

PUBLIC PERCEPTION OF THE EFFECTIVENESS OF ORTHODOX MEDICINE IN THE TREATMENT OF MENTALLY ILL PERSONS IN NSUKKA, NIGERIA

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Abstract

Mental illnesses are among the most common conditions affecting health today, both in developed and developing countries of the world. The purpose of the study therefore was to examine the public perception of the effectiveness of orthodox medicine in the treatment of mentally ill persons in Nsukka, Nigeria. A sample of 193 respondents of Igbo ethnic group were randomly selected using cross – sectional survey design. The findings of the study show that 42.5% of the respondents believed that orthodox medicine was the best for the treatment of mental illness while 57.5% said that orthodox medicine was not the best for the treatment. The most reason for negative perception of the orthodox mode of treatment was necessitated by the cost of drugs and educational level of the respondents coupled with the previous experience of orthodox medicine as ineffective. In view of this, the study recommends that drugs should be made available, accessible and affordable to the mentally ill persons in Nigeria while health workers should educate the public on the need to have positive attitudes towards the effectiveness of orthodox medicine for the treatment of mental illness in Nigeria

Keywords: *Orthodox medicine, Alternative care, mental illness, public perception, effectiveness, Nigeria*

Introduction

World Health Organization (WHO, 2001) defined mental illness as a diseased condition which is deemed detrimental for both the affected individual and the society, because, it affects adversely the normal functioning of the mental, psychological and emotional make up of the individual and so it makes the capacity for insight, orientation, judgment, thought, mood and perception blurred. Mental illness involves intellectual illness in which thought and emotions lose connection with external reality. Townsend (1996) defined mental illness as “maladaptive responses to stressors from the internal or external environment, evidenced by thoughts, feelings and behaviors that are incongruent with the local and cultural norms and interfered with the individuals' social occupational or physical functioning. Mental

disorders are characterized by abnormalities in cognition, emotion or the highest integrative aspects of behavior, such as social interactions or planning of future activities (Baily, C. and Kandel, E. 1993). From scientific studies, mental illness has been with mankind from early time (Morris, 2002).

However, mental illness is seen as disorder of mind. It ranges from minor to severe cases which can interrupt any activities to the point that life became quite difficult. Mental illness has become a more prominent subject and has attracted wide range of controversial views regarding its treatment. In many parts of the world especially developed countries, there is increase in awareness of mental illness treatment. Laing (1999) argues that in United States of America, adults believed that mental health could be improved with orthodox treatment. The large

proportion of adults with positive attitudes towards orthodox illness treatment in United State might result from greater attention and understanding of mental health. Researchers studying orthodox drugs of treatment of mental illness in different purposes had found them to be useful for treating mental disorders, using such drugs as chlorpromazine for psychosis, and lithium for bipolar disorder. The implication of the availability of these drugs is that the stigma attached to the orthodox medicine will be reduced and it will encourage the entire society on demanding of these drugs for treatment of mental ill patients.

There is evident that although scientific discovery may continually advance medical treatment on mental ill patients, the most expert care becomes of no avail if the negative attitudes of the society on orthodox treatment did not change (Andreasen, 1997). Song (2008) argues that every section of society has its unique way of perception about mental illness treatment. This assertion tends to be in line with what is happening in most of the developing countries such as Nigeria. Some members of society especially Nigerians believe on traditional treatment of mental ill patients due to the fact that they were influenced by cultural beliefs and attitudes which in many cases see the birth of such mentally ill persons as expression of anger from offended ancestors. People tend to react in a very discriminating way towards mentally ill patients almost in every section of society.

Traditional medicine is more recognized in Africa and other developing world where it mostly exists in rural areas. The causative factors of mental illnesses were largely attributed to supernatural forces (Aina, 2004). The effective treatments of these illnesses have been identified as arising mostly through magical means or traditional forms of care. According to Odejide, Oyewumi and Ohaeri (1989) in traditional African society,

strong beliefs in the existence and activities of witches, ancestral spirits, sorcerers, diviners and so on still hold sway and it is strongly believed that an individual's well – being can be influenced through the subtle manipulation of those agents that constitute his or her psychosocial environment.

