

MENTAL HEALTH LITERACY ABOUT DEPRESSION AND SCHIZOPHRENIA AMONG ADOLESCENTS IN SECONDARY SCHOOL IN MAKURDI, NIGERIA

Akinjola O.*¹, Edeh AN¹, Agbir TM¹, Omidiji OO², Obekpa IO³, Ighagbon FO³ and Amedu MA.³

¹Departments of Psychiatry, College of Health Sciences, Benue State University, Makurdi, Benue State.

²Department of Psychiatry, Benue State University Teaching Hospital, Makurdi, Benue State.

³Federal Medical Center, Makurdi, Benue State.

Received date: 26 January 2022

Revised date: 15 February 2022

Accepted date: 07 March 2022

*Corresponding Author: Akinjola O.

Departments of Psychiatry, College of Health Sciences, Benue State University, Makurdi, Benue State.

ABSTRACT

A wide gap exists between mental illness sufferers and those who get treated thereby, creating huge disability burden. One important factor creating the gap is mental health literacy which determine help-seeking behaviour. This study aims to determine the mental health literacy about depression and schizophrenia among secondary school adolescents in Makurdi. A total of 228 consenting students were recruited into the study using stratified random sampling technique, case vignettes of depression and schizophrenia followed by open ended questions were administered to assess mental health literacy. The respondents' ages range between 13 to 19 years (mean 15.88 ± 1.55 years) and they were mostly females (51.8%). The recognition of both depression and schizophrenia were low at the rates of 29.8% and 0.4% respectively. More respondents misdiagnosed mental illness for schizophrenia (39.9%) than for depression (5.7%) and on the contrary, more of the respondents misdiagnosed emotional problems, reaction to stress, guilt of undisclosed offence and maltreatment or abuse for depression more than they did for schizophrenia. The recognition rate for depression is greater among female respondents. More respondents recommended help seeking from Psychiatrists for schizophrenia (14.9%) than for depression (1.8%). Support from family and friends was the most recommended source of help seeking both for depression (29.8%) and schizophrenia (25%). Similarly, general practitioners were recommended by 22.8% of respondent for schizophrenia and 25% for depression. Religious and traditional healers were suggested by 7% for schizophrenia and 1.3% for depression. Mental health literacy was found to be low in the current study.

KEYWORDS: Mental health, Literacy, Recognition, Depression, Schizophrenia, Adolescent.

INTRODUCTION

Mental health problems and their attendant consequences, pose issues of increasing global concern. It has been established that mental disorders account for about 13% of the total global burden of diseases^[1] and when adolescents between the ages of 10-19 years were considered, the burden increases to 19%.^[2] It has also been shown that half of all mental health conditions start by 14 years of age.^[2] Nigeria has one of the youngest populations in the world with adolescent between the ages 10-19 years constituting about 23% of its population.^[3] The consideration of this, and the global burden together with the allocation of only about 4% of government health expenditures on mental health in Nigeria^[4] despite continuous rise in health care cost,^[5]

shows the enormity of the problem of mental health among adolescents and adults in the country.

Mental and substance use disorders were reported as the leading cause of years lived with disability worldwide, with depressive disorders accounting for 40.5% of disability-adjusted life years.^[6] Also, 64% of patients with schizophrenia were reported to have severe to very severe levels of social disability.^[7] The reason for this is because a wide treatment gap exists globally, between those who require treatment and those who receive it and this gap is greater in the low- and middle-income countries where it ranges between 76 to 85% as opposed to 35 to 50% in the high-income countries.^[1] This treatment gap, is partly due to lack of access to medical facilities especially in the rural area but majorly due to

the lack of knowledge which influence the attitude of the people towards mental illness. Studies in some low- and middle-income countries have shown that less than 10% of patients with schizophrenia receive treatment^[8,9] while a community study in Nigeria reported that none of the participants with psychotic disorder had ever received professional mental health care, though, 15% had been to general practitioners and alternative health care practitioners.^[10]

