

Depression among primary health care physicians in Makkah Al-Mukarramah

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ABSTRACT

Background The practice of Medicine is stressful, as the pressure of work is unavoidable. The stressful event goes hand-in-hand with physician's job and such events may start as early as Medical school days.

Objectives The main objective being the determination of prevalence depression among primary Health Care physicians in Makkah Al Mukarramah city. The second objective was to evaluate factor associated with depression among them.

Subjects and methods This was a across – sectional epidemiological study among primary Health Care physicians in Makkah Al Mukarramah city. A sample of 90 physicians was included, (64%) males and (26%) females. The tool of the study was self administered questionnaire, which consist of two main parts, each part consist of instructions. First part was consisted of personal data. Second part included 21 questions of Beck Depression Inventory Scale.

Results Main result showed that the prevalence of depression among Primary Health Care Physicians 28.9 %, mild form 18.9 %, moderate form 10 %, and no severe form. Female physicians reported depression more significantly than males.

Conclusion The most important predictors of depression among physicians were being female, young age, recently graduated and seeing more number of patients. Contrary to what was expected, there was no correlation between depression scores of physicians and exercise and recreational activity.

Keywords: depression, Primary Health Care physicians; Beck Depression Inventory Scale; Saudi Arabia

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INTRODUCTION

Physicians fulfil a special role within our society. While they are given many privileges and rewards, they also carry serious responsibilities. Physicians are expected to be healers, available to others whenever a crisis occurs or a medical need arises. They are expected to have unfailing expertise and competence, to be compassionate and concerned, and to provide universally successful care in a cost-effective manner.⁽¹⁾ Such idealized expectations emanate from patients, from families, from society (including payers and regulatory agencies), and from

within the profession of medicine itself. Self-imposed expectations in here in the institutions of medicine, medical colleges, clinics, hospitals, professional associations, and collegial relationships, and are internalized by students of medicine as they are socialized to become practicing professionals.⁽²⁾

These expectations become a part of how physicians define themselves. No physician can consistently meet these idealized expectations. Physicians have human fallibilities and they, too, have needs for support and compassion. While all physicians struggle with these expectations, most find ways to successfully cope with them. Others, however, can develop serious emotional problems.

When this curs, the role of "physician" may actually become a barrier, preventing those in need from getting the help they require.⁽³⁾ The expectation that being a physician implies being able to perform professionally without faltering, and to meet all expectations without experiencing distress or dysfunction, means that personal problems can be perceived as professional failings. This can foster denial of personal vulnerability. The consequences can be tragic.⁽¹⁾

Depression, which is one of the consequences of persistent stress ranges from normal sings of bereavement to major depression accompanied by frank psychoses. Major depression is usually an episodic illness, often beginning in adolescence, with remissions and exacerbations throughout life. A chronic form of less severe depression without acute major episodes is termed dysthymia.⁽⁴⁾

Disability caused by depression and anxiety is just as great as that caused by other common medical conditions, such as hypertension, diabetes, and arthritis. Co-morbidity of depression with anxiety or medical illness further increases the disability experienced by sufferers. Recognition and treatment, however, relieve the burden imposed by untreated depression on the individual, society, and health services.⁽⁵⁾

The practice of Medicine is stressful, as the pressure of work is unavoidable. The stressful event goes hand-in-hand with physician's job and such events may start as early as Medical school days. Physician's in spite of their knowledge about stress, health hazards and coping, are at risk to develop psychiatric illness mainly depression as the result of job stress. Work related stress and depression may have a profound effect on an individual's well being.⁽⁶⁾

Depression screening measures do not diagnose depression on clinical basis, but they provide an indication of the severity of symptoms and assess the severity within a given period of time (for examples, the past seven to 14 days). Although each measure has a unique scoring system, higher scores consistently reflect more severe symptoms. All measures have a statistically predetermined cutoff score at which depression symptoms are considered significant. Some measures group scores into different levels of severity of symptoms. The Beck's Depression Inventory (BDI) scale, which is used in the current study, is one of the popular tools, which are used to assess the severity of depression through designed 21 sets of questions.⁽⁷⁾

This study aimed to evaluate the prevalence of depression and its associated factors among Primary Health Care physicians in Makkah Al-Mukarramah city.

