Knowledge and practice of depression management among primary healthcare physicians

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ABSTRACT

Background: Depression is a mood disease that affects the energy, behavior, and mood of individuals. Depression is associated with an increased risk of chronic disease. Primary healthcare physicians play an important role in the diagnosis and management of depression. We aim to determine the knowledge of primary healthcare physicians on depression. Methods: This is an observational cross-sectional study that was conducted on primary healthcare physicians using a structured validated questionnaire. Statistical analysis was conducted using SPSS 22nd edition. Results: This study included 235 primary healthcare physicians, and the mean ± standard deviation of age was 29 ± 3 years. Males were predominant in the study (62%), and the large majority were residents (94.9%). There were 79.5%, 91.5%, and 27.8% who had good knowledge, a positive attitude, and a good practice, respectively. There was no factor found to affect the knowledge and attitude, whereas only the position of participants was significantly associated with the level of practice (P = 0.027). Conclusion: There were good knowledge and a positive attitude of primary healthcare physicians regarding depression; however, their practice was poor.

Keywords: Attitude, depression, knowledge, PHC physicians, practice

Introduction

About 20% of adult people attending urban primary healthcare (PHC) clinics have depression, one of the main public health problems all over the world. Depression has been related to a raised risk of chronic diseases, decreased health-related quality of life, poor social role performance, and excess mortality. Although effective depression management strategies occur, most of the depressed individuals do not receive the timely evidence-based, high-quality care they need, causing a higher risk of recurrence and worse results. Moreover, a poor mental health human resource is a significant contributor to the under-use of the best available method. A great solution to these informational and financial barriers in PHC is to reconstruct clinical responsibilities to healthcare individuals with due training and supervision. Thus, a team-driven approach to practice would be necessary to increase working capacity through collaborative care, a primary component for the development of effective integrated behavioral healthcare. In 2013, the World Health Organization (WHO) report on Mental Health Systems in Latin America and the Caribbean expressed the pressing need to increase the training opportunities for undergraduate healthcare students and PHC doctors to learn about mental health.

The importance of depression as a global and significant public health problem and the importance of primary care-based support for most of the people with depression are now well recognized. WHO reports that depression is the main cause of disability and the fourth causing contributor to the worldwide burden of disease. Now, depression is the second cause of disability-adjusted life years in the age between 15 and 44 years for both sexes. However, at present, a large proportion of individuals with depression remain with their condition unrecognized or...
do not obtain appropriate support or treatment. Primary care support for mental health has been known as the provision of primary preventive and curative mental healthcare at the first contact of entry into the healthcare system. However, Maxwell et al. (2008) reported that general practitioners/family physicians do not treat depression alone. Individuals who are experiencing distress symptoms and misery seek to address these experiences. In this way, they may seek support and help from a doctor but may also access other forms of support, including from within the social community. The treatment of common mental health problems causes a very high burden on primary care; treatment options are confined mainly to medication (which may not be effective as a first-line response for mild to moderate depression and anxiety) and psychotherapeutic and psychosocial treatments.

Martínez et al. (2019) concluded that psychosocial clinicians performed better than biomedical clinicians in the assessed skills. Also, there are a high level of accomplishment in the relationship with the patient, medical anamnesis, health checkup, and lab test requests; heterogeneous performance in-patient management according to screening results, feedback to the patient, and registration in clinical records; and significant deficiencies in the differential diagnosis of bipolar disorder.

Odejide et al. (2002) concluded that before training, the health workers had poor knowledge of depression. None of the participants could mention any anti-depressants. There were significant improvements in knowledge post training, with the highest gain in knowledge occurring in drug management of depression. General outcome evaluation showed a significant increase in knowledge and skills for the recognition and management of depression. Barley et al. (2011) conducted a systematic literature search to identify qualitative and quantitative studies published in the United Kingdom since 2000 of general practitioners’ and practice nurses’ attitudes to the management of depression. The study concluded that the studies of managing patients with a primary diagnosis of depression indicated that general practitioners and practice nurses are not sure of the relationship between mood and social problems and of their role in treating it. Among some physicians, ambivalent attitudes to working with depressed people, a poor level of confidence, the use of a limited number of management choices, and a belief that a diagnosis of depression is stigmatizing complicate the management of depression.

