# MEDICO-RELIGIOUS COLLABORATION: A MODEL FOR MENTAL HEALTH CARE IN A RESOURCE POOR COUNTRY

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## ABSTRACT

**Background:** Reducing the treatment gap for the treatment of people with psychiatric disorders (also known as the 'mental health gap') is of increasing importance worldwide. In Low and Middle Income Countries (LMICs) human and material resources for orthodox ('western') mental health care are severely inadequate. As such, alternative mental health practices tend to thrive. Such alternative systems of care could be formally linked with western services to achieve a more integrated pattern of care in order to improve access for all users of mental health services in these communities, while ensuring a reduction in harm and promoting the human rights of people with mental health problems.

**Aim:** To describe a medico-religious mental health care collaborative model in a rural community in Nigeria, which may be suitable for scaling up mental health care in LMICs as a whole.

**Methods:** This is a descriptive report of a psychiatric service in collaboration with a Christian religious settlement, based in Ogun State, Western Nigeria. Questionnaires, focus group discussions and direct observation were employed. Client records from the religious center and from the visiting psychiatric team were also examined, and all the data from all sources were synthesized.

**Results:** Interactions between the medical and religious mental health care providers improved consistently over the study period. Acceptance of medical services and understanding of the need for collaboration increased. Increased utilization by people with mental illness from the nearby settlement was observed. In the course of collaboration, the occurrence of harmful practices(though still much in practice), reduced considerably as evidenced by stoppage of prolonged sleep and food deprivation (in form of night vigils and fasting) and flagellation, while physical restrictions with chains, especially for newly admitted sufferers still continued unabated despite the discouragement of such practice by medical practitioners.

**Conclusions:** A structured collaborative arrangement between medical and religious health care practitioners offers a great possibility towards the scaling up of mental health care in a resource poor setting such as Nigeria. In addition, it offers potential benefits to services users, such as: improved access to proven reliable medical care, better continuity of care, and reduction in harmful traditional practices usually used to treat these groups of people. Challenges of fundamental human rights abuse and funding are important areas for local mental health policies to address in such settings. In addition, institutional support is still inadequate and there is need for program sustainability.

**Key words –** Collaboration, Medico-religion, Mental health, Resource poor, LMIC

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# INTRODUCTION

In Nigeria the burden and disability of mental health problems have been well documented.[1] Since mental health problems serve as a major contributor to disability adjusted life years (DALYs), with a shift in contribution from communicable to non-communicable diseases,[2] it becomes an area increasingly recognized for investment and prioritization. The World Health Organization (WHO) recommends that mental health be integrated into primary and secondary general health care level.[3] This recommendation however for integration into general and community healthcare platforms which is yet to be fully implemented in Nigeria may have a far reaching consequences which may include; inadequate access to services, inappropriate information dissemination about the nature of mental health disorders, and high caregivers' burden.

A traditional practitioner is one who practices traditional medicine, which can be defined as "the sum total of the knowledge, skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness".[4] Up to 80% of the population in Africa uses traditional medicine according to the World Bank.[5]A Western practitioner, is one who practices Western medicine, also called Modern or Allopathic medicine, which itself is defined by the Gale Encyclopedia of medicine as, "conventional medical treatment of disease symptoms that uses substances or techniques to oppose or suppress the symptoms.

Most cultures have belief systems that influence the way mental illness is perceived and their preferred access to mental health care services. Biomedical and endogenous beliefs are often held by service users who seek help from both medical and traditional health systems at the same time in high and middle and low income countries worldwide.[7,8] There are a wide range of options available for alternative health care, which include herbal, spiritual, and traditional religions among others. From these, practices such as yoga, meditation, herbal remedies such moringa have been acclaimed to have useful health benefits.[9, 10] It is therefore not unusual for medical and traditional health providers to collaborate in care provision.[7, 8] Such collaboration has been explored in Africa with relationship between the medical care providers and traditional birth attendants, for example, in the delivery of obstetric services.[8]