The coming of the missionaries and the western education had a negative impact on the traditional mode of treatment of mentally ill persons in Nigeria because there was an obvious decrease in the patronage of traditional healers in the earliest time of the Christian religion in Nigeria. This tempo of patronage could not be sustained since many Nigerians today consult the traditional healers for solution-irrespective of their social status or level of education. However, in Africa traditional healers and spiritualists still enjoy large patronage for mental health care – probably borne out of the perceived causative factors (Ebigbo, 1982). Nevertheless, there is limited information on their explanatory models and consequent treatment practices. In addition, traditional healers at times, are unable to give precise names of the herbs that they are using to treat patients suffering from mental illness. This paper therefore was to examine the public perception of the effectiveness of orthodox medicine in the treatment of mentally ill persons in Nsukka Town of Enugu State, Nigeria.

Orthodox Treatment of Mental Illness

Orthodox treatment is the science and practice of treating mental illness as well as dealing with their diagnosis and prevention. This includes the use of psychoactive drugs to correct biochemical imbalances in the brain or otherwise to relieve depression, anxiety and other painful emotional states. Orthodox medicine is a component of health care designed for the health promotion of the public. In orthodox treatment of mental

illness, antipsychotic drugs are used in treatment of psychotic patients. They have a combining effect that is valuable in the relief of violent behavior in psychotic patients. The drugs are quite successful in rendering the symptoms of schizophrenia, mania, and also suppress hallucination and delusions, alleviate disordered or disorganized thinking improve the patients lucidity and generally make him more receptive to psychotherapy (David, H and Ivor, R. 1962). Bulletin (1997) argues that provision of orthodox medicine is as a means of maintaining the good health of people to improve their good living condition. Modern methods of treatment by means of drugs, electricity, leucotomy and appropriate psychotherapy have made it possible to treat a wide variety of nervous and mental illness efficiently.

A widespread belief in the curability of mental illness through orthodox medicine was a principal motivating factor behind reform. According to Kringsen, (1998) the mental hospital era was an age of reform and there is no doubt that patients were treated much more humanely. In orthodox treatment the physician may administer any of several psychological tests to the patients and may supplement it with a physical and a neurological examination. Many western biomedical treatments of mental illness are effective, bringing relief to millions who would otherwise be unable to function or experience pleasure or meaning in life (Lake, 2011). Western psychiatry rests on a coherent body of theory, research and clinical data, and is the beneficiary of fundamental scientific advances in Neurophysiology, pharmacology, molecular biology and genetics. However, the successes of conventional biomedical treatment approaches are limited by many factors such as erroneous understanding of the putative mechanisms of action of many drugs in current use, the limited efficacy of many drugs

in current use and related compliance problems caused by toxic side – effect of drugs – drugs interactions, un-affordability or limited availability of many drugs that are regarded by western medical practitioners as the most appropriate or effective treatments for a particular mental illness (Lake, 2011).

The ability to pay for treatment is clearly a consequential factor in the utilization of health care services (Kelner and Wellman 1996). It has been noted that the income of those who patronize orthodox medicine are higher than those who prefer traditional mode of treatment of mental illness. They are in a better position to pay for treatment, if they choose to use conventional medical care. Previous studies have shown that income level is an important factor for people seeking orthodox care. However, in another aspect of alternative care, many people believe that people who use traditional care do so because orthodox medicine has failed to help them resolve their health problems. For instance, a study carried out by Kelner and Wellman in 1996 in Canada – showed that the alternative users explained why they chose a particular therapy – nearly one quarter (22%) said it was out of depression, they had tried conventional medical care and had not been helped. Others, however, argue that at least some traditional patients seek non – medical health care because they are convinced that it is not a better form of treatment for them (Kelner et al, 1996). It has been argued, particularly; in the medical literature that people only choose alternative treatments when they have been unable to find help for their health problems from conventional medical services (British Medical Association, 1986). Again, socio-economic status of a person forms part of the factors that influences choice of treatment method. High cost of treatment which is disproportionately represented in mental health facilities tends to push people away

from seeking help from the treatment method of their choice when they are mentally sick, this makes them to go to places where they feel that it is affordable to them and in return show a much higher premature termination; and have more unfavorable impressions regarding treatment. Some patients or their relations believe in orthodox treatment but fear of hospitalization is another major barrier for health seeking. Snowden and Cheung (1990) indicated that this fear of hospitalization among patients is realistic in that patients are disproportionately hospitalized. The misuse of hospitalization for mentally ill people is probably due to clinician bias and or problems in misdiagnosis (Walsh, 2000).

