BARRIERS TO DIAGNOSIS AND TREATMENT OF DEPRESSION BY PRIMARY HEALTH CARE PHYSICIANS AT TABUK MILITARY HOSPITAL, SAUDI ARABIA

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ABSTRACT
Depression is one of the most common causes of morbidity in the developing countries. It is seemed that there are many barriers to diagnose and treat it in primary care setting, but little research exists. To assess the barriers that facing Primary Health Care physicians to diagnose and treat depressed patients in Primary Health Care Centres (PHCCs). Cross sectional study. All PHCCs which serve Military personnel and their dependent at North West Armed Forces Hospital (NWAFH) Tabouk City, Saudi Arabia. All primary health care physicians who are available and working at the time of the study in PHCCs which belong to NWAFH. Interview questionnaire consist of personal and sociodemographic data of the physicians, organizational and patient's barriers to diagnose and treat of depression in primary care settings. 75 physicians responded and returned the questionnaires which represent all the physicians. 78% agreed that the diagnosis of depression is their responsibility and only 4% disagreed. 69.3% agreed that treatment of depression is their responsibility comparing with 9.3% who disagreed. 57.3% agreed that lack of knowledge of diagnostic criteria of depression was a limiting factor while 73.3% agreed that lack of knowledge of treatment of depression was another limiting factor. 90.6% agreed that the appointment time was too short for taking adequate history, 96% reported time was inadequate for them to provide counselling/ education, and 92% agreed that mental health professionals were not available within PHC setting. 90.7% of the respondents reported that patients or their families were reluctant to accept the diagnosis of depression and 88% reported that patients were reluctant to take antidepressants. Continuous medical education for the Health Care providers about depression and Provision of counseling services and antidepressant medications at primary care level. Improve the quality and integration of mental health referral services, and Effort to destigmatize depression may result in increased rate of diagnosis and treatment of depression in primary care setting and improving outcomes in this population.

INTRODUCTION
Psychiatric diseases have become a major challenge to primary health care (PHC) physicians all over the world. Depression in particular is a major concern [1]. It is one of the commonest disorders in medicine and is often confused with other disorders. It is a very real disorder that affects the entire mind and body.
Unfortunately, there is social stigma associated with depression and many patients tend to deny that they are depressed.

Depression occurs in children, adolescents, adults, and the elderly. There are many risk factors for depression such as age, sex, family history of depression, chronic illness, stress and emotional trauma. It manifests as a combination of feelings of sadness, loneliness, irritability, worthlessness, hopelessness, agitation, and guilt, accompanied by an array of physical symptoms. Many criteria are available for diagnosis of depression; an important one is the DSM-IV diagnostic criteria.

Major depression will be the second leading cause of disability worldwide by the year 2020 [2]. Rates of depression are increasing rapidly, particularly in the developing countries. It is ironic that these countries are least well prepared to deal with the epidemic. A survey of 185 countries conducted by the World Health Organization (WHO) found that 41% do not have a mental health policy, and 28% have no specific budget for mental health. Of the countries that do report mental health expenditures, 36% spend less than 1% of their total health budget on mental health [3]. In comparison, the United States and the United Kingdom spend between 5 and 10% of their annual public health budgets on mental health care. Countries such as Canada and Denmark routinely spend more than 10% on such care [4].

In addition to scarce resources, there are many systemic barriers to the diagnosis and treatment of mental disorders. These are reported to include stigmatization of sufferers, poor coordination between the mental health and primary health segments of the health care delivery system, and a lack of education of primary health workers in providing mental health services [5]. The WHO is currently developing strategies to address shortfalls in these systems, including information collection, research and policy development as well as advocacy and the promotion of mental health services in developing countries [6].

In Saudi Arabia, Prevalence of depression among high school students in Saudi Arabia is 33.4 %, and Prevalence of depression among Saudi elderly in Riyadh was 39% [7].

Primary care physicians (PCPs) are the initial health care contact for most patients with depression and are in a unique position to provide early detection and continued management for persons with depression and coexisting medical diseases. Studies show that PCPs fail to recognize 30% to 50% of depressed patients and, for those recognized, often prescribe ineffective medications or inadequate doses of antidepressant medications [8]. A study in Saudi Arabia shows the prevalence of mental disorder among patients attending a PHC to be 30%-46% [9].

Using the DSM-IV as a guide to psychiatric diagnosis in primary care is still difficult, due to the complexity of skills and the amount of time needed to reach the diagnoses in a busy family physician setting [10].

In a study, in KSA, most physicians in the health care services were not adequately trained to manage mentally ill patients locally. This was indicated by the high incidence of referral rates [11]. Another study which was carried out by Becker SM, in Saudi Arabia, in 2004, concluded that Saudi primary care physicians had awareness of psychiatric disorders, but their diagnostic skills were poor for somatization and depression [12].

