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Perceived Barriers to Help Seeking for Psychosis among Secondary School Students in Lagos, Nigeria

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Authors' contributions

This work was carried out in collaboration between all authors. Author All designed the study, wrote the protocol and supervised the work. Authors AAA, JOO and OMO participated in data collection. Authors All and AAA managed data entry and statistical analysis. Authors All and BAO managed the literature searches and edited the manuscript. All authors read and approved the final manuscript.

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ABSTRACT

Aim: To assess the barriers to help seeking for psychosis among adolescent students in Lagos Nigeria.

Study Design and Methodology: Using a cross-sectional study design, 156 adolescent students attending a public co-educational secondary school in Lagos, south-West Nigeria completed a vignette-based questionnaire which assessed barriers to help-seeking for psychosis. The vignette depicted an adolescent with psychosis (schizophrenia).

Results: The mean age of the participating students was 15.9 (±1.1) years and 49% were males. The most frequently reported barrier to help-seeking was stigma (42.5%). Others included illness-

related barriers (23.0%), disapproval by friends/families (15.8%), negative perceptions about treatment (9.4%), preference for spiritual cure (7.2%), financial constraints (7.2%), and 'not knowing what to do' (5.8%).

Conclusion: Potentially modifiable barriers especially stigma, disapproval by social network and misperceptions about treatment hinder help-seeking for psychosis among the studied adolescents.

Keywords: Mental health literacy; adolescents; barriers; stigma; psychosis; schizophrenia; Nigeria.

1. INTRODUCTION

Schizophrenia is a chronic psychotic disorder characterised by impairment of the thought system, perception, mood and behaviour [1,2]; it is a leading cause of disability and a major contributor to the global burden of diseases [3]. Advances in medical knowledge have yielded a number of effective treatment options for the treatment of schizophrenia [4,5]. Nevertheless, up to 90% of affected individuals suffer from untreated psychosis, especially in developing countries [6,7]. This huge treatment-gap was highlighted in a Nigerian study by Gureje et al. [8] which found that none of a community sample with identifiable psychosis had ever presented to mental health services. Barriers to help seeking and the resultant prolongation in the duration of untreated psychosis have negative prognostic implications including poor treatment outcomes, impairment in psycho-social functioning and poor quality of life [9].

Globally, the barrier to help-seeking for psychosis is a relatively under-researched subject among adolescents. Previous studies conducted predominantly in Australia and Europe identified a number of structural and personal barriers to help-seeking for mental health problems among young people. The structural barriers include difficulties in accessing services due to financial constraint, long distance to service location, and hurdles before securing appointments. Personal barriers include stigma, non-recognition of the need for services, lack of knowledge or negative attitudes professional help available, lack of emotional competence to seek help, help-negating symptoms, belief that one can solve the problem oneself and preference for other sources of help including informal help from friends or family [10-16].

Adolescents are important target groups for early intervention in psychosis because the onset of psychosis may peak in adolescence [17]. However, the barriers to help seeking for psychosis among adolescents in Nigeria are

currently unknown. Elucidating the barriers to help-seeking will inform the design of interventions targeted at surmounting these barriers, thereby facilitating prompt help-seeking, early intervention and improved outcomes. This study aimed to assess the perceived barriers to help-seeking for psychosis among secondary school students in Lagos, Nigeria.

2. METHODOLOGY

The study design was a cross-sectional descriptive study of a sample of secondary school students in Lagos, Nigeria. Ethical approval was obtained from the Educational Division Authority in charge of the secondary school where the study was conducted. The participants were recruited from a public coeducational senior secondary school in Lagos, South-west Nigeria by convenient sampling. The participating students were selected from one arm each from senior secondary classes 1 to 3. All consenting students in the selected arms/classes were recruited, making a total of 156 participants. Prior to the commencement of the study, the students and staff were educated about the purpose and nature of the study.

The participants were presented a widely used case vignette of schizophrenia as part of a larger study on mental health literacy [11,18,19]. The content of the vignette that pertains to the data in the current report is as follows: "John is a 16 year old boy. For the past few months, John has stopped seeing his friends and no longer going to school. He locks himself in his room and does not want to talk to his family. He refuses to take his bath. His parents also hear him walking around his bedroom at night when everyone is sleeping. Even though they know he is alone, they have heard him talking, shouting and arguing as if someone else is there with him in the room. When they try to encourage him to do come out, he says he won't leave home because the neighbour is spying on him. They know he is not taking drugs because he never sees anyone or goes anywhere".