**Methods**

A descriptive cross-sectional study was conducted on clinicians who are working in cluster 1 whose age is between 24 and 60 years.

- **Study groups:** One group of PHC clinicians.
- **Study Tools:** A self-administrated questionnaire was distributed to every physician in the primary healthcare of cluster 1 to measure the understanding of the disease and the appropriate way to deal with it.

**Ethical consideration:**

The study was approved by the Institutional Review Board (IRB) committee at King Saud medical city with number H1R1-03-May21-01 on 11/5/2021.

**Statistical analysis**

The SPSS program was used for data analysis, with version 22.0. Descriptive statistics was performed. A $P$ value of 0.05 or less will be significant.

**Results**

The present study included 235 medical personnel; the mean ± standard deviation (SD) of the age of participants was 29 ± 3 years old. There were 145 (62%) males and 89 (38%) females. The large majority of participants were residents 222 (94.9%), whereas specialists were 12 (5.1%) only, Table 1.

The level of knowledge of participants was investigated through five questions; the questions of knowledge and the answers of participants are shown in Table 2. There were 186 (79.5%) who had high knowledge, whereas 48 (20.5%) had low knowledge [Table 2].

The attitude of participants was investigated through seven questions; the large majority, 214 (91.5%), had a good attitude, whereas 20 (8.5%) had a poor attitude. The total attitude and the details of the attitude of participants are shown in Table 3.

There were four questions to investigate the practice of participants regarding depression. There were 169 (72.2%) who reported poor practice, whereas 65 (27.8%) reported good practice. The details about the practice of participants about depression are shown in Table 4.

There were no factors found to affect the level of knowledge; the age of participants ($P = 0.056$), gender ($P = 0.055$), and their position ($P = 0.07$) had no significant impact on the knowledge of participants [Table 5].

The demographics of participants had no significant impact on their attitude, age ($P = 0.72$), gender ($P = 0.24$), and position ($P = 0.27$), Table 6.

Regarding the practice of our participants, there was no significant correlation between the level of practice and

| Table 1: Demographics |
|-----------------------|
| **n** | **%** |
| --- | --- |
| Age (mean±SD) | 29 | 3 |
| Gender | | |
| Male | 145 | 62.0% |
| Female | 89 | 38.0% |
| Position | | |
| Resident | 222 | 94.9% |
| Specialist | 12 | 5.1% |
Another Saudi study[22] revealed that general practitioners and specialists showed a negative attitude toward psychiatric patients, whereas family practitioners showed a positive attitude. The level of knowledge among participants varied regarding depression and anxiety.[23]

As far as we know, there was no previous Saudi study conducted on the current subject, so further studies are recommended in order to understand the level of knowledge, attitude, and practice of PHC physicians regarding depression diagnosis and management. These studies enable the researchers to determine the gaps in the knowledge, attitude, and practice and therefore suggest suitable solutions.

Table 2: Level of knowledge about depression

| n | % |
|---|---|
| No | 3.0% |
| Yes | 92.7% |
| I do not know | 4.3% |

The physician must perform a screening for depression on a 70-year-old patient with suspected depression who attends a routine geriatric check-up.

Physicians must follow steps to detect and diagnose a moderate depressive episode and sub-clinical hypothyroidism on a 35-year-old female who is referred by another member of the PHC team.

The physician must create a treatment plan for a 27-year-old female with a moderate depressive episode with no suicide risk.

The physician must initiate Selective Serotonin Reuptake Inhibitor (SSRI) to a newly diagnosed depressed patient.

| No | 6.0% |
| Yes | 96.6% |
| I do not know | 3.0% |

These studies enable the researchers to determine the gaps in the knowledge, attitude, and practice and therefore suggest suitable solutions.

A study similar to ours was reported from Cameroon[21]; the study was conducted on primary healthcare providers in order to investigate the knowledge, attitude, and practice regarding depression. The study revealed that PHC physicians had limited knowledge and a negative attitude toward depression, which was in contrast to our findings, and this indicates that our physicians had a higher level of knowledge and positive attitude compared to physicians in Cameroon. Moreover, there was inadequate practice regarding the diagnosis and management of depression, which was similar to our study.