Many of the patients took somewhat critical view of the medical profession. They had concerns about the side effects of drugs or were convinced that medicine treats symptoms rather than causes (Kelner et al 1996). Vincent and Furnham (1996) find four principal reasons for people's choice of alternative care (1) belief in the positive value of alternative care (2) previous experience of orthodox medicine as ineffective (3) concern about the adverse side – effects of medical care and (4) poor communication with patients and orthodox medical practitioners. However, there is growing evidence that increasing numbers of people in North America and Europe are turning to alternative form of health care (Eisenberg Kester, Foster, Norlock, Calkins and Delbanco1993). This calls for more efforts to obtain data on the effectiveness of orthodox treatment in Nigeria in order to increase the use of effective treatment of mental illness.

A study conducted in Northern Nigeria in 2004 on the preferred mode of treatment for mental illness showed that 46% of the respondents opted for orthodox medical care, 34% preferred spiritual healing and only 18% supported the use of traditional herbal

medicine. The study also showed that literate respondents were seven times more likely to exhibit positive feelings towards the mentally ill as compared to non – literate subjects. In the study there was a higher score on the preference for modern medical care in treating psychiatric illness (Kabir, 2004). Similar changes in attitude towards the modern scientific approach regarding mental disorders was documented by Alem et al (1999) in their work on mental illness in Ethiopia and by Illiyasu and last (1991).

Theoretical Framework

The biological theory which was developed by Charles Darwin in the mid 1800's has been chosen to provide the analytical framework for the study. The theory provides a fuller perspective from which to determine the strategies required to address the mental health problems. For instance, it provides a more comprehensive explanation on the causes of mental illness and a disciplined approach to the gathering of relevant information and to the drawing of relevant conclusions as the basis for appropriate treatment of mental illness. The theory sees mental disorder as organic condition that can be treated through medical intervention. The biological theory holds tenaciously to the view that problems in the brain structure and the biochemical balance in the brain, sometimes due to injury and some other times due to genetic inheritance, are thought to be at the bottom of mental disorders. The genetic inheritance could result to mental disorder. This view point holds that the belief that people inherit certain mannerisms and behavioral patterns (mental disorder) from their parents just as they inherit physical characteristics is as old as the human race. This belief appears to be more widely held in the less developed societies in Africa and Asia. In effect, if a certain family discovers that mental

illness is running in their lineage, from one generation to another, they can explain the situation as related to genetic inheritance (Vold, 1958).

There is also a wealth of scientific evidence that leaves no doubt that physical factors play important role in the origin of mental disorders. It is also noted that exposure to some physical traumatic challenges may affect the link between physiological and developmental determinants to mental disorders (Ambrosino, Hefferman and Ambrosino, 2005). The medical model which is rooted in the biological theories therefore projects the causes of mental illness and as well offers potentials for the treatment of mental illness. However, the theory helps us to understand how individual biological make – up and environmental conditions could expose us to mental health problems. The theory helps us to understand that mental illness is as a result of chemical imbalance in the brain which can be fixed by drugs. This however, provides reassurance to everyone affected that the disorder can be controlled.

Methods

A survey was conducted to examine the public perception of the effectiveness of mentally ill persons in Nsukka Town of Enugu State, Nigeria. A cross – sectional design was employed in the study where public perception of the effectiveness of orthodox medicine in the treatment of mental illness was measured based on a – 20 variable responses. The sample for this study consisted of 193 respondents (46% males and 54% females) selected through cluster and simple random sampling methods from the three communities that made up of Nsukka Town. The three communities included Nru, Nkpunanor and Ihe/Owerre. The research used cluster sampling in order to select the autonomous communities within the town and simple

random sampling was applied to select respondents from the villages. However, assurances on the confidentiality of the data generated in the study were made to participants who were skeptical about the results.