Despite the fact that, religion, culture and health care have been closely linked on many platforms, the relationship between medical and religious mental health services is still largely unclear and at best in evolution. The church has been identified by some as a potential and valuable collaborator with formal care systems to maximize preventive and treatment oriented mental health services.[11]

Significant attention has been drawn to the treatment gap caused by limited human resources in mental health available to many low and middle income countries (LMICs).[12, 13] Some options to solve this problem have included task shifting and sharing to scale up of services in these settings.[14] In addition, the Mental Health Gap Intervention Guide (mhGAP-IG) has been a useful development by the WHO to assist LMICs in scaling up coverage for people with mental illness.[15]

Researchers have described the prevalent use of traditional and religious providers in countries in Africa and also the need to

consider their roles in mental health care delivery.[16, 17] Collaboration, however, appears less attractive due to the challenges such alliances may generate such as; differences in the conceptual framework of causation, and treatment of mental health problems, mutual distrust and suspicion, and the potential for market competition.[18, 19]

In Nigeria, the deep-seated religious beliefs of people with mental illness and their relatives are often turned to when faced with major life events such as mental ill health. These religious groups no doubt offer supports, solace and counsel to many people who later seek mental health care from medical practitioners. The burden of mental health problems in communities, the local salience of traditional and religious explanatory models of illness, and accessibility challenges (economic and cultural) of western tradition services all further contribute to sustain alternative practice.

While there is evidence to show that collaboration with religious groups can be quite successful providing support, provision of general wellbeing and linkage with formal mental health care systems, there have been inadequate explorations on how such collaborations can be practically planned and implemented. [19, 20]

The aim of this study is to describe a collaborative mental health care service between medical and religious mental health practitioners based in a rural community as a potential model for evaluation and for scaling up mental health delivery in resource poor settings.

# METHOD

***Design and location:*** A descriptive study design was used, using a mixed approach with qualitative and quantitative data at an Outreach service of a community psychiatry clinic run in collaboration within a Christian religious settlement. The model was designed to be collaborative in nature, with the initial arm set in the religious settlement to interact and gain the interest of the religious leaders while providing regular routine presence in the settlement. Further details of the collaborative model are further described in the study procedure.

The service was set up within the region covered by the primary health care center of the Lagos University Teaching Hospital (LUTH) located in the Ifo Local Government Area (LGA) of Ogun State, South Western Nigeria. This primary health care center has a mandate to serve the population within a 10km radius covering the Ado-Odo areas of the LGA. The people of Ifo area are predominantly farmers, traders and general business people, with a population of about 186,000 over an area of 82,000 sq. km. It is bordered on the South by Ifako-Ijaiye and Ikeja (capital of Lagos state) areas of Lagos State.[21]

The religious settlement known as *Ori Oke Ipaeniyankoto, interpreted literally to mean "the prayer mountain where human effort is not enough")* caters specifically for people with mental illness and is located in a rural village in Ifo Local Government Area (LGA). History has it that the first supernatural act performed by the founder of the church was healing a man with mental illness, thus this religious settlement is often patronized by people from around the whole of Nigeria, and also at times from overseas, in search of spiritual healing for their mental illnesses. Averages of 50 - 70 residents are accommodated at any one time. This study investigates activities in this service over a period of 24 months between February 2011 and March 2013.

***Procedure:*** Preliminary meetings with community leaders, church leaders and village health workers were held and focus

group discussions (at months 1 and 24).Respondents were invited to share their experience and thoughts regarding thematic areas set out in the focus group discussion's (FGD's) topic guide. The issues discussed at the first session included: their understanding of mental illness and the causes; description of the settlement, as well as the range of local treatment practices. In addition, at 24 month follow up, FGDs addressed: the benefits and progress of medical-traditional practitioner collaboration; challenges experienced; and current material and training needs.

Socio-demographic questionnaires were administered to the caregivers at the first month. A community awareness talk focusing on the causes and signs of mental illness was conducted at the 2nd month of the program. The religious practitioners were not restricted in any way and so they freely continued in their routine spiritual care (described later) used in dealing with people with mental illness in their community.