To reduce the burdens of mental illness and associated disabilities, cases must have to be treated adequately. The World Health Organization in an attempt to reduce this treatment gap in the low- and middle-income countries, introduced the Mental Health Gap Action Programme (mhGAP)^[11] which takes mental health services closer to the people. However, for the programme to be successful, the attitude of people towards mental illness and its treatment must have to change. This attitude result from belief about the etiology of mental illness. A study conducted among Nigerian patients and their relatives as well as a meta-analysis, identified Medical, Psychosocial and spiritual or supernatural etiology of mental illness.^[12,13] High levels of ignorance due to belief in supernatural causation of mental illness have been found among Nigerians^[14-17] and this has made traditional healers and religious leaders to be the first point of consultation.^[15,18]

Mental health literacy is defined as knowledge and beliefs about mental disorders which aid their recognition, management or prevention.^[19,20] The definition comprises the ability to recognize specific mental disorder, beliefs and knowledge about the etiology, intervention, management, and availability of mental health services.^[20] A high level of mental health literacy will enable people to recognize mental disorders earlier and be more willing to seek professional help.^[21] It is also a significant predictor of psychological and pharmacological treatment engagement^[22] and therefore, a critical mediator of health and functional outcomes.^[23] All these supports the finding by Bostock *et al.*, which reported that low mental health literacy is associated with increased mortality^[24] Mental health literacy has been reported to be poor in the low- and middle-income countries,^[25] and studies among adolescents in Nigeria yielded the same finding.^[15,26] Similarly, poor mental health literacy was reported among young people in Australia, Sweden, and Portugal.^[27-29] Studies have revealed that the levels of mental health literacy are worse for schizophrenia compared to depression^[30-33] and that the rates of recognition were greater among females than males^[28,29]

It is therefore clear that measures that would increase mental health literacy will reduce treatment gap and mortality and thereby, lessen the burden of mental illness. This will ultimately be of immense benefit to the individuals, their families and the society at large. It has been shown that School based psycho-educational

interventions is effective in reducing stigma, promotes young peoples' mental health knowledge, and increase mental health literacy in both higher and lower income countries.^[34] Similarly, a study conducted in Germany showed that an information booklet as a low-threshold educational approach can significantly enhance depression-specific knowledge among students.^[35,36]

Literature search reveal paucity of studies on mental health literacy in Nigeria and none was found to have been done in the study area. Conducting this study in Benue will help reveal the level of mental health awareness among adolescents which will aid the planning of awareness programmes and thereby, guide interventions by health care professionals, schools, religious institutions, NGO's and government so as to increase the level mental health awareness among adolescents as well as the general population. It will also add to the body of knowledge.

AIM

Lack of adequate knowledge about mental illness is a critical factor militating against the management of mental illness and thereby, creating huge disability. This study aims at assessing the level of mental health literacy about Depression and Schizophrenia among adolescent in secondary school in Makurdi.

OBJECTIVES

- To determine the Knowledge of depression and schizophrenia among secondary school pupil in Makurdi.
- To determine the knowledge of secondary school pupil in Makurdi about the appropriate sources of treatment/ help for depression and schizophrenia.

MATERIALS AND METHODS

Study location and participants: The study was conducted in Makurdi, the capital city of Benue state. Being the capital of the state, Makurdi has significant representation of all the ethnic tribes of Benue state.

Study design: Cross sectional descriptive study

Study Instruments

1. A proforma was designed and administered to the participants which elicits the age, gender and religion of the respondents.
2. Widely used case vignettes of both depression^[19] and schizophrenia^[20,26,37] was presented to the respondents, each of which was followed by open-ended questions to elicit
 - a. Participant's knowledge of possible diagnosis
 - b. Participant's knowledge of appropriate treatment required

Procedure: The secondary schools in the Makurdi Local government area were stratified into two groups (Private and public) out of which one schools each was randomly selected from each stratum. And from the selected

schools, one arm was randomly selected each from the three levels of the senior secondary arms of the schools. The study instrument was administered to all consenting students in the selected arms of each school. Ethical approval was obtained prior to this from the ethical committee of the Benue State University Teaching Hospital and permission was also obtained from the Benue State ministry of health.