The case vignette was followed by an openended question designed to elicit barriers to help seeking as previously used in previous research [11]. The specific question was 'If you have a problem like John, what might stop you from seeking help/treatment'. Multiple responses were permitted. The age and gender of the participants were also elicited. Participants' responses to barriers to help-seeking were coded based on categories used in previous research on this subject [10-12]. These categories included structural barriers (e.g. financial constraint, lengthy distance to health service, difficulty in securing appointment / consultation); stigma-related barriers (concern about being viewed negatively, humiliated or embarrassed); barriers related to attitudes and beliefs about treatment/health service (e.g. lack of confidence in the source of help, perception that nothing can help concern about adverse effects of treatment,); barriers related to the illness (symptoms, lack of insight/ emotional competence to seek help, help negation/ resistance); and other barriers including preference for other sources of help, self-reliance (belief that one can handle the problem by oneself), and ignorance [10-12]. Questionnaires were completed by self-report and participants were encouraged to ask questions if they need further clarifications. They were assured of confidentiality and the fact that the questions were for research purposes and not an academic assessment.

2.1 Statistical Analysis

The major variable of interest in the current study is the perceived barrier to help seeking for schizophrenia. Using templates from previous research on this subject, open-ended responses to the item eliciting perceived barriers in the questionnaire were grouped into categories and tabulated based on similarity of thematic content. Two of the researchers independently conducted the assignment into categories before a consensus was reached on further review. Of the 156 participants, 139 questionnaires (89.1%) yielded relevant responses that could be analysed. Descriptive statistics such frequencies, percentages or mean values were computed for relevant socio-demographic and perceived barrier variables using IBM-SPSS version 20. Gender differences in perceived barriers were assessed using the chi-square. The level of significance was set at p<0.05.

3. RESULTS

3.1 Age and Gender of Participants

The mean age of the participating students was 15.9 (±1.1) years and 68 (48.9%) were males.

3.2 Categories of Barriers to Helpseeking

The barriers to seeking help for psychosis reported by the adolescents (Table 1) included stigma (42.5%), barriers related to the illness (23.0%), barriers related to attitudes and beliefs about treatment (fear/uncertainty about treatment modality (9.4%), preference for spiritual healing (7.2%), financial constraint (7.2%), wrong advice/disapproval by friends/families (22/139, 15.8%), and 'not knowing what to do' (5.8%).

Table 1. Barriers to help-seeking for psychosis

Barriers	n	%
Stigma	59	42.5
Illness-related	32	23.0
Attitude/beliefs about treatment	13	9.4
Disapproval by friends/families	22	15.8
Preference for	10	7.2
spiritual/traditional healing		
Financial constraint	10	7.2
Ignorance	8	5.8

3.3 Sample Responses on the Barriers to Help-seeking

3.3.1 Stigma-related barrier

'people will start running away from you if they hear what is happening to you', 'because of abusive words, you may not have the courage to look for help at the right place, 'if people notice, they will start spreading rumours about you', '...fear of secret being known by others', "To avoid the shame ... people will start laughing at you if they know about it", 'fear of embarrassment', 'fear of being mocked or laughed at', 'fear of discrimination', 'fear of stigmatisation by society'.

3.3.2 Barriers related to the illness

"if someone is totally hooked by the sickness, you may be mentally ill and insist that you are not insane" (lack of insight), "when you behave like John, you lock yourself up away from people and don't talk to anybody, it will be difficult to get

help" (social withdrawal) "if you believe that everybody hates you or they want to kill you..." (paranoia), "brain malfunction', 'the mental disorder' 'uncomfortable at the sight of people', 'not being in the right senses'.

3.3.3 Disapproval by family members/friends

'if you want to see a doctor and your parents say no...", "you need to talk to your family and friends and if they tell you not to go to psychiatric hospital, you can't go" "taking bad advice from people close to you", "when the problem is not shared with the right people", "discouragement", "peer pressure".

3.4 Gender Differences in Barriers to Help-seeking

Greater proportion of females perceived disapproval by friends (18.3% vs. 13.2%) and stigma (47.9% vs. 36.8%) as barriers to help-seeking for psychosis than males (Table 2). On the other hand, greater proportion of males considered negative attitudes to treatment (13.2% vs. 5.6%), Illness-related factor (27.9% vs. 18.3%), preference for spiritual treatment (11.8% vs. 2.8%) and financial constraint (11.8% vs. 2.8%) as barriers to help-seeking than females. However, the gender differences in the barriers to help-seeking for psychosis were not statistically significant (Table 2).