The medical mental health team at each given time was made up of a psychiatric traineedoctor and a community health nurse who visited the religious settlement on a weekly basis to offer psychiatric consultation and treatment, with supervision provided by a Consultant Psychiatrist. Amongst the patients residing within the facility, only those who had a family member present who could give some history with regards to the illness and as well pay for the client's medications were seen by the psychiatric team. The residents at the facility who were seen by the visiting psychiatric team received a provisional diagnosis based on the available information given to them and symptom-focused treatment was commenced.

The outreach psychiatric trainee doctor came weekly to review the patients and to provide psycho-education to the relatives present. As the patient improved, referrals were then made to the community psychiatric service which is offered in the LUTH-PHC which is nearby, to provide continued follow-up psychiatric out-patient care.

***Data Collection:*** Quantitative data relating to patients were obtained from the church records and from the records of the outreach psychiatric service for the study period. Information regarding patients' socio-demographic data, reason(s) for being referred to the settlement, clinical findings, and contact for psychiatric consultation were also obtained.

A pretested questionnaire was given to each of the 15 consenting religious caregivers at the start of the study. This questionnaire included; details of the socio-demographic characteristics of the practitioners, attitudes and knowledge about mental health, their willingness for collaboration with medical services, their experience with the mentally ill, their level of perceived competence and areas of need identified for their clients. Details about how they felt the service had contributed to the wellbeing of their clients were also obtained at the 24-month follow-up assessment.

Qualitative data were obtained using FGDs at the beginning of the service (baseline) and at end-line (24 months later). Of the 15 religious caregivers at this location during the study period, only four (4) were involved with the administration of mental health care at the settlement while the remaining eleven (11) provided domestic care to the 'resident-patients', and were actively involved in the spiritual interventions such as praying with patients. The FGDs were audio recorded, and later analyzed by the authors and the main thematic areas identified.

***Ethical Considerations***: Institutional approval was obtained from the LUTH

Research and Ethics Committee (ADM/DCST/HREC/APP/1573).
Approval was also obtained from the church authorities at the *Ori Oke, Ipaeniyankoto Prayer camp/settlement* at Pakoto, Ifo, Ogun State (referred to as Church in this study) and key community leaders (i.e. the ward development committee covering the specified community), before the service was commenced. Permission was also obtained from the church to extract information from its patient records and publish same after the study. All identities of residents at the settlement as obtained from the records were confidential and anonymity of subjects was preserved. Unique participant identifiers (known only to researchers) were allocated to all patients whose records were used. Informed consent was obtained from the interviewed care-givers before completion of their questionnaires and participation in FGDs. Church care-givers were also provided with information by the research team about the harm inherent in practices such as physical restraints, flogging, or prolonged fasting and the use was discouraged among the residents.

***Data Analysis:*** Quantitative data were collected and entered into SPSS version 17. Qualitative data and recordings from the FGD were transcribed and compiled. The FGD data were analyzed and thematic areas were identified.

# RESULTS

The Psychiatry department of the Lagos University Teaching Hospital (LUTH), which itself is located in Lagos, offers community psychiatric services at the primary health care outpost of the hospital in Pakoto Ogun state. The community psychiatry service, run by LUTH, provides mental health care for service users around the PHC region and the neighboring adjacent towns in Ogun state. By extension, the service was available to all users within the coverage area of the primary care center as earlier described.
The resident patients were predominantly aged 21-40 years (80.5%), single (65.4%), and male (66.5%). A total of 241 residents patients were seen over the study period, and almost all were from neighbouring states (98.6%). Most of the participants had a known past psychiatry history (Table1).

The religious care providers were slightly predominantly male (54.5%), and only a few (27.3%) themselves had a mentally ill relative. Only one (9.1%) had a past history of mental ill health. A significant majority (63.6%) had experienced a physical attack by a mentally ill resident. Most (63.6%) felt they did not have adequate skills to care for the mentally ill residents. (Table 2).

As a result of the collaboration about a fifth (19.4%) were referred from the religious healing centre to the hospital-owned community psychiatry services of the PHC. Regular use of medication commenced in that group of patients, while others either used erratically or had no relatives present to facilitate payment of their medication. It was observed that the use of physical chains and other retrains persisted despite regular education given to the caregivers. Reasons given for this use of chains werethat, it was borne out of concern for the safety of the patients in case they wandered off into the highway or the surrounding bushes in their state of ill health (Table 3).