Data Analysis: Responses to the open-ended questions were grouped in categories based on similarities of thematic content and presented in tables. Data analysis was carried out using the IBM-SPSS version 23 and descriptive statistics including frequency, percentages, mean and standard deviation were computed for relevant variables.

RESULTS

A total of 228 students participated in the study. Their ages ranged between 13 to 19 years (mean = 15.88 years;

sd \pm 1.55) with 51.8% being females. With regards to recognition of the diagnosis in the depression case vignettes (Table 1), depression was correctly identified by 29.8% of the respondents while 5.7% interpreted it as Mental illness. Emotional problem was identified in about a fifth of the respondents which was closely followed by maltreatment or abuse and reaction to stress, identified by 13.6% and 12.7% respectively. The respondents also misidentified depression as physical illness among 7.5% of the respondents as well as guilt of undisclosed wrong doing (8.3%) like being pregnant. Other misdiagnosis of depression by 3.1% of the respondents includes academic problems, problem with boyfriend, menstrual pain and thinking too much. The study also revealed that out of the 68 respondents that correctly identified depression in the vignette, close to two-third were females (Table 2).

Table 1: Respondent's perception of the depression vignette.

Variables	Frequency	Percentage
	n	(%)
Psychological/ mental disorder or problem	13	5.7
Emotional problems	44	19.3
Stress	31	13.6
HIV/ Physical infection	17	7.5
Guilty of undisclosed offence	19	8.3
Depression	68	29.8
Maltreatment/ Abuse	29	12.7
Others	7	3.1
TOTAL	228	100.0

Table 2: Proportion of respondents who correctly identified depression by their gender.

Gender	Depressed	Percentage
	n	(%)
Male	27	39.7
Female	41	60.3
TOTAL	68	100.0

Responses to the Schizophrenia vignette on the other hand (Table. 3), showed that only one of the respondents was able to correctly diagnose schizophrenia as mental illness followed by depression and emotional problems identified by 11.0% and 10.1% of the respondents respectively. They also misidentified schizophrenia as drug addiction (8.8%), reaction to stress (7.5%), spiritual attack (7.0%), cultism (6.6%), guilt of undisclosed wrong doing (5.3%) and HIV or other physical illness (1.8%). Other misidentifications by 1.8% of the respondent include; accident, sick and cancer.

Table 3: Respondent's perception of the schizophrenia vignette.

Variables	Frequency	Percentage
	n	(%)
Mental disorder or problem	91	39.9
Emotional problems		
Stress	23	10.1
HIV/ Physical infection	17	7.5
Guilty of undisclosed offence	4	1.8
Spiritual attack	12	5.3
Drug abuse	16	7.0
Depression	25	11.0
Schizophrenia	1	0.4
Cultism	15	6.6
Others	4	1.8
TOTAL	228	100.0

Table. 4 shows respondents' preferred source of help or treatment which revealed that 99.6% of the respondents reported that the characters in both vignettes will need treatment or help. Regarding the depression vignette, only 1.8% preferred Psychiatrists as the source of help seeking. Support from family and friends is the most recommended (29.8%), this is followed by general

practitioners, recommended by a quarter of the respondents and then, Psychologist and Counsellors, each of which was recommended by 17.5% of respondents. Religious leaders were suggested as source of help seeking in 4.8%, followed by teachers in 3.1% while 0.4% reported no need for treatment or help.

Responses to the schizophrenia vignette revealed that Psychiatrist was recommended as the preferred source of

help seeking by 14.9% of the respondents, a quarter recommended support from family and friends, over a fifth preferred medical practitioners while 12.7%, 11.8% and 10.1% of respondents recommended religious leaders, Psychologist and Counsellors respectively. Traditional healer was recommended by 1.3% of the respondents, 0.9% recommended teachers while 0.4% reported no need for treatment or help.

Table 4: Respondent's preferred source of treatment or help for cases in the case vignettes.

