

# The emotional impact of chronic illness

## Abstract

**Aim and background:** The objective of this study was to identifying the emotional impact of chronic illnesses and its relation to study variables (Age, Sex, Clinic visit, Diagnosis, District and working status). There is a limited information and lack of researches in Arab countries about the mental health condition for people who are suffering from chronic illnesses

**Material and methods:** One hundred sixty eight consenting participants who were suffering from chronic illnesses, which were attended to receive care from primary health care departments, related to MoH in west-bank of Palestine, the study population was selected based on (catch fish) and study sample were selected systematically and was divided equally between both sex, and they were. The researcher has used PHQ 9; which was consisted from nine statements, PHQ 9 has built based on DSM to assess the emotional status. The data was collected during a month, and through personal interview.

**Results:** The results showed that there was no significant differences on the chronic illness at the level of ( $\alpha=0.05$ ) according to PHQ-9 total score by; Age, Sex, Clinic visit, Diagnosis and District. But showed that there was a significant differences on the chronic illness at the level of ( $\alpha=0.05$ ) according to PHQ-9 total score related; working status to the advantage of not working. Also the results were show different levels on depression symptoms; (27.2%) of participants showed a minimal level of depression which can categorized as a normal health conditions. (30.2%) of participants showed a mild level of depression, and (24.7%) of participants showed moderate level of depression, and both percentages could be pathological conditions. (13.6%) of participants showed moderately severe depression and (4.3%) of participants showed that they are suffering from severe depression, and both of (13.6%) and (4.3%) percentages classified as a pathological health conditions and they were needed for intervention.

**Conclusion:** The results showed that there is no significant differences between people suffering from chronic illness at the level of ( $\alpha=0.05$ ) according to PHQ-9 total score related to; Age, Sex, Clinic visit, Diagnosis and District. But showed that there is a significant differences between people suffering from chronic illness at the level of ( $\alpha=0.05$ ) according to PHQ-9 total score related to; working status to the advantage of whom not working. And showed that depression symptoms with different levels were common between most of people suffering from chronic illnesses.

**Keywords:** compliance, distress, emotion, depression, chronic condition, disease; illness, an episode

**Abbreviations:** DBP, diastole blood pressure; PHQ 9, patient health questionnaire 9; LDL, low-density lipoprotein; BMI, body mass index; Mmhg, A millimeter of mercury; BP, blood pressure; SBP, systole blood pressure; MoH, Ministry of Health

## Introduction

Palestine is experiencing a rapid health transition, with a large and rising burden of chronic diseases, which are estimated to account for a large proportion of deaths rate.<sup>1</sup> Chronic illness involves more than physical symptoms, there are a psychological and emotional symptoms as well.<sup>2</sup> the emotional impact for chronic illnesses or serious illnesses revolves around the theme of adjustment, or adaptation. So many people who were suffering from chronic illnesses has produced feelings of helplessness, frustration, hopelessness, or great sadness, and many of them have a noticeable worsening of their physical symptoms under psychological stress.<sup>3</sup> So Illness may lead to change patients family structure, and social support network, also influence how people cope and deal with life events, further that, Self-image and self-esteem may distort during coping with a chronic illness, especially if that illness is painful or imposes limitations that interfere with social activities, school, or work.<sup>4</sup>

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Depression in late life, is associated with significant morbidity.<sup>5</sup> also causes decreased in quality of life, and has a negative effect on the body's recovery from illness.<sup>6,7</sup> The WHO (2005) emphasizes that depression is the fourth most common illness which can lead to physical, emotional, social and economic problems.<sup>8</sup> also depressed persons used two to three times many medical services compare with people who are not depressed.<sup>9</sup> other studies have estimated that "elderly persons with depressive symptoms accrued 50% higher health-care costs and more frequent use of medical services" than do other older who are not suffering from depression.<sup>10</sup> Also studies showed that there is a bidirectional relationship between depression and chronic medical disorders, also risk health behaviors and psychobiological changes associated with depression.<sup>11-13</sup> also depression has a long link to cardiovascular disease and death rate.<sup>14</sup> So cognitive behavior therapy (CBT) may be an effective to treat depressive symptoms and improve adherence to medication.<sup>15-18</sup>

So this study was aimed to identifying the emotional impact of chronic illness, so the researcher has use ;PHQ 9 to assess the emotional status of people who suffering from chronic illness, also to identifying the emotional impact of chronic illness and its relation to study variables; Age, Sex, Clinic visit, Diagnosis, District and working status.