The strengths highlighted from discussions with the study participants during the follow-up FGD from this collaborative service include: willingness to collaborate, potential reduction of harmful practices if provided with other options ensuring patients safety, and the availability of referral to primary health care (PHC). Weaknesses of the intervention include: a lack of funding to support abandoned or

indigent residents, the risk of the religious caregivers assuming a 'doctor' role, and the persistence of the use of chains and other harmful religious practices. The identified requirements for future collaboration with such a religious setting would include: the need for more training in structured record-keeping an upgrade of accommodation with basic minimum amenities, the use of alternatives to physical restraints of using chains, and supervision / regular coverage by community health nurses experienced in caring for the aggressive residents (Table 4).

Main themes identified from FGDs (Table 5) included: beliefs about causation, mode of referrals to the center, common interventions used, identified needs, and training needs, aetiological beliefs about mental illness held by the religious caregivers which include: spiritual attack, possession by demons, hereditary, and abuse of drugs. Common modes of referral were by relatives, church members and in the case of old clients, self-referrals. Common intervention methods used include: flogging, praying, fasting and the casting out of demons. They also used prescribed orthodox medication whenever available. Suitable accommodation and availability of free medications are also identified material needs.

Training needs identified by the medical caregiving staff include: coping with aggressive patients and the explanation of the causes of mental illness.

**Table 1.Demographic characteristics of the resident patients seen at religious mental health settlement.**

| Variable | n (242) | % |
|---|---|---|
| Age Range | | |
| 21 - 40yrs | 95 | 80.5 |
| Marital Status | | |
| Single | 157 | 65.4 |
| Gender | | |
| Male | 161 | 66.5 |
| Main Place of Residence | | |
| From immediate neighbouring state | 142 | 98.6 |
| Known Past Psychiatric history | 202 | 83.5 |

**Table 2: Religious caregiver characteristics**

| | n (11) | % |
|---|---|---|
| **Gender** | | |
| Male | 6 | 54.5 |
| **Have a mentally ill relative** | | |
| Yes | 3 | 27.3 |
| **Past history of mental ill health in self** | | |
| Yes | 1 | 9.1 |
| **Been ever attacked by resident** | | |
| Yes | 7 | 63.6 |
| **Skilled to care for mentally ill** | | |
| Does not feel skilled | 7 | 63.6 |

**Table 3: Some Successes of Collaboration**

| Variable | N | Percent |
|---|---|---|
| **Patients** Seen per year | | |
| Patients seen in 2011 | 97 | 40.1 |
| Patients seen in 2012 | 144 | 59.5 |
| Successfully referrals | | |
| Referred to Psychiatry clinic at the PHC & engaged in follow-up | 47 | 19.4 |
| Known Past Psychiatric history | 202 | 83.5 |

**Table 4: Strengths, Weaknesses of the collaborative model and areas for improved collaboration**

| STRENGTHS | WEAKNESS | AREAS FOR IMPROVED COLLABORATION |
|---|---|---|
| Potential to reduce harmful practices is great, if concerns of caregivers are attended to. | Persistence of chains and harmful practices | Alternatives to restraints Such as secure housing and emergency response to aggression. |
| Referral to community based mental health services. | No funding for service to support indigent or abandoned residents for continued medication use. | Need for more training in order to keep records and care for patients |
| High willingness to collaborate in areas of training and service improvement. | Risk of church care providers abusing process and assuming role of "Doctor" – by prescribing medications | Need for on-site community health nurse for aggressive patients. |
| | | Advocacy with government to support service delivery at such locations. |

**Table 5: Thematic issues raised by religious care provider**

| Beliefs about Causation | Methods employed by church | Mode of Referral to center | Training needs identified by staff | Needs of center. |
|---|---|---|---|---|
| Spiritual attack, Demons, Inheritance, Drug abuse | Flogging<br>Praying and casting out demon<br>Fasting<br>Medication if available | Parents/Relatives<br>Church Members<br>Walk-in | Coping with aggressive patients<br>Understanding Causes of mental illness<br>Caring for mentally ill<br>Medical related training. Knowing the difference | Suitable Accommodation<br>feeding<br>Free drugs |