Variable	Depression		Schizophrenia	
	Frequency	Percentage	Frequency	Percentage
	n	(%)	n	(%)
Physician/ Doctor	57	25.0	52	22.8
Psychiatrist	4	1.8	34	14.9
Pastor/ Church/ Priest	11	4.8	29	12.7
Traditional healers	0	0.0	3	1.3
Psychologist	40	17.5	27	11.8
Counsellor	40	17.5	23	10.1
Support from family/ friends	68	29.8	57	25.0
Teachers	7	3.1	2	0.9
No need for help	1	0.4	1	0.4
TOTAL	228	100.0	228	100.0

DISCUSSION

The current study revealed that the ability to recognize both depression and schizophrenia is low and is in agreement with the widespread ignorance about mental illness reported in previous studies among adults and adolescents in Nigerian.^[10,15] Widespread misrepresentation of the ideas about mental illness in films and the mass media has been identified and described as stereotypical, negative or flat-out wrong and has been reported to influence people's opinions.^[38-40] As such, it is regarded as one of the main barriers underlying low mental health literacy in low- and middle-income countries.^[41] The current study clearly demonstrates the knowledge gap and hence, low mental health literacy (MHL) about depression and schizophrenia among secondary school adolescents in Makurdi, Nigeria and the need to further intensify awareness programs on mental health and mental illness.

The low depression and schizophrenia literacy in this study is consistent with studies conducted locally in the south-western and south-eastern parts of Nigeria^[26,42-43] and internationally.^[27,28,31,33] However, the rate of recognition of depression in this study (29.8%) is relatively higher compared to the other local studies identified in literature search (4.8% and 10.4%).^[42,43] Similarly, 0.4% of the respondents were able to recognize schizophrenia compared to the only study identified in literature search on schizophrenia literacy among adolescents in Nigeria which was conducted in Lagos and reported that no participant was able to recognize schizophrenia.^[26] This disparity may appear unexpected especially considering the studies in south-western part of Nigeria which were conducted in

Lagos,^[26,43] a more urban society where awareness is expected to be higher. However, the increased awareness in this study may be due to activities of some non-governmental organizations (NGO) in the state that incorporated awareness programs in schools as part of their activities. Notable among such NGO's is the Comprehensive Community Mental Health Program (CCMHP), sponsored by the Australian AID and the Christopher Blind Mission which fashioned its programme after the mhGAP action programme of the World Health Organization. The findings of this study also agree with previous studies that reported that the levels of mental health literacy are worse for schizophrenia compared to depression.^[30-33] Also, the recognition of depression among the respondents is greater among females (60.3%) than males (30.7%) which is consistent with reports from previous studies.^[28,29]

More respondents in the current study recognized schizophrenia as mental illness (39.9%) than they recognized depression as mental illness (5.7%). This support the notion that depression is seen as normal reaction to adverse life situations and not an illness in majority of the black community.^[44] Also, it is in agreement with previous studies in which depression was largely misidentified as reaction to stress,^[27,32] more respondents misdiagnosed depression as reaction to stress (13.6%) compared to the proportion that misdiagnosis schizophrenia as reaction to stress (7.5%). It is for the same reason that higher proportion of the respondents misdiagnosed emotional problems, guilt of undisclosed offence like getting pregnant as well as maltreatment or abuse which can be considered as

stressful events for depression than they did for schizophrenia.

The misrecognition of schizophrenia as spiritual attack in this study by 7% of the respondents is consistent with studies reporting high levels of ignorance due to supernatural causation of mental illness in Nigeria,^[14-17] Asia,^[45,46] and Europe.^[47] The same attribution to spiritual attack is not seen with depression in the current study thereby, further supports the view that among blacks, depression is viewed to be a normal reaction to adverse life situations.^[44]