SUBJECTS AND METHODS

A cross-sectional analytic study was conducted among physicians in Primary Health Care Centers of ministry of health in Makkah al-Mukarramah along one-month duration in sep 2013. Makkah al-Mukarramah is the holy city located on the western province of the King Dom of Saudi Arabia and considered to be the major religious city universally. There are thirty Governmental Primary Health Care Centers inside Makkah city providing health care facilities (preventive, promotive, and curative services) for the all Makkah al-Mukarramah population registered in primary health care centers. This study was conducted in Primary Health Care Centers in Makkah al-Mukarramah.

All physicians working in the governmental Primary Health Care Centers in Makkah al-Mukarramah city at the time of the study were invited to participate in the study. They accounted for 90 (84 physicians and 6 dentists). Outcome variable was depression while independent variables were age, gender, nationality, marital status, number of children, personal monthly income (optional), year of graduation, medical qualification, current job practice, duration of work after graduation, duration of work in primary health care centers, number of patients seen per day, number of doctors in the center, working time, exercise and recreational activity.

A self administered questionnaire was used. While there are many instruments available to measure depression, the Beck Depression Inventory (BDI) scale, which contain 21-item, has been extensively tested in various cultures as useful instrument for screening clinical depression in general practice and other setting with good result. It was used as indicator of the prevalence of depression.⁽⁸⁾

The questionnaire included 21 sets of questions, each set encompasses 4 questions reflecting psychological status of respondents, and these questions were quantified through a

scale ranging from zero to 3. The grand sum of the scores in the items quantified the severity of depression. . Many attempts had been made to set cutoff scores at which depression symptoms are considered, the most accepted was to consider the range 0-9 (minimal), 10-16 (mild), 17-29 (moderate) and 30-63 as severe depression.⁽⁷⁾ These cutoff ranges were adopted in the current study. Depending on our scale the cut point of diagnosing depression is a score of 10 or more.

The Beck's Depression Inventory (BDI) questionnaire was found to have 100% sensitivity and 89% specificity when evaluated against diagnostic criteria.⁽⁹⁾ Testing the validity and the reliability of the BDI showed that the statistical analysis of the internal consistency and stability of the BDI indicated a high degree of reliability, and the correlation between BDI scores and clinicians' ratings indicated a high degree of validity.⁽¹⁰⁾

A Pilot study was carried out at emergency department at Al-Noor specialist hospital and all suggestions taken into consideration such as; nationality: it was Saudi and non-Saudi changed to Saudi, Arab, and Non-Arab, and salary to be optional.

After coding of all variables, data were entered to personal computer, and SPSS v.18, was used for analysis. Chi square and student's t statistical tests were performed. A p value <0.05 was used for significance.

Permission from the Joint Programme of family & community medicine was obtained. Permission from the higher authorities in ministry of health was also obtained. Full explanation about the study and its purpose was carried out to physicians to obtain their participation. All collected data and information were handled confidentially and no name was required in the questionnaire. Busy hours were avoided, and free times were chosen. Recommendations out of this study were submitted to Ministry Of Health. prompt assistance to depressed physician was provided by the researcher according to the level of depression.

RESULTS

The number of received correct filled questionnaires accounted for 90 making a response rate of 100%. The mean age for physicians in this study was 43.42 ± 9.60 years. Male physicians were 64 (71.1%), while females constituted (28.9%) of the whole physicians. Fifty physicians (55.6%) were Arab, 17 physicians (18.9%) were Saudi and 23 physicians (25.6%) were non Arabs.

Figure 1 showed that 26 out of 90 physicians (28.9%) in this study were found to have depression by Beck Depression Inventory.