# DISCUSSION

In several African countries, the inadequacy in the number of mental health care professionals remains a rate-limiting factor in mental health care provision.[22, 23] Most of the government-owned health facilities and psychiatric hospitals are sited in the cities, and a huge number of people with mental disorders in the communities depend on community resources, if they are available. These include: churches, family, traditional/ indigenous and alternative/herbal health care systems. In

this index study we see that even though patients came from many surrounding towns in this rural area. It was quite interesting to note that even though there was a service primary care delivery center right beside the religious home the users opted to obtain service of the religious caregivers rather than opt for the orthodox health service. This may be linked to the deeply held superstitious and religious attributions in clients for the cause of their experienced mental illness as described by many earlier researchers.

The 2007 Lancet series on Global Mental Health presented evidence that mental health is an essential and inseparable component of health.[14] In this context scaling up the process of increasing the overall volume of services provided to treat people with mental disorders, especially in low and middle income countries. Some proposed strategies of scaling-up includes capacity building with the appointment of mental health specialists who are designated to train and supervise workers in primary and general health care settings. As was demonstrated in this study there is willingness for capacity development among the informal caregivers, they willingly had admitted to feeling inadequately trained to care for the mentally ill patients(Table 2). To this end, the mhGAP Intervention Guide thus remains one of the promising protocols designed for the training of non-specialists workforce in these settings.[24, 25]

As a way forward, the non-formal workforce, such as community volunteers, must also be included as valuable resources who can supplement formal mental health care. Traditional/religious (alternative) mental health practitioners are often present in LMICs.[18-20, 26]However with such training, the complete fidelity to the details of care being proposed in such collaboration was not guaranteed as demonstrated by their reluctance to stop using physical restraints which was also highlighted as one of the major weakness in this study, because that pattern of care did not change much.

Nevertheless, despite the recognized potentials, linkages between religious and formal mental health providers have remained minimal globally. For an example, a study that surveyed black and white churches in the United State of America (USA) [11] showed that there were no linkages between any church and medical mental health providers and recommended that linking religious leaders' to primary care providers may be a way to strengthen the capacity for this network to provide some level of care, problem identification, and creative partnerships as described in our study were recommended. [11]

The use of the mental health gap Intervention guide (mhGAP-IG) as adapted for Nigeria has been seen as a useful resource for scaling up mental health service in settings with inadequate human and capital resources. This process of scaling up in LMICs has been proposed to include the training of primary health care providers as well.[27]

It is noteworthy to recognize that the pathway to care, especially in communities of LMICs is often variable and would usually involve the patronage of the religious care-givers at some point by the mentally ill. It is expected that medical services can also have linkages with a wide range of stakeholders in the community. Alternative caregivers are important stakeholders in rural communities of resource challenged countries; they need to be considered in view of the fact that they may be beneficial or detrimental to the holistic care of the mentally ill depending on their orientation or competence. [28]
This risk is clearly displayed here in this study as the researchers observed the willingness of the caregivers, though

simultaneously witnessed reluctance in changing their entire practice- a point which furtheremphasizes the need for supervision and acting within legislation in considering such collaboration.

The Balanced Care Model (BCM) as described by Thornicroft and Tansella[29, 30] proposed that community and hospital-based resources are combined, depending on the amount of available resources. In resource poor settings, they had proposed that the emphasis for such a balance of care will be to focus more on improving mental healthcare in primary care with specialist backing. The BCM as recommended for LMICs suggests one of the first steps to be, the strengthening of primary care with specialist backup in these settings. The dilemma on how the religious care providers would fit into the larger scheme of things can be a challenge for orthodox mental health practitioners in communities where they thrive. Some reasons for this could include: mutual mistrust and possibly the fundamentally different explanatory models of mental illness causation which often could make compliance with orthodox medical interventions inconsistent and unreliable.