Previous studies revealed that beliefs about what a problem is, plays a clear role in guiding individuals toward different formal and informal sources of help.^[48] Although low, 14.9% of the respondents recommended psychiatrists as the appropriate source of help seeking for schizophrenia compared to 1.3% for depression, probably due to the relatively higher rate of identification of schizophrenia as mental illness. The low recommendation of help seeking from psychiatrist is consistent with the finding of previous studies conducted in south-western Nigeria,^[26] China,^[33] Indians^[36] and among African-Americans.^[49] It however, contrasts the high recommendation of help seeking from psychiatrist reported from studies in some other countries (64.6-86.7%) due to high mental health literacy levels.^[50,51]

Help seeking from doctors and hospital was recommended by a quarter of the respondents for depression and over a fifth for schizophrenia, similar to studies rating general practitioners high among helping professionals.^[19,52,53]

Psychologists and Counsellors were recommended by about a tenth of the respondents for both depression and schizophrenia. In line with this finding, studies examining patients' preferences in the treatment of depression reported that lay people prefer psychotherapy over medication.^[54,55] Similarly, some other studies also reported that psychological interventions are seen by the public as effective for psychotic disorders.^[56-58]

Support from family and friends is the most recommended source of help seeking for both depression and schizophrenia at the rates of 29.8% and 25% respectively. This finding supports previous studies reporting that family was the main source of intended help for mental illness among adolescents.^[31,59,60] The recommendation of family support together with the relatively high rate of recognition of schizophrenia as mental illness (39.9%) confirms the report of another study which found that the ability to recognize mental illness increase help seeking from friends while recognition of the disease as schizophrenia increases help seeking from professionals.^[61]

In agreement with reports of widespread belief of supernatural causation of mental illness that necessitate

help seeking from religious and traditional healers,^[14-18] the current study revealed that a total of 14% of respondents recommended spiritual healers as source of help seeking for schizophrenia (Religious leaders by 12.7% and Traditional healers by 1.3%) compared to only 4.8% that recommended religious leaders as source of help seeking for depression. When this is related to the fact that 7% of the respondents misdiagnosed schizophrenia as spiritual attack while none misdiagnosed depression as spiritual attack, it is clear that the higher misdiagnosis of spiritual attack in response to the schizophrenia vignette influenced the higher recommendation of spiritual healers as source of help seeking for schizophrenia.

CONCLUSION

The current study revealed low mental health literacy about depression and schizophrenia among secondary school students in Makurdi, Nigeria. The inability to recognize specific mental disorders and identify appropriate source of help seeking shows the need for the intensification of awareness programmes on mental health and mental illness in Benue and Nigeria as a whole.

ACKNOWLEDGMENT

All the students who participated in the study as well as the school principals, vice principals and the teachers for their support

SOURCE OF SUPPORT/ CONFLICT OF INTEREST

This study had no external source of support and there is no conflict of interest by any of the researchers

REFERENCES

1. World Health Organization, executive board 130th session. Global burden of mental disorders and the need for a comprehensive, coordinated response from health and social sectors at the country level. December 2011
2. World Health Organization. Adolescent mental health. September 2020 <https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health>
3. Varella S. Age distribution of population in Nigeria 2021, by gender. Statista; May 2021
4. Ministry of Health, WHO-AIMS Report on Mental Health Systems in Nigeria. Ibadan, Nigeria: Ministry of Health and WHO, 2006.
5. World Health Organization. *World Health Statistics 2006*. World Health Organization; Geneva, Switzerland, 2006.
6. Whiteford HA, Degenhardt L, Rehm J, Baxter AJ, Ferrari AJ, Erskine HE, et al. Global burden of disease attributable to mental and substance use disorders: findings from the Global Burden of Disease Study 2010. *Lancet*, 2013; 382(9904): 1575–86.