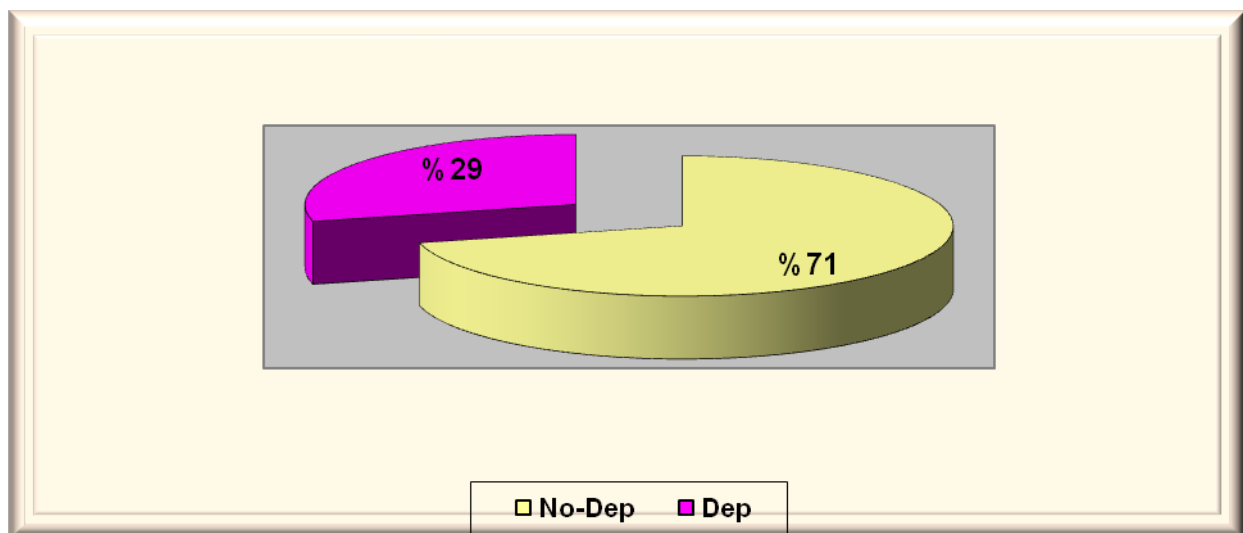


Figure 1: Prevalence of depression among PHC physicians, Makkah Al-Mukarramah.

Depression among physicians was further categorized into mild, moderate or severe depression. Therefore; mild depression was noticed among 17 physicians (18.9%), moderate form among 9 physicians (10%), however; sever form of depression was not observed among the study group.

Factors associated with Depression

Figure 2 showed that there was 12 out of 26 female physicians (46.2%) with depression, While there was only 14 out of 64 male physicians (21.9%) affected with depression. This difference was statistically significant P value < 0.03.