A cross-sectional survey that included 72 general practitioners from Nigeria showed that there was limited knowledge about depression among participants and the physicians showed moderately stigmatizing attitudes toward patients with depressions.[24] In Tanzania, a total of 14 PHC physicians were involved. The study demonstrated that the participants had a positive attitude toward the psychological and pharmacological treatment of depression. However, the authors suggested that there was a need to strengthen the training of the physicians about the diagnosis and detection of depression, psychological interventions, and pharmacological treatments.[25] Similarly, in Zambua, it was reported that there was an urgent need to conduct more effective awareness training and educational programs for healthcare providers.[24] In Hong Kong, it was
Table 3: Attitude toward depression

| Attitude to depression                                                                 | n   | %   |
|----------------------------------------------------------------------------------------|-----|-----|
| I feel confident and comfortable to diagnose and discuss depression with patients      |     |     |
| Strongly disagree                                                                      | 11  | 4.7%|
| Disagree                                                                               | 15  | 6.4%|
| Neutral                                                                               | 31  | 13.2%|
| Agree                                                                                 | 113 | 48.3%|
| Strongly agree                                                                         | 64  | 27.4%|
| I feel confident selecting appropriate pharmacotherapy for depression treatment         |     |     |
| Strongly disagree                                                                      | 10  | 4.3%|
| Disagree                                                                               | 26  | 11.1%|
| Neutral                                                                               | 57  | 24.4%|
| Agree                                                                                 | 84  | 35.9%|
| Strongly agree                                                                         | 57  | 24.4%|
| It is my responsibility to treat and manage depressed patients                         |     |     |
| Strongly disagree                                                                      | 4   | 1.7%|
| Disagree                                                                               | 9   | 3.8%|
| Neutral                                                                               | 44  | 18.8%|
| Agree                                                                                 | 92  | 39.3%|
| Strongly agree                                                                         | 85  | 36.3%|
| Depressed patients are better off managed by a mental health specialist than family medicine |     |     |
| Strongly disagree                                                                      | 30  | 12.8%|
| Disagree                                                                               | 95  | 40.6%|
| Neutral                                                                               | 50  | 21.4%|
| Agree                                                                                 | 48  | 20.5%|
| Strongly agree                                                                         | 11  | 4.7%|
| It is difficult to differentiate between a patient presenting with unhappiness and a clinical depressive disorder |     |     |
| Strongly disagree                                                                      | 35  | 15.0%|
| Disagree                                                                               | 102 | 43.6%|
| Neutral                                                                               | 31  | 13.2%|
| Agree                                                                                 | 65  | 27.8%|
| Strongly agree                                                                         | 1   | 0.4%|
| Depression can impact the quality of life for individuals                               |     |     |
| Strongly disagree                                                                      | 4   | 1.7%|
| Disagree                                                                               | 0   | 0.0%|
| Neutral                                                                               | 7   | 3.0%|
| Agree                                                                                 | 42  | 17.0%|
| Strongly agree                                                                         | 181 | 77.4%|
| There are reliable and easy-to-follow algorithms to guide treatment and follow-up for depression diagnosis |     |     |
| Strongly disagree                                                                      | 7   | 3.0%|
| Disagree                                                                               | 17  | 7.3%|
| Neutral                                                                               | 75  | 32.1%|
| Agree                                                                                 | 103 | 44.0%|
| Strongly agree                                                                         | 32  | 13.7%|
| Attitude                                                                               |     |     |
| Poor attitude                                                                          | 20  | 8.5%|
| Good attitude                                                                         | 214 | 91.5%|

found that two-thirds of the primary care physicians were prepared to look after the depressed individuals, but the experienced doctors in Hong Kong had negative attitudes toward mental health patients compared to younger ones.[27] All these studies reveal limited general knowledge and a poor attitude and practice, which were general and globally. This encourages conducting more studies on such subjects and focuses on depression as there were a few studies on this subject.