4. DISCUSSION

The current study assessed the perceived barriers to help-seeking for psychosis in a sample of secondary school students in Lagos, south west Nigeria. We found that the adolescents perceived stigma as the most common barrier to help-seeking. This finding is consistent with previous research on barriers to seeking conducted in Australia [11,13,14,19], Europe [20], America [21] and Asia [22]. In these studies, stigma-related hindering help-seeking concerns about being viewed negatively, avoided or discriminated, as well as anticipated embarrassment and humiliation. A systematic review of 22 studies on barriers to mental health help-seeking among young people identified stigma as the most formidable barrier [12]. Stigma is a deeply discrediting attitude which reduces the bearer's status to a tainted one on account of possessing an attribute which is considered deviant by the society [23]. Due to the high level of stigma experienced by individuals with psychosis, schizophrenia has

been referred to as 'today's equivalent of leprosy' [24]. A recent survey of the experiences of people with schizophrenia in Nigeria revealed that 87% had been unfairly treated or discriminated against on account of their illness, and consequently 4 out of 5 respondents concealed their illness [25]. Another study conducted among adolescent secondary school students in Ibadan, south-west Nigeria demonstrated predominantly negative views and high levels of stigmatisation against mental illness [26].

Disapproval by friends or family members, ignorance and beliefs in supernatural causation / treatment were also perceived as important barriers to help seeking in the current study. Previous research indicated that adolescents are more likely to turn to peers, families or other informal sources for help rather than consulting professionals when they have mental health needs [11,27,28]. Therefore, help-seeking beliefs and attitudes of adolescents may mirror those of the significant people within their social network. which will consequently influence the helpseeking behaviour of the adolescents. In Nigeria, studies conducted among both adolescent students and adults in the community have shown low levels of mental health literacy [29-31]. Mental illness is commonly misattributed to supernatural forces such as witchcraft, demons, curses or punishment by deities. These myths are also propagated by the mass media and local films which attract wide patronage in Nigeria [32,33]. These negative views facilitate consultation of traditional or spiritual healers and discourage prompt help-seeking from mental health professionals [34,35]. A recent study of pathways to mental health care among patients with schizophrenia in Lagos, south west Nigeria revealed that spiritual and native healers were the most frequent first point of call for helpseeking, eventuating in a longer duration of untreated psychosis [35].

In the current study, illness related factors were perceived as barriers to help seeking by nearly a quarter of the respondents. This converges with previous studies suggesting a help-negation process whereby symptoms of psychological distress induce refusal to seek help [16,36]. Individuals with psychosis may have limited insight into their mental health needs and therefore refuse to initiate or cooperate with formal help-seeking. Features of the illness such as paranoia and social withdrawal may also preclude help-seeking.

Table 2. Association between gender and perceived barriers to help-seeking for depression

Variable	Male (N=68) Female (N=71) Total (N=139)				
	n (%)	n (%)	n (%)	X ²	Р
Stigma	25 (36.8)	34 (47.89)	59 (42.5)	1.76	0.19
Illness related	19 (27.9)	13 (18.31)	32 (23.0)	1.81	0.18
Attitude to treatment	9 (13.2)	4 (5.63)	13 (94.0)	2.37	0.12
Disapproval by family/friends	9 (13.2)	13 (18.31)	22 (15.8)	0.67	0.41
Spiritual treatment	8 (11.8)	2 (2.82)	10 (7.2)	4.14	0.08*
Financial constraints	8 (11.8)	2 (2.82)	10 (7.2)	4.14	0.08*
Ignorance	2 (2.9)	6 (8.45)	8 (5.8)	1.94	0.16*

* fischer's correction applied

Some respondents identified negative attitudes or beliefs about available treatment as a possible barrier to help-seeking. Similarly, previous studies have shown that negative attitudes to help-seeking, negative perception of need for treatment, doubts about the efficacy of available treatment, lack of confidence in the care provider or uncertainties about the side-effect of treatment hinder adolescents from seeking appropriate help for mental health problems [37,38]. The only structural barrier to helpseeking reported in the current study is financial constraint. Payment for mental health services is 'out of pocket' in Nigeria, therefore people with mental health needs may not be able to receive treatment due to lack of funds [39].