The formal inclusion of a referral or entry pathway for alternative/religious mental health care into standard medical services in their respective communities may be worth considering. In this way these relevant but poorly structured caregivers can participate in guided models of care and through linkages with the community psychiatric services also meaningfully contribute to mental health care delivery, while causing reduced harm to their users.

While this paper has highlighted some willingness for collaboration among medical and alternative mental health caregivers as demonstrated by other researchers,[31] the reluctance to abandon the use of physical retrains and chains remained evident among these caregivers howbeit for what seemed like altruistic reasons on their part. There is a clear need for structured training, evaluation and post-hoc monitoring as a necessity to sustain impact of service rendered. This is the next progression in this collaboration and a detailed evaluation of this will be described elsewhere. Eventual referrals and linkage to community psychiatric settings in the nearby PHC center had ensured comprehensive care was available to any person needing it within the region covered by this outreach.

The limitations of this study include: unreliable presence of informants for patients, long-term wellbeing of the patients after leaving this setting is uncertain due to difficulty tracking patients.

While there is a need for mental health professionals to explore wider collaborations with various stakeholders, there must also be serious consideration of training these stakeholders as well. Although, such supervision must bear in mind the ethical / legal implications of such collaboration in order not to be seen to be supporting crude methods of care. In addition, well designed mental health protocols are needed to guide collaboration between medical and religious practitioners, and that such protocols are important in the implementation of such a collaborative model.

## CONCLUSIONS

The care for people with mental illness in LMICs can be better achieved via community-instituted services provided near to the people who require it most. Collaborations involving the extension of medical psychiatric services to non-medical settings such, as religious organization could be a veritable option for scaling up of mental health care delivery in resource poor setting.

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## REFERENCES

1. Gureje O, Odejide AO, Olatawura MO, Ikuesan BA, Acha RA, Bamidele RW, Raji OS . Results from the Ibadan centre. In: Ustun TB, Sartorius N, eds. Mental illness in general health care: an international study. Chichester, John Wiley & Sons on behalf of the World Health Organization: 1995; 157–173.

2. Murray CJ. *et al.* Disability-adjusted life years (DALYs) for 291 diseases and injuries in 21 regions, 1990-2010: asystematicanalysis for the Global Burden of Disease Study. *Lancet,2012;* 380 (9859): 2197-223.

3. World Medical Association Declaration of Helsinki; Ethical Principles for Medical Research Involving Human Subjects. World Medical Association. *JAMA. 2013*; 310 (20): 2191-2194.
4. The World Health Organization. Traditional Medicine: Definitions. WHO 2016-http://www.who.int/medicines/areas/traditional/definitions/en/.
5. World Bank 2011, Health Systems. Traditional Health Services (http://go.worldbank.org/433PVWTQL0)
6. Allopathy. (n.d.) *Gale Encyclopedia of Medicine*. (2008). Retrieved January 13 2016 from http://medical-dictionary.thefreedictionary.com/allopathy.
7. Saravenan et al (add all author details) perceptions about psychosis and psychiatric services SPPE 2008.
8. Ebuehi OM, Akintujoye IA, Perception and utilization of traditional birth attendants by pregnant women attending primary health care clinics in a rural Local Government Area in Ogun State, Nigeria. *Int J Womens Health. 2012*; 4: 25–34.
9. Sheikh A, Yeasmin F, Agarwal S, Rahman M, Islam K, Hossain E, Hossain S, Karim MR, Nikkon F, Saud ZA, Hossain K. Protective effects of Moringaoleifera Lam. Leaves against arsenic induced toxicity in mice. *Asian Pac J Trop Biomed. 2014*. 4(1): S353–S358.
10. Dillikumar M, Magesh R, Lokeshwari TS, Sivanandan RN, Madhavan S. Efficacy of leaf extracts of selected medicinal plants against multi drug resistant strains of Staphylococcus aureus. *Jo. Sci. Trans. Environ. Technov.2008;* 2(1): 23- 27.
11. Blank MB, Mahmood M, Fox JC, Guterbock T. Alternative mental health services: The role of the black church in the South. *Am J Public Health, 2002*; 92(10): 1668-1672.
12. Chisholm D, Flisher AJ, Lund C, Patel V, Saxena S, Thornicroft G, *et al.* Scale up services for mental disorders: a call for action. *Lancet. 2007*; 370 (9594): 1241-52.
13. Saxena S, Thornicroft G, Knapp M, Whiteford H. Resources for mental health: scarcity, inequity, and inefficiency. *Lancet. 2007*; 370 (9590): 878-89.
14. Lancet Global Mental Health Group ; Chisholm D, Flisher A.J., Lund C, PatelV, *et al*. Scale up services for mental