The questionnaires were administered to both old and young in the study. The chi-square (χ^2) test of association was used to test for the association of variables in the study. The data which was collected in 2012 was processed and analyzed using statistical package for the social sciences (SPSS). The first part of analysis was done using socio – demographic characteristics of respondents such as age, sex, education, occupation and marital status. The second part of the analysis was done using frequency, simple percentages and chi-square to test the variables used in the study.

Results – The socio – demographic characteristics of respondents: The study showed that most of the respondents fall within the age bracket of 24 – 29 years, 46% and 54% were males and females respectively. The findings showed that out of the younger respondents (18 – 29 years), 30% were males and 44.6% were females. In Table 1 below, the findings of the educational qualifications of the respondents showed that most of the respondents (45.6%) fall within the range of those who possess degree certificates. Out of this number, about 17% and 29% of the respondents were males and females respectively.

The study also reveals fact based on the response that 18% of the male and 14% of the female respondents were civil servants. The results also showed that most of the respondents (48%) fall within the category of traders in which about (17%) of them were males and 31% were females.

Public Perception of the Effectiveness of Orthodox Medicine In The Treatment of Mentally ill Persons In Nsukka, Nigeria

Table 1: Percentage distribution of respondents by background information

Table 1: Distribution of respondents on cross-tabulations of some background characteristics.				
Age range	Male	Female	Total	X ²
18 - 3	50 (26%)	16 (8.3%)	66 (34.2%)	P _≤ 000
24 - 29	8 (4.1%)	70 (36.3%)	78(40.4%)	
30 - 35	30 (15.5%)	6 (3.1%)	36 (18.7%)	
36 and above	0 (0.0%)	13 (6.7%)	13 (6.7%)	
Total	88 (45.6%)	105 (54.4%)	193 (100.0%)	
Educational Qualification	Male	Female	Total	P
NECO/GCE	20 (10.4%)	10 (5.2%)	30 (15.5%)	.038
NCE/OND	29 (15%)	30 (16%)	59 (30.6%)	
B. SC Degree	33 (17.1%)	55 (28.5%)	88 (45.6%)	
Higher degree	6 (3.1%)	10 (5.2%)	16 (8.3%)	
Total	88 (45.6%)	105 (54.4%)	193 (100.0%)	
Occupation of respondents	Male	Female	Total	P ÷
Civil servant	34 (18%)	26 (14%)	60 (32%)	.006
Trader	33 (17%)	60 (31%)	93 (48%)	
Student	21 (10.%)	15 (8.%)4 (2.1%)	36 (18%)	
Others	0 (.0%)	105 (54.4%)	4 (2.1%)	
Total	88 (45.6%)	105 (54.4%)	193 (100.%)	
Mode of treatment	Male	Female	Total	
Traditional mode	48 (24.9%)	70 (36.3%)	118 (61.1%)	
Orthodox mode	40(20.7%)	35 (18.1%)	75(38.9%)	
Total	88 (45.6%)	105 (54.4%)	193 (100.0%)	

Source: Ngwu, (2012).

Public Perception of the Effectiveness of Orthodox Medicine In The Treatment of Mentally ill Persons In Nsukka, Nigeria

Sex	Yes	No	Total
Male	40 (20.7%)	48 (24.9%)	88(45.6%)
Female	35 (18.1%)	70 (36.3%)	105 (54.4%)
Total	75 (38.9%)	118 (61.1%)	193 (100.0%)
Educational attainment	Yes	No	Total
NECO/IGCE	1 (5%)	29 (15%)	30 (15.5%)
NCE/OND	4 (2.1%)	50 (25.9%)	54 (28.0%)
B.Sc Degree	57 (29.5%)	31 (16.1%)	88 (45.6%)
Higher Degree	16 (8.3%)	0 (0%)	16 (8.3%)
Total	83 (43.0%)	110 (57.0%)	193 (100.0%)
Religious Affiliation	Yes	No	Total
African traditional religion (ATR)	0 (0%)	5 (2.6%)	5 (2.6%)
Christianity Islam	75 (38.9%)	106 (54.9%)	181(93.8%)
Total	75 (38.9%)	118 (61.1%)	193 (100.0%)
Sex	Yes	No	Total
Male	56 (29%)	32 (16.6%)	88 (45.6%)
Female	45 (23.3%)	60 (31.1%)	105 (54.4%)
Total	101 (52.3%)	92 (47.7%)	193 (100.00%)