7. Bottlender R, Strauss A, Möller H. Social disability in schizophrenic, schizoaffective and affective disorders 15 years after first admission. *Schizophrenia Research*, 2010; 116(1): 9–15.
8. Saxena S, Lora A, Morris J, Berrino AM, Esparza P, Barrett T. Mental health services in 42 low- and middle-income countries: a WHO-AIMS cross-national analysis. *Psychiatric Services*, 2011; 62: 123-125.
9. Lora A, Kohn R, Levav I, McBain R, Morris J, Saxena S. Service availability and utilization and treatment gap for schizophrenic disorders: a survey in 50 low-and middle-income countries. *Bulletin of the World Health Organisation*, 2012; 90(1). DOI: 10.1590/s0042-96862012000100012
10. Gureje O, Olowosegun O, Adebayo K, Stein DJ. The prevalence and profile of non-affective psychosis in the Nigerian survey of mental health and wellbeing. *World Psychiatry*, 2010; 9: 50-55.
11. WHO Mental Health Gap Action Programme (mhGAP). [Available from: http://www.who.int/mental_health/mhgap/en/]. Accessed 1 May 2019.
12. Adebawale TO, Ogunlesi AO. Beliefs and knowledge about aetiology of mental illness among Nigerian psychiatric patients and their relatives. *African Journal of Medical Science*, 1999; 28: 35–41.
13. Choudhry FR, Mani V, Ming LC and Khan TM. Beliefs and Perception about mental health issues: a meta-synthesis. *Neuropsychiatric Disease and Treatment*, 2016; 12: 2807-2818.
14. Armiyau AY. A review of stigma and mental illness in Nigeria. *Journal of clinical case reports*, 2015; 5: 1. <http://dx.doi.org/10.4172/2165-7920.1000488>
15. Dogra N, Omigbodun O, Adedokun T, Bella T, Ronzoni P, Adesokan A. Nigerian's secondary school children's knowledge of and attitudes to mental health and illness. *Clinical Child Psychology and Psychiatry*, 2012; 17(3): 336–53.
16. Ukpong DI and Abasiubong F. Stigmatizing attitude towards the mentally ill: A survey in a Nigerian Teaching Hospital. *South African journal of Psychiatry*, 2010; 16(2): 56-60.
17. Said JM, Jibril A, Isah R and Beida O. Pattern of Presentation and Utilization of Services for Mental and Neurological Disorders in Northeastern Nigeria: A Ten-Year Study. *Psychiatry Journal*, 2015; 2015: 328432.
18. Abiodun OA. Pathways to mental health care in Nigeria. *Psychiatric Services*, 1995; 46(8): 823–6. <https://doi.org/10.1176/ps.46.8.823>.
19. Jorm, A. F, Korten, A. E, Jacomb, P. A, et al. Mental health literacy': a survey of the public's ability to recognise mental disorders and their beliefs about the effectiveness of treatment. *Medical Journal of Australia*, 1997; 166: 182-186.
20. Jorm AF, Korten AE, Jacomb PA, Christensen H, Rodgers B, Pollitt P. Public beliefs about causes and risk factors for depression and schizophrenia. *Social Psychiatry and Psychiatric Epidemiology*, 1997; 32(3): 143-148.
21. Wong FK, Lam YK, Poon A. Depression literacy among Australians of Chinese-speaking background in Melbourne, Australia. *BMC Psychiatry*, 2010; 10(1): 7.
22. Bonabi H, Muller M, Ajdacic-Gross V, Eisele J, Rodgers S, Seifritz E, et al. Mental health literacy, attitudes to help seeking, and perceived need as predictors of mental health service use: a longitudinal study. *Journal of Nervous and Mental Diseases*, 2016; 204(4): 321–324.
23. Squiers L, Peinado S, Berkman N, Boudewyns V, McCormack L. The health literacy skills framework. *Journal of Health Communication*, 2012; 17: 30–54.
24. Bostock S, Steptoe A. Association between low functional health literacy and mortality in older adults: longitudinal cohort study. *British Medical Journal*, 2012; 344: e1602.
25. Asyanti S, Karyani U. Mental health literacy among youth in Surakarta. *Advances in Social Sciences Education and Humanities Research*, 2018; 133: 12–6.
26. Adeosun II, Adegbohun A, Jeje O and Manuwa F. Mental Health Literacy about schizophrenia among Secondary School Students in Lagos, Nigeria. *International Neuropsychiatric Disease Journal*, 2015; 4(3): 132-139.
27. Loureiro LM, Jorm AF, Mendes AC, et al. Mental health literacy about depression: A survey of Portuguese youth. *BMC Psychiatry*, 2013; 13: 129.
28. Melas PA, Tartani E, Forsner T, Edborg M and Forseli Y. Mental Health literacy about depression and schizophrenia among adolescents in Sweden. *European Psychiatry*, 2013; 28: 404-411.
29. Cotton SM, Wright A, Harris MG, Jorm AF and McGorry PD. Influence of gender on mental health literacy in young Australians. *Australian and New Zealand Journal of Psychiatry*, 2006; 40: 790-796.
30. Sai G, Furham A. Identifying depression and schizophrenia using vignettes: A methodological note. *Psychiatry Research*, 2013; 210(1): 357-362.
31. Wright A, Harris MG, Wiggers JH, Jorm AF, Cotton SM, Harrigan SM et al. Recognition of depression and psychosis by young Australian and their beliefs about treatment. *Medical Journal of Australia*, 2005; 183: 18-23.
32. Leighton S. Using a vignette-based questionnaire to explore adolescents' understanding of mental health issues. *Clinical Child Psychology and Psychiatry*, 2010; 15(2): 231-250.
33. Chen S, Wu Q, Qi C, Deng H, Wang X, He H, Long J, Xiong Y and Liu T. Mental health literacy about schizophrenia and depression: a survey among Chinese caregivers of patients with mental disorder. *BMC Psychiatry*, 2017; 17: 89. DOI 10.1186/s12888-017-1245-y
34. Weare K, Nind M. Mental health promotion and problem prevention in schools: what does the