Conclusion

This study revealed that there were good knowledge and a positive attitude of primary healthcare physicians regarding depression, but their practice was poor. Therefore, educational and training programs and sessions should be established to increase the practice of physicians by encouraging them and directing them to the correct practice with individuals with depression.
Table 4: Practice toward depression

| Practice                                                                 | Poor practice | n  | %   | Good practice | n  | %   |
|--------------------------------------------------------------------------|---------------|----|-----|---------------|----|-----|
| Limited clinical time to obtain history regarding patient depression     |               |    |     |               |    |     |
| Rarely                                                                   | 15            | 6.4%|     |               |    |     |
| Sometimes                                                                | 69            | 29.5%|     |               |    |     |
| Most of the time                                                         | 98            | 41.9%|     |               |    |     |
| Always                                                                   | 52            | 22.2%|     |               |    |     |
| The patient is reluctant to accept a diagnosis of depression              |               |    |     |               |    |     |
| Rarely                                                                   | 38            | 16.2%|     |               |    |     |
| Sometimes                                                                | 134           | 57.3%|     |               |    |     |
| Most of the time                                                         | 56            | 23.9%|     |               |    |     |
| Always                                                                   | 6             | 2.6% |     |               |    |     |
| The patient is reluctant to be referred to mental health services        |               |    |     |               |    |     |
| Rarely                                                                   | 44            | 18.8%|     |               |    |     |
| Sometimes                                                                | 83            | 35.5%|     |               |    |     |
| Most of the time                                                         | 80            | 34.2%|     |               |    |     |
| Always                                                                   | 27            | 11.5%|     |               |    |     |
| Lack of access to mental health services available to patients           |               |    |     |               |    |     |
| Rarely                                                                   | 26            | 11.1%|     |               |    |     |
| Sometimes                                                                | 114           | 48.7%|     |               |    |     |
| Most of the time                                                         | 70            | 29.9%|     |               |    |     |
| Always                                                                   | 24            | 10.3%|     |               |    |     |
| Practice                                                                 |               |    |     |               |    |     |
| Poor practice                                                            | 169           | 72.2%|     |               |    |     |
| Good practice                                                            | 65            | 27.8%|     |               |    |     |

Table 5: Correlation between knowledge and demographics

| Knowledge                                                                 | Poor knowledge | n | %   | Good knowledge | n | %   |
|--------------------------------------------------------------------------|----------------|----|-----|----------------|----|-----|
| Age (mean±SD)                                                            | 28             | 2  |     | 29             | 3  | 0.056|
| Gender                                                                   |                |    |     |                |    |     |
| Male                                                                     | 24             | 50.0%|     | 121            | 65.1%| 0.055|
| Female                                                                   | 24             | 50.0%|     | 65             | 34.9%|     |
| Position                                                                 |                |    |     |                |    |     |
| Resident                                                                 | 48             | 100.0%|     | 174            | 93.5%| 0.071|
| Specialist                                                               | 0              | 0.0% |     | 12             | 6.5% |     |

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Conflicts of interest
There are no conflicts of interest.

References
1. Mitchell AJ, Vaze A, Rao S. Clinical diagnosis of depression in primary care: A meta-analysis. Lancet 2009;374:609-19.
2. Depression W. Other Common Mental Disorders: Global Health Estimates. Geneva: World Health Organization; 2017. p. 1-24.
3. Dong JY, Zhang YH, Tong J, Qin LQ. Depression and risk of stroke: A meta-analysis of prospective studies. Stroke 2012;43:32-7.
4. Blakemore A, Dickens C, Guthrie E, Bower P, Kontopantelis E, Afzal C, et al. Depression and anxiety predict health-related quality of life in chronic obstructive pulmonary disease: Systematic review and meta-analysis. Int J Chron Obstruct Pulmon Dis 2014;9:501-12.
5. Vickers NJ. Animal communication: When I'm calling you, will you answer too? Curr Biol 2017;27:R713-5.
6. Colli A, Tanzilli A, Dimaggio G, Lingiardi V. Patient personality and therapist response: An empirical investigation. Am J Psychiatry 2014;171:102-8.
7. Linde K, Kriston L, Rücker G, Jamil S, Schumann I, Meissner K, et al. Efficacy and acceptability of pharmacological treatments for depressive disorders in primary care: Systematic review and network meta-analysis. Ann Fam Med 2015;13:69-79.
8. Chisholm D, Sweeny K, Sheehan P, Rasmussen B, Smit F, Cuijpers P, et al. Scaling-up treatment of depression and anxiety: A global return on investment analysis. Lancet Psychiatry 2016;3:415-24.
9. Hardeveld F, Spijker J, De Graaf R, Nolen WA, Beekman AT. Recurrence of major depressive disorder and its predictors in the general population: Results from the Netherlands Mental Health Survey and Incidence Study (NEMESIS). Psychol Med 2013;43:39-48.
10. Saxena S, Thornicroft G, Knapp M, Whiteford H. Resources for mental health: Scarcity, inequity, and inefficiency. Lancet 2007;370:878-89.
11. Vanderlip E, Rundell J, Avery M, Alter C, Engel C, Fortney J, et al. Dissemination of Integrated Care Within Adult Primary Care Settings: The Collaborative Care Model. Washington DC: American Psychiatric Association and Academy of Psychosomatic Medicine; 2016.
12. Stockwell MS, Cano M, Jakob K, Broder KR,
Gyamfi-Bannerman C, Castaño PM, et al. Feasibility of text message influenza vaccine safety monitoring during pregnancy. Am J Prev Med 2017;53:282-9.