## Material and methods

This study was gotten on approve by Palestinian ministry of health, and then was sending a formal letter to primary health care departments (Bethlehem, Salfit, Ramallah and Tubas) north, middle and south of west-bank, which were selected randomly through (catch fish), and then a formal letter was sent, to explain the study methodology, purpose, study population and sample selection procedure, and field visit agenda to the departments. After visiting the selected departments, the sample was selected systematically, and equally between both sex. During field visit, the researcher asked informed consent from participants and did review their medical files, and was provided clarification for them about; study goals, expected benefits of their participation, expected risks, privacy and choices. The data was collected by personal interview, file review and by using PHQ9. Each participant asked to fill out self-reporting, reliable, and validated questionnaires GHQ 9 for the assessment of depression, and participants were interviewed individually.

## Statistical analysis

Analytic approach was used to identifying the possible association between the emotional impact of chronic illness and its relation with study variables (Age, Sex, Clinic visit, Diagnosis, District and working status). The first step was finding the average, standard deviation, frequency and percentage to examine distribution of data, and using (Kruskall-Wallis) test, to determine if there were statistical differences between the groups, because the distributions of the PHQ-9 total score was not normal. So (Kruskall-Wallis) test was used to test relationships between the independent variables and the PHQ-9 total, instead of using (T) and (F) tests to compare the means of groups, so (Kruskall-Wallis) and (Mann-Whitney U) test were the alternative choices. Also (Kronapach Alpha) test which were used to test the reliability. (Mann-Whitney U) test was used to make the comparison between Mean ranks according to PHQ-9 total score related to sex and working status. (Kruskall-Wallis) test was used to make the comparison between Mean ranks according to PHQ-9 total score related to diagnosis, Clinic visit, Age, district. Also emotional conditions levels were classified based on GHQ 9 levels; from (0-4) Minimal depression, (5-9) Mild depression, (10-14) Moderate depression, (15-19) moderately severe depression and (20-27) severe depression.

## Results

The mean of total score of PHQ-9, represented a mild and minimal symptoms of depression. The highest score were reported (209) on the statement "Feeling tired or having little energy" as a mild criteria of depression symptoms, and the lowest score were reported (84) on statement "Thoughts that you would be better off dead or of hurting yourself in some way" as a minimal criteria of depression symptoms. The total score for PHQ-9 was (1432) classified as a minimal criteria of depression symptoms.

The descriptive statistics according to PHQ-9 total score & Criteria.

Also the participants was showed a different levels on depression symptoms; (27.2%) of participants showed a minimal level of depression which can categorized as a normal health conditions. (30.2%) of participants showed a mild level of depression, and (24.7%) of participants showed moderate level of depression, and both percentages could be pathological conditions. (13.6%) of participants showed moderately severe depression and (4.3%) of participants

showed that they are suffering from severe depression, and both of (13.6%) and (4.3%) percentages classified as a pathological health conditions and they were needed for intervention.

Study sample distribution by frequency, percentage, criteria and Actions. After testing the hypothesis, the results showed that there is no statistically significant of odds ratio ( $\alpha=0.05$ ) was observed in the relationship between people suffering from chronic illnesses and emotional status relate to; age, sex, clinic visit, diagnosis and district, but the results showed that; there is a statistically significant of odds ratio ( $\alpha=0.05$ ) was observed in the relationship between people suffering from chronic illnesses and emotional status relate to working status to the advantage of not working.