- evidence say? Health Promotion International, 2011; 26(1): i29–69.
35. Schiller Y, Schulte-Korne G, Eberle-Sejari R, Maier B, Allgaier A. Increasing knowledge about depression in adolescents: effects of an information booklet. *Social psychiatry and Psychiatric Epidemiology*, 2014; 49: 51-54.
 36. Ventieri D, Clarke DM and Hay M. The effects of a school based educational intervention on pre-adolescent's knowledge of and attitudes towards mental illness. *Advances in School Mental Health Promotion*, 2011; 4(3): 5-17.
 37. Kermode, M., Bowen, K., Arole, S., Joag, K., & Jorm, A. F. Community beliefs about causes and risks for mental disorders: a mental health literacy survey in a rural area of Maharashtra, India. *The International Journal of Social Psychiatry*, 2010; 56(6): 606-622.
 38. Aina OF. Mental illness and cultural issues in West African films: Implications for orthodox psychiatric practise. *Medical Humanities*, 2004; 30: 23-26.
 39. Kirstin Fawcett. How mental illness is misrepresented in the media: Insidious portrayals on TV shape perceptions about real-life people with psychological disorders. 2015. news/health-wellness/article/2015/04/16/how-mental-illness-is-misrepresented-in-the-media
 40. Srivastava K, Chaudhury S, Bhat PS and Mujawar S. Media and mental health. *Industrial Psychiatry Journal*, 2018; 27(1): 1-5. doi: 10.4103/ipj_ipj_73_18
 41. Bahr Weiss. Mental Health Literacy at the Public Health Level in Low- and Middle-Income Countries: An explanatory mixed methods study in Vietnam. Ann Arbor, MI: Inter-University Consortium for Political and Social Research [distributor], 2020. <https://doi.org/10.3886/E129121V1>
 42. Aluh DO, Anyachbelu OC, Anosike C and Anizoba EL. Mental Health Literacy: what do Nigerian adolescents know about depression? *International Journal of Mental Health Systems*, 2018; 12: 8. doi:10.1186/s13033-018-0186-2
 43. Adeosun II. Adolescent Student's Knowledge of Depression and Appropriate Help-seeking in Nigeria. *International Neuropsychiatric Disease Journal*, 2016; 6(3): 1-6.
 44. Garfield Hylton. The Sad State of Depression in the Black Community. Abernathy 2015, <https://abernathymagazine.com/depression-black-community/>
 45. Razali SM, Khan UA and Hasanah CI. Belief in supernatural causes of mental illness among Malay patients: impact on treatment. *Acta Psychiatrica Scandinavica*, 1996; 94(4): 229-233.
 46. Kinzie JD. Overview of clinical issues in the treatment of Southeast Asian refugees. In: Owan TC, editor. *Southeast Asian Mental Health: Treatment, Prevention, Services, Training, and Research*. Washington, DC: National Institute Mental Health, 1985.
 47. Pfeifer S. Belief in demons and exorcism in psychiatric patients in Switzerland. *Br J Med Psychol*, 1994; 67(pt 3): 247–258.
 48. Olafsdottir S and Pescosolido BA. Constructing illness: how the public in eight western nations respond to a clinical description of “schizophrenia”. *Social science and medicine*, 2011; 73(6): 929- 938.
