?

What do you think of training lay persons to treat people with mental illness?

Appendix C: Policymakers Questions Arabic.

موانع الاستفادة من خدمات الصحة النفسية في ولاية الخرطوم
أسئلة صانعي السياسات الصحية

التاريخ: _____
رقم الدراسة للشخص الذي أجرى معه اللقاء: _____
اسم الشخص الذي أجرى اللقاء: _____
الموقع: _____
العمر: _____ النوع: _____ المهنة: _____ الديانة: _____
ما هو رأيك بخدمات الصحة النفسية في ولاية الخرطوم؟

ما هي أكبر التحديات والعقبات التي تواجه الصحة النفسية في رأيك؟

1. على مستوى صنع القرار. 2. على مستوى المؤسسات الصحية. 3. على مستوى المجتمع

ما هي العوامل التي تعتقد أنها تؤثر على النمط الحالي للاستفادة من خدمات الصحة النفسية؟

كيف يمكننا تحسين الاستفادة من خدمات الصحة النفسية؟

كيف يمكننا تحسين الارتباط ما بين خدمات الصحة النفسية والنظام الصحي؟

ما هي السياسات التي تراها ناجحة في الصحة النفسية وما هي التي تراها أقل نجاحاً؟

هل ترى أنه من الممكن أن يحدث ادماج لخدمات الصحة النفسية على مستوى الرعاية الأولية؟

هل تعتقد أن وزارة الصحة سوف ترحب بمثل هذا النهج؟

Appendix D: Health Care Providers Questions Arabic:

موانع الاستفادة من خدمات الصحة النفسية في ولاية الخرطوم

أسئلة مقدمى الخدمات الصحية

التاريخ: _____

رقم الدراسة للشخص الذى أجرى معه اللقاء: _____

اسم الشخص الذى أجرى اللقاء: _____

الموقع: _____

العمر: _____ النوع: _____ المهنة: _____ الديانة: _____

ما هو رأيك بخدمات الصحة النفسية في ولاية الخرطوم؟

ما هي أكبر التحديات والعقبات التي تواجه الصحة النفسية في رأيك؟

1. على مستوى صنع القرار. 2. على مستوى المؤسسات الصحية. 3. على مستوى المجتمع

ما هي العوامل التي تعتقد أنها تؤثر على النمط الحالي للاستفادة من خدمات الصحة النفسية؟

كيف يمكننا تحسين الاستفادة من خدمات الصحة النفسية؟

كيف يمكننا تحسين الارتباط ما بين خدمات الصحة النفسية والنظام الصحى؟

ما هي الجوانب التي تريد أن ترى فيها تحسنا في الصحة النفسية؟

ما هي التحديات التي تواجه تقديم الخدمة في المؤسسة التي تعمل بها؟

من أين تستقبل مرضى الصحة النفسية؟

ما هو رأيك في ادماج خدمات الصحة النفسية مع الرعاية الأولية؟

ما هو رأيك في تدريب الأشخاص العاديين ليقوموا بعلاج المرضى النفسانيين؟