This study tries to identify the barriers facing PHC physicians in the diagnosis and treatment of depression in Primary Health Care Centres in NWAFH in Tabouk City, Saudi Arabia.

SUBJECTS AND METHODS

A cross-sectional study was conducted among all the primary health care physicians who were available and working at the time of study in primary health care centres which belong to North West Armed Forces Hospital “NWAFH” in Tabouk City, Saudi Arabia during the period from October, 1st, 2013 to December 31, 2013.

The number of the estimated physicians was 75. However, physicians who were on leave or ill at the time of the study were excluded, as well as, those who were not willing to participate in the study. The data was collected through a self-administered questionnaire derived from a study done by John. It was validated by a multidisciplinary team of family physicians general internists, obstetrician-gynaecologists, and social scientists. It entails questions about physician barriers, patient barriers, organization barriers to diagnose and treat of depression.

A pilot study was done on four physicians to assess the clarity of questions and time taken for filling of the questionnaire.

All information were kept confidential, and used for research purposes only. The data was presented in grouped-format without any individual identification. Letter of approval by the research committee at NWAFH was taken, and permission of PHCCs director was obtained before the study starts. The researcher was trying to avoid delay of physician to his or her clinic.

The collected data was entered and analysed by using The Statistical Package of the Social Sciences (SPSS) version 20.

RESULTS

The total number of physicians who responded was 75, which represent all physicians working at Primary Health Care Centres in NWAFH in Tabouk City during the study period. Most of participates were Non-Saudi (77.3%). Male physicians represent 76% of the respondents. The median age of participants was 39 years and the range was 27 years (28 to 55 years). The median years of experience were 13.1 years and the range was 29 years (1 to 30 years). 54.2% of respondents have family medicine degree, 29.2% were MBBS holders and 16.6% have other speciality. Only 64% of respondents received courses in psychiatric illness.
As shown in table 1, most of physicians (78.0%; 95% CI, 67 -95%) either strongly agreed or agreed that diagnosis of depression is their responsibility whereas almost two-thirds of them (69.3%; 95% CI, 57- 79%) strongly agreed or agreed that treatment of depression is their responsibility.

As obvious from table 2, majority of physicians reported that they can diagnose (98.7%; CI, 92. -99%), treat with medication (90.6%; CI, 81- 96%), treat with counseling (86.6%; 95%CI, 76-93%) and overall manage depression (92.0%; 95%CI, 83 – 97%). Physicians’ barriers to manage depression from the physicians’ perspectives were Lack of effective treatment (74.6%; 95% CI, 63 - 84%), incomplete knowledge of treatment for depression (73.3%; 95% CI, 62 - 82%) and incomplete knowledge of diagnostic criteria (57.3%; 95% CI, 45 -68%). Table 3.

Organization ‘barriers to manage depression from the physicians’ perspectives were appointed time is too short for an adequate history (90.6%; 95% CI, 81 - 95 %), inadequate time for me to provide counselling/education (96.0%; 95% CI, 73- 91%) and mental health professionals are not within PHC sitting (92.0%; 95% CI, 83 - 97%). Table 4.

Patients ‘barriers to manage depression from the physicians’ perspectives were patients or family reluctance to accept diagnosis (90.7%; 95% CI, 81-96%), medical reluctance to take antidepressants (88.0%; 95% CI, 78 - 94%), patients concern about medication side effects (87.8%; 95% CI, 78 - 94%), patients reluctant to see mental health professional (86.7%; 95% CI, 76 - 93%) and symptoms may be explained by other medical illness (84.0%; 95% CI, 74- 91%). Table 5.

**DISCUSSION**

This study revealed that 78% (95% CI, 67-95%) of the respondents agreed that the diagnosis of depression is their responsibility and only 4% disagreed. Furthermore, 69.3% (95 CI, 57-79%) agreed that treatment of depression is their responsibility comparing with 9.3% who disagreed. This study showed high responsibility for diagnosis and treatment of depression by PHCP and suggested many physicians are willing to play an active role in the diagnosis and the treatment of depression.