Source: Ngwu, (2012).

Table 2 shows the sex of respondents and their level of awareness of orthodox medicine. The study attempted to examine the public perception of the effectiveness of orthodox medicine in the treatment of mentally ill persons in Nigerian urban setting. The results showed that 38.9% of the respondents were aware of the orthodox medicine while 61.1% of them were not aware of the orthodox mode of treatment. In separating the data by sex, the study showed that about 20.7% of males and 18.1% of females were aware of orthodox medicine. Looking at the respondents' responses, men are always at the high side whenever it involves knowledge or understanding of certain issues in the society. Though, awareness of the treatment of mental illness is one thing and utilization of such mode of treatment by them is a different ball game. However, from the study, it showed that there is need to improve the effectiveness of orthodox medicine which invariably helps to upgrade the health quality of the society. Table 3 above shows the educational attainment of respondents and their perception on the effectiveness of orthodox medicine in Nigeria. The results showed that most respondents (29.5%) within the B.Sc degree category support that orthodox medicine was effective in the treatment of mental illness while (25.9%) of the

NCE/OND category perceived orthodox medicine as ineffective in the treatment of mental illness. This group of respondents belongs to the categories of medium education. In summary, the study showed that 43% of the sample population believed that orthodox medicine was effective in mental treatment while the greatest percentage of the sample population (57%) was of the opinion that orthodox medicine was not effective in the treatment of mental illness. Therefore, the study notes a significant relationship between level of education and the perception of effectiveness of orthodox medicine in the treatment of mental illness ($\chi^2 (3, N = 193) = 76.017a, p < .000$). The level of education of respondents and the awareness or knowledge of the effectiveness of orthodox medicine is highly related.

Table 4 examined the relationship between religions affiliation and awareness of orthodox medicine. When asked about the relationship between religions affiliation and awareness of orthodox medicine, the results showed that 61.1% of the respondents were not aware of orthodox medicine especially in the treatment of mental illness and 38.9% of them were aware of the orthodox mode of treatment of mental illness. In disaggregating the data by religious affiliation, findings showed that more respondents (38.9%) from Christian religion were aware of orthodox medicine while 54.9% of the sample population on Christian religion was not aware of this mode of treatment. This religious group may be more interested in alternative treatment of mental illness. They seek non-orthodox treatment because they are convinced; it is not a better form of treatment for them. They may prefer healing method of treatment through prayers.

Table 5 presents the differences between the male and female respondents on the preferred mode of treatment of mental

illness. The results showed that 20.7% of male respondents preferred orthodox mode of treatment while 18.1% of the female respondents support the orthodox style of treatment. The study also showed that 61.1% of the sample population preferred traditional mode of treatment whereas 38.9% of them preferred orthodox medicine. The findings presented in table 6 reveal that 52.3% of the respondents believed that the cost of drugs can affect the utilization of orthodox medicine while 47.7% of the respondents said that the cost of drugs cannot affect its utilization. The results showed that (52.3%) of the respondents believed that cost of drugs can affect the utilization of orthodox medicine while (47.7%) of them said that the cost of medicine cannot affect its utilization. That the cost of drugs affects the utilization of orthodox medicine is corroborated by Kelner and Wellman 1996 where they observed that the ability to pay for treatment is clearly a consequential factor in the utilization of health care services.