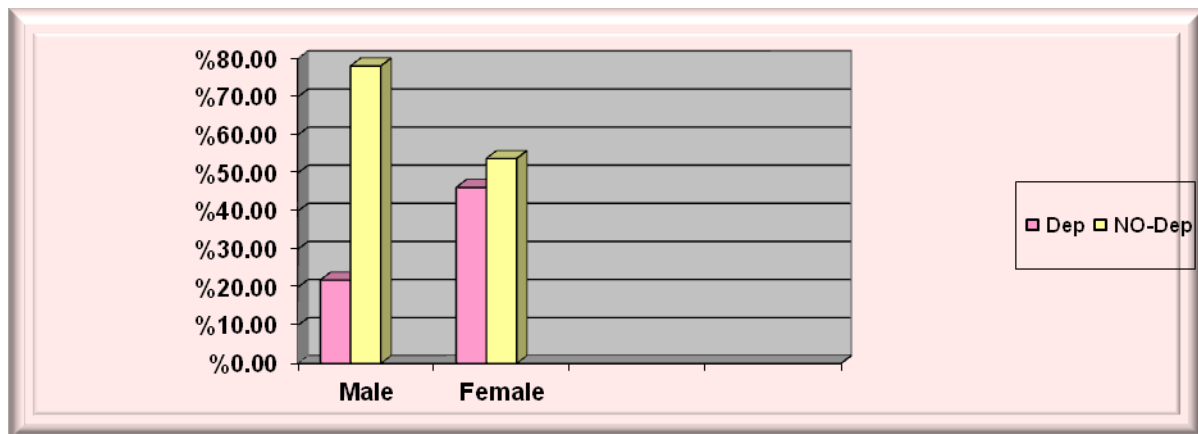


Figure 2: Gender in relation to depression among PHC physicians, Makkah Al-Mukarramah.

The results showed that the mean age for physicians without depression was 43.70 + 9.81 and among depressed physicians was 42.73 +9.23 years, however; this difference was statistically insignificant.

The study showed that among 17 Saudi physicians 6 (35.5%) had depression. Out of 50 Arab physicians 16 (32%) had depression, and out of 23 Non-Arab physicians 4 (17.4%) affected with depression. However, this difference was statistically insignificant.

Figure 3 showed that out of 3 single physicians 1(33.3%) was affected with depression. Out of 84 married physicians 24 (28.6%) had depression. Furthermore; out of 2 divorced 1(50%)

affected, and the only widowed physician was not affected. However; this difference was statistically insignificant.

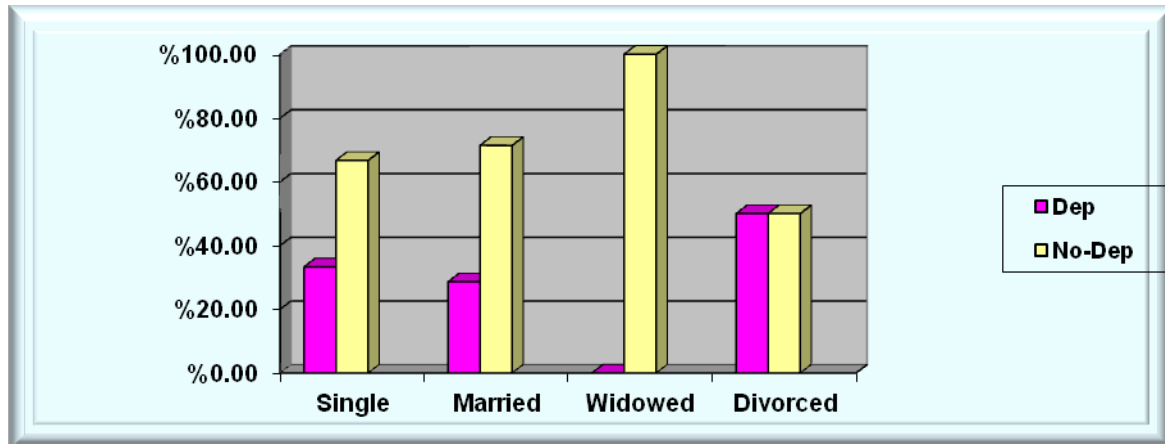


Figure 3: Marital status in relation to depression among PHC physicians, Makkah Al-Mukarramah.

The results showed that mean monthly income of depressed physicians was 6864.53 ± 2656.42 SR whereas the mean monthly income of non-depressed physicians was 7405.71 ± 3054.50 SR. However; this difference was statistically insignificant.

Figure 4 showed that physicians who have Bachelor degree constituted 82 (91.1%) of physicians, followed by those who have Diploma 4 (4.4%), Master 2 (2.2%), while P.H.D only 2 (2.2%) of all physicians. Depression was more prevalent among physicians with M.B.B.S constituting 29.3%. 2 physicians had master degree and both of them (100%) had depression as well. Nevertheless; there were only 2 P.H.D holders and both were free of depression. However; this difference was statistically insignificant.