Previous research suggests that females have more positive attitudes towards help seeking and high school girls are more likely to seek help for mental health needs than their male counterparts [40,41]. Furthermore, female gender was reported to be associated with intention to seek help from friends or professionals, among adolescent students [42,43]. In the current study. females considered disapproval by family or friends and stigma as more important barriers to help-seeking for psychosis, while perceived negative attitudes to treatment, illnessrelated factors, preference for spiritual treatment and financial constraints as more important barriers. Though, this gender related differences were not statistically significant in the current study, further studies may elicit the relationship between gender and barriers to help seeking for psychosis thereby informing the need for gendertargeted interventions that could facilitate helpseeking.

Our findings suggest that policies directed at provision of available, affordable and accessible mental health care alone are unlikely to achieve reduction in the treatment gap for schizophrenia until the personal barriers to help-seeking such

as stigma, ignorance and negative influences are surmounted. Therefore, in order to facilitate prompt utilisation of services by adolescents with psychosis and consequently early intervention, strategies targeted at fighting stigma and improving mental health literacy among adolescents in Nigeria are indicated. Evidencebased interventions in this regard demonstrated in other parts of the world include integration of mental health literacy into school curriculum, public mental health literacy campaigns, destigmatisation and organised contact with users of mental health services [44-52]. Similar interventions could be adapted in Nigeria with consideration to cultural competence and feasibility in a resource constrained setting [53]. The messages in these campaigns must clearly address stigma, deficits in knowledge about schizophrenia and provide detailed information about sources of help seeking. Myths about supernatural causation must be debunked and fears about orthodox care addressed. In order to reach adolescents, the campaigns must be channelled through the appropriate outlets such as social media, mobile phone text messages, and favourite entertainment channels on the mass media. There is also need to provide an allinclusive mental health financing scheme to remove barriers to care associated with 'out of pocket payment'.

The current study has a number of important limitations. The participants were recruited by convenient sampling from a selected school and the sample size was limited. This may limit generalisation of the results to the general population of Nigerian adolescents. Secondly, the reaction of participants in real-life situations may not be consistent with their responses to the vignette based questionnaire, and case vignettes may not reflect the complexity manifested in real life. Furthermore, socially desirable responses cannot be ruled out. However, participants were assured of the anonymity and confidentiality of

their responses. The use of case vignette has also been shown to facilitate communication of the adolescent's opinion with minimal interference from the researcher. In addition, the use of a similar methodology to previous studies conducted in other parts of the world facilitated comparison of our results with extant literature. Overall, this study has provided very valuable information on a subject that has not been previously researched in Africa. Further large scale studies are required to confirm and extend our findings.

5. CONCLUSION

This study found that adolescent secondary school students in Lagos Nigeria predominantly perceived personal factors such as stigma, influences by family members or friends, negative attitudes to treatment and illness related factors as predominant barriers to help seeking for psychosis. In order to facilitate early intervention in adolescents with psychosis and reduce the prevailing treatment gap, interventions must target the removal of these barriers through strategic mental health literacy and destigmatisation.

ETHICAL APPROVAL

All authors declare that ethical approval was obtained and the study was performed in accordance with the ethical standards laid down in the 1964 Declaration of Helsinki.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

- American Psychiatric Association. Diagnostic and statistical manual of mental disorders (4th edition), Washington; 1994.
- World Health Organization. The International Classification of Diseases, 10th Edition. Classification of Mental and Behavioural Disorders. Clinical descriptions and diagnostic guidelines. Geneva: World Health Organization; 1992.
- Lopez AD, Mathers CD, Ezzati M, Jamison DT, Murray CJ. Global and regional burden of disease and risk factors 2001: systematic analysis of population health data. Lancet. 2006;367(9524):1747–1757.