Discussion

The major issue of this research was to examine the public perception of the effectiveness of orthodox medicine in the treatment of mentally ill persons in a Nigerian urban setting. Some important and relevant policy implications are drawn from the empirical findings. The findings of the study indicated that more of the male respondents were aware of orthodox medicine in Nsukka areas of Enugu state as against their female counterparts. In this study, men were found to be more knowledgeable about orthodox mode of treatment than women. This shows that men are more likely to patronize orthodox medicine than their women counterparts. One can equally suggest that the poorer knowledge of orthodox medicine among women could be attributed to the fact that men

are regarded as the head of family who provide and decide on how, when and where to receive health services. In other words, awareness of orthodox medicine tended to be better with those with higher levels of socioeconomic status. Interestingly, the study documented that most respondents from the categories of medium education of those who possess B.Sc degree certificates perceived orthodox medicine as effective in the treatment of mental illness in Nsukka, South Eastern, Nigeria.

According to Mirowsky and Ross (2003) education acts as a structural variable, sorting individuals into socio-economic strata with graduated rates of economic accumulation as measured by factors such as occupational status and authority, earnings, household-income and wealth. People who are better educated may also be better able to make use of written materials like Newspaper articles and Leaflets to gain information on the effectiveness of orthodox medicine. The study also noted that (38.9%) of the respondents from Christian religion were more aware of orthodox medicine than any other group mentioned in the study. The implication of this result is that Christians are more likely to receive the health services of orthodox medicine than the traditionalists or Moslems.

The study findings showed that more than half of the sample population preferred traditional mode of treatment for the mentally ill persons while 38.9% of them perceived orthodox medicine as the best forms of treatment for the mentally ill individuals. The differences between the male and female respondents on the preferred mode of treatment showed that more of the male respondents preferred orthodox medicine as the best forms of treatment for the mentally ill persons while less of the female respondents perceived orthodox style of treatment as the best. In furtherance to this, the study also

observed that the greater percentage of the female respondents perceived orthodox medicine as ineffective as against their male counterparts (24.9%). This is contrary to the study conducted in Northern Nigeria in 2004 on the preferred mode of treatment for mental illness which showed that 46% of the respondents opted for orthodox medical care and 18% supported the use of traditional herbal medicine. The difference in perception here confirms Song (2008) assertion that every section of society has its unique way of perception about mental illness treatment.

Finally, the results from the study showed that more than half of the respondents identified the cost of drugs as one of the problems that may affect the utilization of orthodox mode of treatment in Nigeria. Nevertheless, nearly half of the respondents opined that the cost of drugs cannot affect the utilization of health services or orthodox treatment in Nsukka Town of Enugu State. In disaggregating the data by sex, the findings showed that majority of the male respondents agreed that the cost of drugs can affect the utilization of orthodox treatment as against their female counterparts. The knowledge difference among the sexes here showed that male respondents are more knowledgeable about the cost of drugs and utilization of orthodox medicine. The knowledge difference could be predicted on the fact that men of this part of the world are mainly responsible for providing for their family members in the areas of health, food, clothing, education etc, which exposes them more to the cost of drugs or health care services in Nigeria.

Conclusion

The findings confirm that there are many people who are not well informed about the effectiveness of orthodox medicine in the treatment of mental illness in Nsukka Town of South Eastern Nigeria. It was observed that

more than half of the respondents opted for traditional mode of treatment of mental illness. The negative perception of the respondents on the orthodox mode of treatment was necessitated by the previous experience of orthodox medicine as ineffective coupled with the cost and unavailability of the drugs. The perception of the respondents may not speak well of the country and the victims of mental illness in Nigeria. This is because the people's perception in many aspects of the research poses a great danger to the general public especially in Nsukka area of Enugu state, Nigeria. Therefore, there should be an urgent need to invest in policies and programmes that will enhance the awareness of the effectiveness of orthodox medicine in Nigeria which will save many lives that would be lost through the herbal concoctions of traditional healers of mental illness.