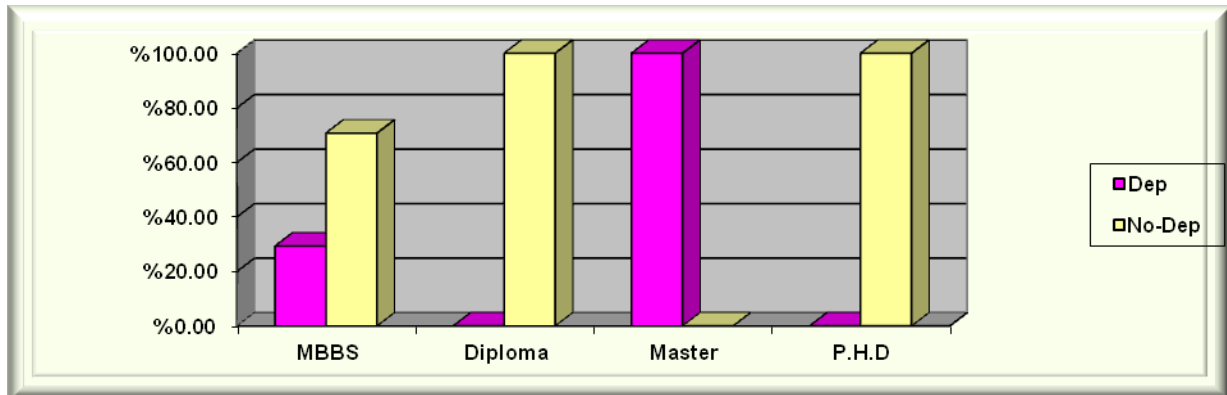


Figure 4: Medical qualification in relation to depression among PHC physicians, Makkah Al-Mukarramah.

The mean duration of work after graduation of non-depressed physicians accounted for 17.58 ± 10.08 years, and 16.54 ± 9.86 years for depressed physician. However; this difference was statistically insignificant. The mean duration of work in primary health care was 10.19 ± 8.15 years among non-depressed and 7.69 ± 5.77 years among depressed. However; this difference was statistically insignificant.

Figure 5 showed that 21 general practitioners out of 77 (23.3%) had depression, while 2 specialists and 2 dentists (2.2%) had depression. There were only 2 consultants without depression (100%), and one P.H.D director with depression (100%). However; this difference was statistically insignificant.

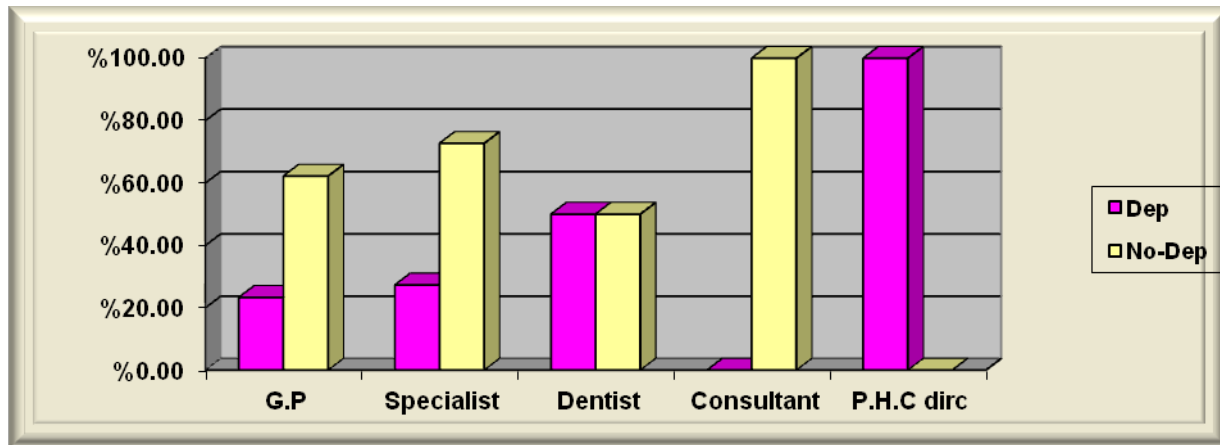


Figure 5: Current Job practice in relation to depression among PHC physicians, Makkah Al-Mukarramah.