13. Minoletti A, Galea S, Susser E. Community mental health services in Latin America for people with severe mental disorders. Public Health Rev 2012;34.

14. World Health Organization. Mental Health Disorders Management. Depression. 2010. Available from: https://www.who.int/health-topics/depression.

15. World Health Organization. The World Health Report 2001: Mental health: New Understanding, new hope. 2001.

16. Maxwell M. Women's and doctors' accounts of their experiences of depression in primary care: the influence of social and moral reasoning on patients' and doctors' decisions. Available from: https://pubmed.ncbi.nlm.nih.gov/17136934/.

17. Bérubé C, Schachner T, Keller R, Fleisch E, Wangelheim FV, Barata F, Kowatsch T. Voice-based conversational agents for the prevention and management of chronic and mental health conditions: Systematic literature review. J Med Intern Res 2021;23:e25933.

18. Martínez P, Rojas G, Martínez V, Marin R, Cornejo JP, Gómez V. Measuring Primary Health Care Clinicians' Skills for Depression Management. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6703131/.

19. Odejide AO, Morakinyo JO, Oshiname FO, Omigbodun O, Ajuwon AJ, Kola L. Integrating mental health into primary health care in Nigeria: Management of depression in a local government (district) area as a paradigm. Seishin Shinkeigaku Zasshi 2002;104:802-9.

20. Barley EA, Murray J, Walters P, Tylee A. Managing depression in primary care: A meta-synthesis of qualitative and quantitative research from the UK to identify barriers and facilitators. BMC Fam Pract 2011;12:47.

21. Mulango ID, Atashili J, Gaynes BN, Njim T. Knowledge, attitudes and practices regarding depression among primary health care providers in Fako division, Cameroon. BMC Psychiatry 2018;18:66.

22. Alshaikh AA. Knowledge, attitude and practice of primary health care physicians in Abha city about common psychiatric disorders. Middle East J Fam Med 2020;18:108-18.

23. Al-Atram AA. Physicians' knowledge and attitude towards mental health in Saudi Arabia. Ethiopian J Health Sci 2018;28:771-8.

24. James BO, Jenkins R, Lawani AO. Depression in primary care: The knowledge, attitudes and practice of general practitioners in Benin City, Nigeria. South Afr Fam Pract 2012;54:55-60.

25. Xue Q, Xie X, Liu Q, Zhou Y, Zhu K, Wu H, et al. Knowledge, attitudes, and practices towards COVID-19 among primary school students in Hubei Province, China. Children Youth Serv Rev 2021;120:105735.

26. Kapungwe A, Cooper S, Mayeya J, Mwanza J, Mwape L, Sikwese A, et al. Attitudes of primary health care providers towards people with mental illness: Evidence from two districts in Zambia. Afr J Psychiatry 2011;14:290-7.

27. Lam TP, Lam KN, Lam EW, Ku YS. Attitudes of primary care physicians towards patients with mental illness in Hong Kong. Asia Pac Psychiatry 2013;5:E19-28.