 49. Snowden LR. Barriers to effective mental health services for African-Americans. *Mental Health Services Research*, 2001; 3: 181-187.
 50. Hu J, Zheng Q, Zhang Y, Liu C, Tian X, Liu X, Wang D and Ma J. Help-seeking behavior of individuals with schizophrenia in the general population of Hunan, China. *Scientific reports*, 2021; 11: 23012. Doi: 10.1038/s41598-021-01819-w
 51. Ediriweera HW, Fernando SM, Pai NB. Mental health literacy survey among Sri Lankan carers of patients with schizophrenia and depression. *Asian journal of Psychiatry*, 2012; 5(3): 246-250.
 52. Priest RG, Vize C, Roberts A., et al. Lay people's attitude to treatment of depression: result of opinion poll for Depression Defeat Campaign just before its launch. *British Medical Journal*, 1996; 313: 858-859.
 53. Bradli H. The image of mental illness in in Switzerland. *The image of madness: The public facing mental illness and Psychiatric treatment* (eds. J. Guimon, W Fischer and N Sartorius), 1999; 29-37.
 54. Angermeyer MC, Matschinger H, Riedel-Heller S. whom to ask for help in case of a mental disorder? Preferences of the lay public. *Socia Psychiatry and Psychiatric Epidemiology*, 1999; 34(4): 202-210.
 55. Van Schoik DJ, Klijn AF, Van Haut HP et al. Patients' preference in the treatment of depressive disorder in primary care. *General Hospital Psychiatry*, 2004; 26(3): 184-189.
 56. Jorm AF, Angermeyer M and Katschnig H. Public knowledge of and attitude to mental disorder: alimiting factor in the optimal use of treatment services. In *Unmet needs Need in Psychiatry* (eds. G Andrews & S. Henderson), 2000; 399-413. Cambridge: Cambridge University Press.
 57. Angermeyer MC and Matschinger H. Public attitude towards psychiatric treatment. *Acta Psychiatrica Scandinavica*, 1996; 94: 326–336.
 58. Hillert A, Sandmann J, Ehmig SC., et al. the general public's cognitive and emotional perception of mental illness: an alternative attitude research. In *the image of madness: The public facing mental illness and psychiatric treatment* (eds J. Guimon, W. Fischer & N.Sartorius), 1999; 56-71. Basel: Karger
 59. Jorm AF, Wright A, Morgan AJ. Where to seek help for a mental disorder? National survey of the beliefs of Australian youth and their parents. *Medical Journal of Australia*, 2007; 187(10): 556-560.
 60. Rickwood D, Deane FP, Wilson CJ and Ciarrochi J. Young people's help seeking for mental health problems. *Australian e-journal for the Advancement of Mental Health*, 2005; 4(3) (supplement).

www.auseinet.com/journal/vol4iss3suppl/rickwood.pdf

61. Yamasaki S, Ando S, Shimodera S, Endo K, Okazaki Y, Asukai N, Usami S, Nishida A, and Sasaki T. The Recognition of Mental Illness, Schizophrenia Identification, and Help-Seeking from Friends in Late Adolescence, 2006; PLOS ONE. doi.org/10.1371/journal.pone.0151298.