- Lieberman JA. Effectiveness of antipsychotic drugs in patients with schizophrenia: Efficacy, safety and cost outcomes of CATIE and other trials. Journal of Clinical psychiatry. 2007;68(2): e04.
- Leutch S, Tardy M, Komossa K, Heres S, Kissling W, Davis JM. Maintenance treatment with antipsychotic drugs for schizophrenia. Cochrane Database Syst Rev. 2012;CD008016.
- 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.
- Lora A, Kohn R, Levav I, Mc Baine R, Morris J, Saxena S. Service availability and utilisation and treatment gap for schizophrenic disorders: A survey in 50 low-and middle-income countries. Bulletin of the World Health Organization. 2012; 90:47-54.
- 8. 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.
- Perkins DO, Gu H, Boteva K, Lieberman JA. Relationship between duration of untreated Psychosis and outcome in firstepisode schizophrenia: A critical Review and Meta-Analysis. American Journal of Psychiatry. 2005;162:1785-1804.
- 10. Rickwood DJ, Deane FP, Wilson CJ. When and how do young people seek professional help for mental health problems. Medical Journal of Australia. 2007;187:535-539.
- 11. 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.
- Gulliver A, Griffiths KM, Christensen H. Perceived barriers and facilitators to mental help-seeking in young people: A systematic review. Bio Med Central Psychiatry. 2010;10:113.
- Jorm AF, Wright A. Beliefs of young people and their parents about the effectiveness of interventions for mental disorders. Australian and New Zealand Journal of Psychiatry. 2007;41:656-666.
- 14. Yap MBH, Wright A, Jorm AF. The influence of stigma on young people's

- help-seeking intentions and beliefs about helpfulness of various sources of help. Social Psychiatry and Psychiatric Epidemiology. 2011;46(12):1257-1265.
- Yap MB, Reavley N, Jorm AF. Where would young people seek help for mental disorders and what stops them? Findings from an Australian national survey. Journal of Affective Disorders. 2013;147:255-261. DOI: 10.1016/j.jad.2012.11.014.
- Wilson CJ. General psychological distress symptoms and help avoidance in young Australians. Advances in Mental Health. 2010;9(1):63-72.
- Marshall M, Lewis S, Lockwood A, Drake R, Jones P, Croudace T. Association between duration of untreated psychosis and outcome in cohorts of first-episode patients: A systematic review. Archives of General Psychiatry. 2005;62:975-983.
- 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.
- Jorm AF, Wright. Influences on young people's stigmatizing attitudes towards peers with mental disorders: National Survey of young Austrians and their parents. British Journal of Psychiatry. 2008;192(2):144-9.
- Schomerus G, Angermeyer MC. Stigma and its impact on help-seeking for mental disorders: What do we know? Epidemiologia e Psichiatria Sociale. 2008; 17(1):31-37.
- Barksdale CL, Molock SD. Perceived norms and mental health help-seeking among African American college students. The Journal of Behavioural Health Services and Research. 2009;36(3):285-299.
- Shidhaye R, Kermode M. Stigma and discrimination as a barrier to mental health service utilization in India. International Health. 2013;5(1):6-8.
- Goffman E. Stigma: Notes on the management of spoiled identity. Englewood Cliffs, NJ: Prentice Hall; 1963.
- 24. Torrey F. Surviving schizophrenia: a manual for families, consumers and providers. Harper and Row, New York; 1994.
- 25. Adeosun II, Adegbohun AA, Jeje OO, Adewunmi TA. Experience of

- discrimination by people with schizophrenia in Lagos, Nigeria. Journal of Public Mental Health. 2014;13(4):189-196. DOI: 10.1108/JPMH-06-2013-0038.
- Ronzoni P, Dogra N, Omigbodun O, Bella T, Atilola O. Stigmatization of mental illness among Nigerian school children. International Journal of Social Psychiatry. 2010;56(5):507-514.
- 27. 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.
- 28. Burns JR, Rapee RM. Adolescent mental health literacy: young people's knowledge of depression and help-seeking. Journal of Adolescence. 2006;29:225-239. DOI: 10.1016/j.adolescence.2005.05.004.
- Gureje O, Lasebikan VO, Ephraim-Oluwanuga O, Olley BO. Community study of knowledge of and attitude to mental illness in Nigeria. British Journal of Psychiatry. 2005;186:436-441.
- Adewuya AO, Makanjuola ROA. Social distance towards people with mental illness amongst Nigerian University student. Journal of Socila Psychiatry and Psychiatric Epidemiology. 2005;40:865-868.
 DOI: 10.1007/s00127-0965-3.
- Dogra N, Omigbodun O, Adedokun T, Bella T, Ronzoni T, Adesokan A. Nigerian secondary school children's knowledge and attitude to mental health. Clinical Child Psychology and Psychiatry 2012;17(3): 336-357.
- Aina OF. Mental illness and cultural issues in West African films: Implications for orthodox psychiatric practice. Med. Humanities. 2004;30:23-26.
 DOI: 10.1136/imh.2003.000152.
- Atilola O, Olayiwola F. Mind frames in Nollywood: frames of mental illness in Nigerian home videos. Research Journal of Medical Sciences. 2011;5(3):166-171. DOI: 10.3923/rjmsci.2011.166.171.
- Abiodun OA. Pathways to mental health care in Nigeria. Psychiatric Services. 1995; 46(8):823-826.
- Adeosun II, Adegbohun O, Jeje A. Adewumi A. The pathways to the first contact with mental health service among patients with schizophrenia in Lagos, Nigeria. Schizophrenia Research and Treatment. 2013;2013:1-8.