Depression was reported among 16 (31.4%) physicians working two shifts, and was found to be 25.6% among physicians working one shift only. However; this difference was statistically insignificant.

Figures 6 and 7 showed that 42 physicians (46.7%) were performing physical exercises, and 39 physicians (43.3%) had recreational activities. Among the depressed group only 10 physicians (38.5%) were performing physical exercises. Recreational activities were performed by 10 out of 26 (25.6%) of depressed physicians. However; this difference was statistically insignificant.

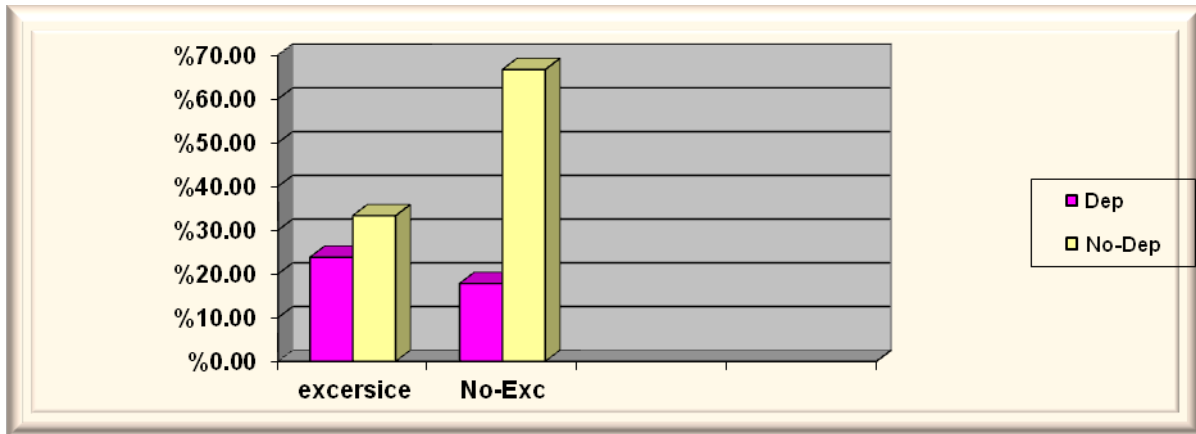


Figure 6: Exercise activity in relation to depression among PHC physicians, Makkah Al-Mukarramah.