## Discussion

The total score for PHQ-9 is (1432) fall under minimal criteria of depression. The mean score of PHQ-9 represented a mild and minimal symptoms of depression, these indicators assume that these patients are more likely to have depression, some studies showed that there is a bidirectional relationship between depression and chronic medical disorders.<sup>13</sup> also the expectations of WHO which reported that depression will be one of the leading causes of disability worldwide, also depression will be from the fourth most common illness, which can lead to physical, emotional, social and economic problems.<sup>19-25</sup> another studies showed that; seven of more 10 general practice encounters, are for chronic conditions, and the most three common chronic conditions managed by GPs are; depression, diabetes and asthma.<sup>26</sup> The highest score was on the statement "Feeling tired or having little energy" with (209) which was classified as mild level based on PHQ 9 criteria, and the lowest score was on the statement "Thoughts that you would be better off dead or of hurting yourself in some way" with (84) which was classified as minimal level based on PHQ 9 criteria. Also the results were show a different level on depression symptoms; (27.2%) of participants showed a minimal level of depression which can categorized as a normal health conditions. (30.2%) of participants showed a mild level of depression, and (24.7%) of participants showed moderate level of depression, and both percentages could be pathological conditions. (13.6%) of participants showed moderately severe depression and (4.3%) of participants showed that they are suffering from severe depression, and both of (13.6%) and (4.3%) percentages classified as a pathological health conditions and they were needed for intervention.

The results showed that there was no statistically significant of odds ratio ( $\alpha = 0.05$ ) was observed in the relation between chronic illnesses and emotional status relate to sex, district. These results agree with studies which showed that the risk factors of chronic diseases are known, and a small set of common risk factors are responsible for most of the main chronic diseases, and these risk factors are the same between men and women, also the relation between the major risk factors and the main chronic diseases is similar in all regions of the world.<sup>27</sup>

The results showed that there was no statistically significant of odds ratio ( $\alpha = 0.05$ ) was observed in the relation between chronic illnesses and emotional status relate to; clinic visit. This result was not agreed with some research which showed that depressed persons have used two to three times as many medical services as people who are not depressed.<sup>28</sup> Other studies have estimated that "elderly persons with depressive symptoms accrued 50% higher health-care costs and more frequent use of medical services" than other older, who are not suffering from depression.<sup>29,30</sup>

Also the results showed that there is no statistically significant of odds ratio ( $\alpha = 0.05$ ) was observed in the relation between chronic illnesses and emotional status relate to; age and diagnosis. despite of some research showed that depression is common in the elderly and is a major public health problem.<sup>31</sup> also showed that physical diseases, psychological illness and adjustment problems are quite common during this phase of life.<sup>32</sup> another studied showed that younger age and higher education level were associated with more knowledge, more social support, fewer depressive symptoms, and more favorable prior results.<sup>33-36</sup> also studies showed that there is no psychological attributes are specific to particular chronically illnesses.<sup>37</sup>

Finally this study showed that there is a statistically significant of odds ratio ( $\alpha = 0.05$ ) was observed in the relation between chronic illnesses and emotional status relate to working status to the advantage of whom not working. Depression in late life is associated with significant morbidity, including deficits in a range of cognitive functions and considerable influence on functional impairment, disability.<sup>38</sup> Some people with chronic illnesses aren't able to function as well as they'd like.<sup>39-41</sup> also its has been observed that physical diseases, psychological illness and adjustment problems are quite common, the theme of this period is loss, which may be identified like loss of physical abilities, loss of intellectual processes, loss of work role and occupational identification (Retirement), loss of intimate ties, such as death of spouse, friends and other a acquaintances.<sup>42-47</sup>

## Conclusion

In this study, the participants who suffering from chronic illnesses reported that they have a mild symptoms of depression. Also showed that there is no statistically significant of odds ratio ( $\alpha = 0.05$ ) was observed in the relation between chronic illnesses and emotional status relate to age, sex, clinic visit, diagnosis, and district, but also showed that there is a statistically significant of odds ratio ( $\alpha = 0.05$ ) was observed in the relation between chronic illnesses and emotional status relate; to working status to the advantage of whom not working.

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## Conflicts of interest

The authors declare that there is no conflict of interest.

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