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**Table 1. Physicians’ believes regarding their responsibilities regarding diagnosis and treatment of depression**

<table>
<thead>
<tr>
<th>Physicians Responses</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>disagree</th>
<th>Strongly agree and Agree (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnosing depression is my responsibility</td>
<td>38 (50.7%)</td>
<td>21 (28.0%)</td>
<td>3 (17.3%)</td>
<td>3 (4.0%)</td>
<td>78.0% (95% CI, 67 -95%)</td>
</tr>
<tr>
<td>Treating depression is my responsibility</td>
<td>17 (22.7%)</td>
<td>35 (46.7%)</td>
<td>16 (21.3%)</td>
<td>7 (9.3%)</td>
<td>69.3%, (95% CI, 57-79%)</td>
</tr>
</tbody>
</table>

**Table 2. Physicians’ self-reporting of capability to manage depression**

<table>
<thead>
<tr>
<th>Physicians Responses</th>
<th>Not confident</th>
<th>Some What confident</th>
<th>mostly confident</th>
<th>Very confident</th>
<th>Somewhat, mostly and very confident (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can diagnose depression</td>
<td>1 (1.3%)</td>
<td>25 (33.3%)</td>
<td>36 (17.3%)</td>
<td>13 (18.3%)</td>
<td>98.7% (95% CI, 92. -99%)</td>
</tr>
<tr>
<td>I can treat depression with medication</td>
<td>7 (9.3%)</td>
<td>34 (45.3%)</td>
<td>26 (34.7%)</td>
<td>8 (10.7%)</td>
<td>90.6%, (95% CI, 81- 96%)</td>
</tr>
<tr>
<td>I can treat depression with counselling</td>
<td>10 (13.3%)</td>
<td>30 (40.0%)</td>
<td>26 (34.7%)</td>
<td>9 (12.0%)</td>
<td>86.6% (95% CI, 76-93%)</td>
</tr>
<tr>
<td>Overall, I can manage depression</td>
<td>6 (8.0%)</td>
<td>32 (42.7%)</td>
<td>28 (37.3%)</td>
<td>9 (12.0%)</td>
<td>92.0% (95% CI, 83 – 97%)</td>
</tr>
</tbody>
</table>

**Table 3. Physicians’ barriers to manage depression**

<table>
<thead>
<tr>
<th>Physicians Responses</th>
<th>Limited a great deal</th>
<th>Limited somewhat</th>
<th>Did not limit</th>
<th>Limited a great deal &amp; limited somewhat cumulative percent (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incomplete knowledge of diagnostic criteria</td>
<td>13 (17.3%)</td>
<td>30 (40.0%)</td>
<td>32 (42.7%)</td>
<td>57.3%, (95% CI, 45 -68%)</td>
</tr>
<tr>
<td>Incomplete knowledge of treatment for depression</td>
<td>15 (20.0%)</td>
<td>40 (53.3%)</td>
<td>20 (26.7%)</td>
<td>73.3%, (95% CI, 62- 82%)</td>
</tr>
<tr>
<td>Lack of effective treatment</td>
<td>15 (20.0%)</td>
<td>41 (54.7%)</td>
<td>19 (25.3%)</td>
<td>74.6%, (95% CI, 63 - 84%)</td>
</tr>
</tbody>
</table>
Table 4. Organization Barriers to manage depression

<table>
<thead>
<tr>
<th>Physicians Responses</th>
<th>Limited a great deal</th>
<th>Limited somewhat</th>
<th>Did not limit</th>
<th>Limited a great deal &amp; limited somewhat cumulative percent (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appointed time is too short for an adequate history</td>
<td>33 44.0%</td>
<td>35 46.7%</td>
<td>7 9.3%</td>
<td>90.6%, (95% CI, 81 - 95%)</td>
</tr>
<tr>
<td>Inadequate time for me to provide counselling/education</td>
<td>40 53.3%</td>
<td>32 42.7%</td>
<td>3 4.0%</td>
<td>96.0%, (95% CI, 73- 91%)</td>
</tr>
<tr>
<td>Mental health professionals are not within PHC sitting</td>
<td>27 36.0%</td>
<td>42 56.0%</td>
<td>6 8.0%</td>
<td>92.0%, (95% CI, 83 - 97%)</td>
</tr>
</tbody>
</table>

Table 5. Patients’ barriers to manage depression

<table>
<thead>
<tr>
<th>Physicians Responses</th>
<th>Limited a great deal</th>
<th>Limited somewhat</th>
<th>Did not limit</th>
<th>Limited a great deal &amp; limited somewhat cumulative percent (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients or family reluctance to accept diagnosis</td>
<td>34 45.3%</td>
<td>34 45.4%</td>
<td>7 8.0%</td>
<td>90.7%, (95% CI, 81-96%)</td>
</tr>
<tr>
<td>Medical problems were more pressing</td>
<td>12 16.2%</td>
<td>48 64.9%</td>
<td>14 18.9%</td>
<td>81.1%, (95% CI, 70- 89%)</td>
</tr>
<tr>
<td>Patients reluctant to take antidepressants</td>
<td>33 44.0%</td>
<td>33 44.0%</td>
<td>9 12.0%</td>
<td>88.0%, (95% CI, 78 - 94%)</td>
</tr>
<tr>
<td>Patients concern about medication side effects</td>
<td>19 25.7%</td>
<td>46 62.2%</td>
<td>9 12.2%</td>
<td>87.8%, (95% CI, 78 - 94%)</td>
</tr>
<tr>
<td>Patients reluctant to see mental health professional</td>
<td>27 36.0%</td>
<td>38 50.7%</td>
<td>10 13.3%</td>
<td>86.7%, (95% CI, 76 - 93%)</td>
</tr>
<tr>
<td>Symptoms may be explained by other medical illness</td>
<td>12 16.0%</td>
<td>51 68.0%</td>
<td>12 16.0%</td>
<td>84.0%, (95% CI, 74- 91%)</td>
</tr>
</tbody>
</table>