disorders: a call for action. Global mental health series 6. *The Lancet.2007*; 1241-1252.

15. World Health Organization (2008).Scaling up care for mental Neurological and substance use disorders. Geneva WHO available: http//www.who.int.mental_health/mhgap_final_english.pdf.
16. Ndeitei. Traditional healers in East Africa. *International Psychiatry. 2007;* 4:4: 85-85.
17. Olugbile O., Zakariah N.P., Isichei. B. Nosology and modalities for deciding on the management of patients with Psychiatric illness among traditional healers in Lagos, Nigeria. *International Psychiatry*. *2007;* 4(4): 83-84.
18. Adefolaju T. Traditional and Orthodox Medical Systems in Nigeria: The Imperative of a Synthesis. *American Journal of Health Research*. *2014;* 2(4): 118-124.
19. Uwakwe R, Otakpor A. Public Mental Health- Using the Mental Health Gap Action Program to Put all Hands to the Pumps. *Front Public Health. 2014*; 2: 33.
20. *IFO. http://ogunstatebiz.tripod.com/adoodootalocalgovernment/id2.html*
21. Lund C, Flisher AJ, Porteus K, Lee T. Bed/population ratios in South African Public sector mental health services. *Soc psychiatry epidemiology. 2002;* 37: 346-49.
22. Laugharne R, Burns T. Mental Health services in Kumasi Ghana. *Psychiatric Bulletin. 2002*; 26: 310 -12.
23. Barbui C, Dua T, Van OM, Yasamy MT, Fleischmann A, Clark N, *et al*. Challenges in developing evidence-based recommendations using the GRADE approach: the case of mental, neurological, and substance use disorders. *PLoSMed.2010*; 7(8).
24. Dua T, Barbui C, Clark N, Fleischmann A, Poznyak V, van Ommeren M, *et al*. Evidence-based guidelines for mental, neurological, and substance use disorders in low- and middle-income countries: summary of WHO recommendations. *PLoS Medicine. 2011*; 8(11):e1001122.
25. Olorunshola Sam. Religion, cultural and health care deliver in Nigeria. *Nigeria post graduate medical journal. 2010;* Vol 17.
26. Ayorinde O, Gureje O, Lawal R. Psychiatric research in Nigeria: bridging traditional and modernization. *The British Journal of Psychiatry*. 2004; 184: 536-538.
27. Abdulmalik J, Kola L, Fadahunsi W, Adebayo K, Yasamy MT, Musa E, and Gureje O. Country Contextualization of the Mental Health Gap Action Program Intervention Guide: A Case Study from Nigeria. *PLoS Med. 2013*; 10(8): e1001501.
28. Ogunnubi OP, Adikea DC, Oshodi YO, Olagunju AT, Adeyemi JD, Aina OF, Onajole AT. Community Psychiatric Service in a Nigerian Rural Centre: Bridging Mental Health Gap. *Nigerian Journal of Psychiatry 2014***;** *12 (1): 2-33.*
29. Thornicroft G, Tansella M. The balanced care model: the case for both hospital- and community-based mental healthcare. *Br J Psychiatry. 2013;* 202 (4): 246-8.
30. Thornicroft G, Tansella M. The balanced care model for global mental health. *Psychol Med.2013*; 43 (4): 849-63.
31. Agara A.J, Makanjuola AB, Morakinyo O. Management of perceived mental health problems by spiritual healers: a Nigerian study. *AJOP. 2008*; 11: 113-118.