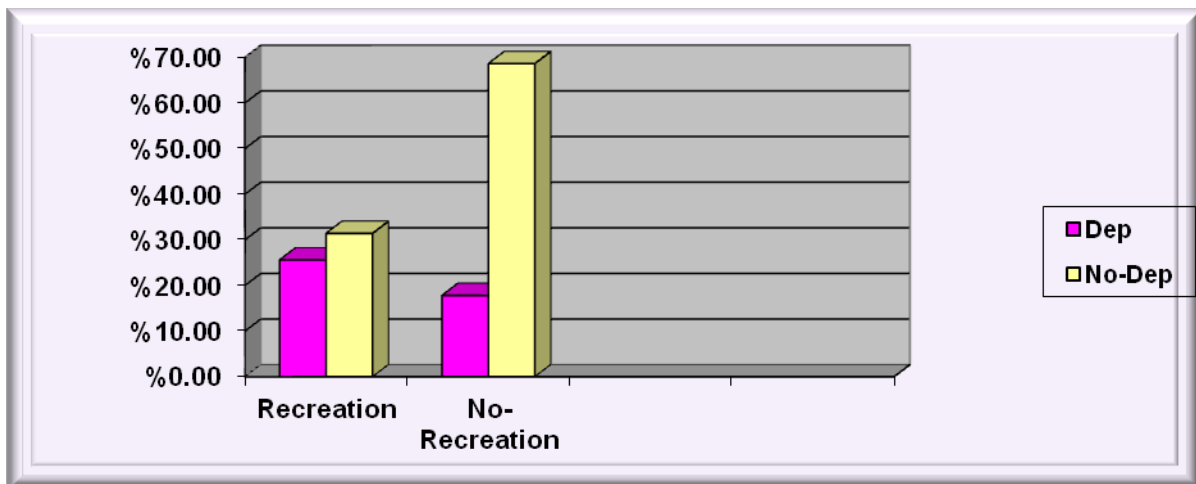


Figure 7: Recreational activity in relation to depression among PHC physicians, Makkah Al-Mukarramah.

The results showed that average number of patients seen per day for physicians without depression was 53 ± 19 and among depressed physicians was 65 ± 34 patients. This difference was statistically significant. P value < 0.03 .

DISCUSSION

The prevalence of depression among primary health care physicians in the present study was lower than expected. This might be explained by Makkah being a holy city and stress alleviation easily accessible by visiting the Haram and Kaaba. This was in contrast to other studies showing lower prevalence of depressions by using different scales and different study groups.⁽¹¹⁻¹⁵⁾

The grades of depression were similar to the prevalence by showing unexpectedly more mild forms and no severe forms. This was in agreement with the study held in Jeddah 2004, however; the study showed 2% severe form of depression among Primary Health Care Centers.⁽¹¹⁾

Depression was more reported among female physicians. This result was expected, and in agreement with other studies using Beck scale conducted among physicians.^(11, 16-20)

Physicians` age was not a significant factor associated with depression in the present study. This result was not expected. However, as other studies conducted among physicians and use the same scale showed that more experiences lead to less stress and therefore less depression.^(1, 11)

Physician`s nationality was not a significant predictor for depression in the current study. This result was expected, in accordance to other studies using Beck scale conducted among

physicians.⁽¹¹⁾ Similarly, physicians` marital status was not a significant predictor for depression. This result was expected, and in agreement with other studies carried out in same setting and using different scales on same study groups.^(11, 20)

Physicians` income was not significantly associated with depression among physicians in the present study. This result was expected as in accordance to other studies using Beck scale conducted among physicians.⁽¹¹⁾

Depression was unexpectedly high among master degree holders as in agreement to other studies using the same scale and situations and conducted among physicians.^(11, 21-23)

In agreement with others,^(11, 16, 21) duration of work was not a significant factor associated with depression among physicians in the current study.

The duration of work in primary health care was higher among non-depressed than depressed physicians. This result was unexpected. However; there was studies showed inverse relation.^(11, 18, 20, 21)

Current job status was not a significant predictor for depression among physicians in the present study. This result was expected. In agreement to other studies conducted on physicians using different scales and different situation.^(11, 19, 23)

In accordance with other studies,^(11, 18, 24, 25) the present study failed to confirm an association between working shifts and depression among PHC physicians.

Physicians practicing of physical exercise as well as recreational activities were unexpectedly inversely related to depression inn the present study, in correlations to other studies conducted among different kind of populations and physicians using same and different scaling system.^(1, 11, 26)

In agreement with others,^(1, 11, 26) the number of patients seen per day was a significant predictor for depression among primary health care physicians in the present study.

In conclusion, the most important predictors of depression among physicians were being female, young age, recently graduated and seeing more number of patients. Contrary to what was expected, there was no correlation between depression scores of physicians and exercise and recreational activity. We recommended that female physicians suppose to have less work load, more leave schedule according to her physiological changes and psychology and less working hours. This arrangement has to be carried out by high authority with ministry of health. As one of the risk seeing more numbers of patients, therefore; need more numbers of physicians to be assigned in Primary Health Care Centers to take this load out.

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