- Article ID 769161
- Wilson CJ, Bushnell JA., Caputi P. Early access and help seeking: Practice implications and new initiatives. Early Intervention in Psychiatry. 2011; 5(Suppl. 1):34-39.
- 37. Sheffield JK, Fiorenza E, Sofronoff K. Adolescents' willingness to seek psychological help: promoting and preventing factors. Journal of Youth and Adolescence. 2004;33:495-507.
- Kuhl J, Jarkon-Horlick L, Morrissey RF. Measuring barriers to help-seeking behaviour in adolescents. Journal of Youth and Adolescence. 1997;26:637-650.
- Klecha D, Barke A, Gureje O. Mental health care in developing countries: The example of Nigeria. Nervenarzt. 2004; 75(11):1118-1122.
- Mackenzie CS, Gekoski WL, Knox VJ. Age, gender, and the underutilization of mental health services: The influence of help-seeking attitudes. Aging & Mental Health. 2006;10(6):574-582.
- 41. Koydemir-Ozden S. Self-aspects, perceived social support, gender, and willingness to seek psychological help. International Journal of Mental Health. 2010;39(3):44-60.
- 42. Levinson D, Ifrah A. The robustness of the gender effect on help seeking for mental health needs in three subcultures in Israel. Social Psychiatry and Psychiatric Epidemiology. 2010;45:337-344.
- 43. Rickwood D, Deane FP, Wilson CJ, Ciarrochi J. Young people's help seeking for mental health problems. Australian e-Journal for the Advancement of Mental Healt. 2005;4(3):2-34.
- 44. Gulliver A, Griffiths KM, Christensen H, Brewer JL. A systematic review of help-seeking interventions for depression, anxiety and psychological distress. Bio Med Central Psychiatry. 2012;12:81.
- 45. Pinfold V, Toulmin H, Thornicroft G, Huxley P, Farmer P, Graham T. Reducing psychiatric stigma and discrimination: evaluation of educational interventions in

- UK secondary schools. British Journal of Psychiatry. 2003;182:342-346.
- 46. Watson AC, Otey E, Westbrook AL, Gardener AL, Lamb TA, Corrigan PW, et al. Changing middle schoolers' attitudes about mental illness through education. Schizophrenia Bulletin. 2004;30(3):563-572.
- 47. Wright A, McGorry PD, Harris MG, Jorm AF, Pennell K. Development and evaluation of a youth mental health community awareness campaign-The compass strategy. Bio Med Public Health. 2006;6:215. DOI: 10.1186/1471-2458-6-215.
- 48. Morgan AJ, Jorm AF. Awarness of beyondblue: The national depression initiative in Australia young people. The Australian Journal. 2007;15(4):329-333.
- 49. Noar SM. A 10-year retrospective of research in health mass media campaigns: Where do we go from here? Journal of Health Communication. 2006;11:21-42. DOI: 10.1080/10810730500461059.
- Costin DL, Mackinnon AJ, Griffiths KM, Batterham PJ, Bennett AJ, Bennett K, Christensen H. Health e-cards as a means of encouraging help seeking for depression among young adults: Randomized controlled trial. Journal of Medical Internet Research. 2009;11(4): e42.
- Sharp W, Hargrove D, Johnson L, Deal W. Mental health education: An evaluation of a classroom-based strategy to modify help-seeking for mental health problems. J Coll Stud Dev. 2006;47(4):419–438.
- 52. Kelly CM, Jorm AF, Wright A. Improving mental health literacy as a strategy to facilitate early intervention for mental disorders. Medical Journal of Australia. 2007;187:S26-S30.
- 53. Ganasen KA, Parker S, Hugo CJ, Stein DJ, Emsley RA, Seedat S. Mental health literacy: Focus on developing countries. African Journal of Psychiatry. 2008;11(1): 23-28. PMID: 19582321.

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