Similar to this study, John W. Williams et al observed that physicians strongly endorsed their role in recognizing depression. Perceived responsibility for treating depression, however, was less consistent, being endorsed by 87.5% of family physicians [8].

In this study 37.3% of the respondents showed high confidence in the overall management of depression, where 42.7% represented somewhat confidence and 12% represented no confidence. Individual skill components showed that 98.7% (95% CI, 92-99%) of respondents were confident that they could diagnose depression while 90.6% (95% CI, 81-96%) of reported that they could cope with depression with medications confidently and 86.6% (95% CI, 76-93%) showed that they were confident that they could treat depression with counselling.

This study result was compared with the study of John W. Williams et al, where he observed that confidence for family physicians was (34.7% very confident and 48.3% mostly confident). Individual skill components showed a similar pattern, with family physicians being more confident for diagnosis (94.9% of family physicians very or mostly confident), treatment with medication (91.3% of family physicians), and treatment with counseling (36.1% of family physicians) [8].

Also, this study showed 57.3 % (95% CI, 45-68%) of the participants reported that incomplete knowledge of diagnostic criteria was a limiting factor. 73.3 % (95% CI, 62-82%) agreed that incomplete knowledge of treatment of depression was another a limiting factor, and again 74.6% (95% CI, 45-68%) agreed that a lack of effective treatment of depression was a limiting factor.

John W. Williams et al revealed that Knowledge of diagnostic criteria was a perceived barrier (16.3% of family physicians), and knowledge of treatment options was limited for family physicians (11.6%) [8].

This study showed that 90.6%(95% CI, 81-95%) of the respondents reported that the appointment time was too short for taking adequate history, 96%(95% CI, 73-91%) reported time was inadequate for them to provide counseling/education, and 92%(95% CI, 83-97%) agreed that mental health professionals were not available within PHC setting.

John W. Williams et al observed that almost 50% of respondents listed “mental health professional not affordable” as a barrier. Physicians citing inadequate time
reported less counseling and were less likely to use formal
diagnostic Criteria [8].

There is an obvious difference between this study
result and the result of the compared study and this was,
possibly, due to a large number of patients in clinics and
lack of appointment system to regulate these huge numbers
may an important factor in this discrepancy.

In addition, restriction of the mental health service
to hospitals is important barrier and this reflects the large
percentage of physicians (92%) who reported "mental
health professionals are not available within PHC setting.

It was found that most of the respondent agreed
that patient barrier played a role in limiting diagnosis and
treatment of depression. 90.7% (95% CI, 81- 96%) of the
respondents reported that patients or their families were
reluctant to accept the diagnosis of depression, 81.1%(95% CI,
70- 89%) reported that medical problems were more
pressing, again88%(95% CI, 78- 94%) reported that
patients were reluctant to take antidepressants, 87.8%(95% CI,
78- 94%) reported that patients were concerned about
medication side effects, 86.7% (95% CI, 76- 93%) reported
patients were reluctant to see mental health professional, and 84 %
(95% CI, 74- 91%) reported that symptoms of depression may be explained by other
medical illness.

In the study of John W. Williams et al., more than
half of respondents reported patient reluctance to see a
mental health professional, reluctance to take
antidepressant medication, or concern about medication
adverse effects. More than a third reported patient or
family reluctance to accept the diagnosis [8].

CONCLUSION

Conclusively, to establish diagnosis and treatment of
depression, there are many barriers facing the physicians in
PHCCs .Sometime, this will lead to missing the diagnosis
and treatment of many cases. These barriers are not at the
level of physicians alone but also at the level of the patient
and organization. Many physicians who are working in
PHCCs hold Family medicine degree and received courses
in psychiatric illness.

Most of them are confident and willing to play an
active role in the diagnosis and the treatment of depression.
In addition, organizational barriers, such as time factor for
an adequate history taking and the affordability of mental
health professionals were a matter of concern for many
physicians beside the patient barriers such as reluctant to
accept diagnosis or to take antidepressants limiting their
diagnosis and treatment of depression. Finally, the care of
depressed patients is an integral part of primary care , but
not all depressed patient will be best served or prefer
treatment in this setting.

REFERENCES