References

- Aina O (2004). Mental illness and cultural issues in West African Films. Implications for orthodox psychiatric practice: *Med. Humanities*, 30: 23 . do : 10 – 11 36jm.h.
- Alem, A; Kebede. D. Woldesemiat. G. Jacobsson. L, Kullgren. G (1999). The prevalence and socio – demographic correlates of mental distress in Butajira, Ethiopia.
- Ambrosino R, Hefferman J. & Ambrosino, R (2005). Social work and social welfare, 5th (ed) Brooks/cole, Belmont, USA.
- Andreasen, N.C (1997). Linking mind and Brain in the study of mental illness. A project for a scientific psychopathology; *science*: 275 PP. 1586 – 1593.
- Ayonrinde, A & Erinosh. O. (1977). A pilot experiment in preventive psychiatry in a rural community. The cases of Igbo Ora in Nigeria. *International journal of health education*. PP.2 – 7.
- Bailey, C.H. & Kandel, ER (1993). Structural changes accompanying memory storage. *Annual Review of physiology*, 55. PP.397 – 426.
- British medical Association (1986). “Alternative Therapy” Report to the Board of science and education. London :BMA.
- Bulletin J.E (1997). Pharmacology for Nursing and Allied Health professions. African first publishers limited.
- David. H & Ivor. R.C (1962). Text book of psychiatry. London, Oxford university press P. 1-14.
- Ebigbo P.O. & Tyodza. W (1982). Healing methods of a prayer house in Nigeria – in Erinosh. O.A Bell NW (eds) mental health in Africa, Ibadan, Nigeria, Ibadan University press:
- Eisenberg D; Kester. R, Foster. C; Norlock. F, Calkins. D & Delbanco. T (1993). “Unconventional medicine in the united states, prevalence, costs and patterns of use. “*The New England Journal of medicine*: 328; 246 – 252.
- Iliyasu, M & Last. M (1991). Mental illness at Goron Dutse psychiatric hospital, Kano state, special issue, 3 : 41 – 70.
- Jean Bellamy (2011). Science – Based medicine – Exploring issues and controversies in the relationship between science and medicine; politics and regulation comments, 135.
- Kabir M; Iliyasu. Z; Abubakar. 1 & Aliya. M (2004). Perception and beliefs about mental illness among adults in karfi village, Northern Nigeria. *BMC – Journal of international Health and Human Rights* 2004, 4: 3 do 1: 16. 1186/1472 – 698 x – 4.3.
- Kelner M & Wellman, B (1996). Who seeks alternative Health care: A profile of the users of five modes of treatment-submitted for publication?
- Laing, R.D (1999). The divided self: An Existential study in sanity and madness London. Penguin press.
- Lake. M (2011). Integrative mental Health Care – one psychiatrists perspective.
- Mirowsky, M & Ross. L. (2003). Education, social status and Health. Hawthorne, N.Y, Aldine.

- Nwaboza C. (2005). Primary Health care in Nigeria. University of Ibadan, Department of sociology, Ibadan, Nigeria.
- Odenjide, A.O. Oyewumi LK; Ohaeri. JU (1989). Psychiatry in Africa: An overview; *AM. J psychiatry* 1989, 46: 708 – 16 (Medline) web of science.
- Snowden, L.R. & Cheung, F.K. (1990). Use of inpatient mental health services by members of ethnic minority groups. *American psychologist*, 45,347-355.
- Song, E.C (2008). Familiarity with mental illness and social distance from people with schizophrenia and major depression. Testing a model using data from a representative population survey. *Schizoph. Res*, No 69. PP 175 – 182.
- Vincent. C & Furnham A (1996). “why do patients turn to complementary medicine? An empirical study “*British journal of clinical psychology* 35:37 – 48.
- Vold, G (1958). Biological theories of mental illness “As quoted in Igbo E.U. M (1999), *Introduction to criminology*, Nsukka, Afro Orbis publishers.
- Walsh, J. (2000). *Clinical Case Management with persons Having mental illness: A Relationship – Based Perspective*. Belmont.
- WHO (1984). *Mental health care in developing countries. A critical appraisal of research findings. Report of WHO study group. World Health organ tech. Rep Ser. 698, 5 – 34. Pubmed. Abstract.*
- Who (2001). *The world Health Report 2001, mental health: New understanding: New hope*, WHO. Geneva : <http://www.who.int/whr/2001/website>.