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# Depression Among Health Workers in Kuwait

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## ABSTRACT

**Introduction:** People with depression have persistent sadness which interferes with productivity and daily activity. Subsequently decreasing work accuracy or increasing the medical errors in the medical field. The increasing amount of medical errors that was suggestive of depression encouraged us to estimate the extensiveness of depression among health workers in the hospitals in Kuwait.

**Aim:** To provide basic data that will contribute to the design of preventive measures that will reduce the prevalence of Depression among health workers.

**Study Design:** Cross sectional study.

**Materials and Methods:** The research was conducted in AlFarwaniya Hospital & Mubarak AlKabeer Hospital in 2016. Data was performed using IPad and analyzed using SPSS.

**Results:** The highest percentage of depression is among the ones whose ages are between 30 to 39 which is 12% (37) out of 52.4 % (162). It shows that females had depressive symptoms more than males, 7.1% of males were depressed compared to the 12.2% who were females. It seems that Kuwaiti health workers show depressive symptoms more than the non-Kuwaiti. It shows that doctors have highest depression rate (28%) then the nurse and finally the other careers. Married individuals show 68% are depressed which is the highest, single individuals with (28%) and divorced with (1.7%). Smokers were with 25% and nonsmokers with (19%) of depression. Chronic diseases don't show significant effect on depression.

**Conclusion:** This study showed that there is a difference in the prevalence of depression between the genders as well as the social status. Establishment of new rules to decrease working hours and held workshops and seminars on overcoming depression are great solutions to reduce stress among health workers.

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## Introduction

Everyone experiences sadness in their life at one time or another, which can be a normal reaction to a loss of a beloved one, life's struggles or losing a job. But this "transient depression" disappears within a couple of days. People with depression have persistent sadness which interferes with productivity and daily activity. Depression is defined as a mood disorder that involves the body, mood and thoughts. Depression can be caused by a variety of reasons including abuse, some medications and a family history of depression.

Several aspects related to work productivity can be negatively affected in people with depression. Managing work responsibilities can be diminished in depressed individuals. Also, emotions can be negatively affected so that workers do not enjoy their jobs. Moreover, depression can lead to difficulties with concentration, which subsequently decrease work accuracy or, in the medical field, increase the frequency of medical errors. In addition, work relationships are an aspect that is affected by depression as the avoidance of depressed workers greatly decreases the efficacy of the work environment. Reduced physical health and energy levels as a consequence of depression reduces the workers' effectiveness. Health workers experience work overload and they face tough patients, also the nature of their work which has an inconsistent timetable may affect their mood, that's why they are more susceptible to depression because of their stressful occupation. Most people do not recognize that they are suffering from this illness & they would not believe it nor will seek help because they will not identify it as a treatable illness, but there are many medications and psychosocial therapies that can cure this state of confusion. The increasing amount of medical errors that was suggestive of depression led us to believe it was contributing to the cause. This encouraged us to estimate the extensiveness of depression among health workers in the hospitals in Kuwait.

## Literature Review

A study was made in Nigeria on 309 health workers to know the prevalence of depression among them. They study indicated that 46 of them were depressed (14.9%). Also, they found that (18.0%) of the females were depressed whereas (8.7%) of the males were depressed. The condition of depression is present among health workers in this part of the world. Being a female health worker, may be associated with depression in South East Nigeria [1]. Another study in New York was done on 83 health

workers to know the prevalence of anxiety and depression among emergency department staff showed 54% of them had minimal signs of depression, 22% showed mild signs of depression, and 8% showed high signs of depression. Depression in the working age population is estimated to cost $12 billion every year in medical care and approximately $44 billion annually in lost productivity [2]. A new study in Baghdad was done that included 521 healthcare providers to find the prevalence of anxiety and depression among emergency department staff and 70.25% of them had depressive symptoms. They found that age, number of children in medical participants, and marital status for administration had significant association with the depressive symptoms [3]. Along with alcohol abuse, it is the most common psychiatric disorder, present in 20-40% of the population at any one time [4]. A study among nurses in intensive Care Units of hospitals in North western São Paulo State Brazil revealed that 28.4% of them have depression. Also, there were significant percentages of workers who reported discouragement, sadness and hopelessness [5].

Indeed, healthcare workers were ranked third for depressive episodes of all occupations between 2004 and 2006 [6]. It has been proven that the depression will be the second disability-adjusted life years lost by the year 2020 [7]. A study among nurses in the journal Clinical Psychiatry stated that nurses working in more crowded unit by 10% than the normal rate have double depressive rate illness [8]. A study aimed to survey the nursing staff at King Fahad Medical City, for anxiety and depression symptoms using Hospital Anxiety and Depression scale. The results for anxiety stated that (53%) were normal, (27%) were a cause of concern, and (20%) were clinical cases. Whereas for depression, (75%) of the staff were normal, (15%) were a cause of concern, and (10%) were clinical cases. The conclusion of the study suggested that Middle Eastern nurses, divorced or widowed nurses, the ones who lack physical exercise and the smokers were risk factors for anxiety and depression symptoms among nursing staff [9]. The depressive symptoms were found to be more in nurses (52%) rather than doctors (47%), which were selected from 1179 employed in the hospitals of Zhejiang University [10]. A study was also done in Morelos (Mexico) on IMSS health workers through the years 1998 to 2000. Their age varied from 18 to 89 years. It concluded that depression is more common in people with long working hours or lower income. Also, chronic diseases had a significant impact on depression, being proportionately related [11].

## Aim

To provide basic data that will contribute to the designing of preventive measures to reduce the prevalence of Depression among Health Workers.

## Objective

To estimate the prevalence of depression among health workers in the hospitals in Kuwait, and to find out any other risk factors related to depression.

## Methodology

**Type of study:** Cross sectional
**Study site:** AlFarwaniya Hospital & Mubarak AlKabeer Hospital health workers.

**Study population:** 323 health workers, statistical equation on 2000 of the population (>4000)

An open, randomized, questionnaire was conducted in 2016 at AlFrwaniya and Mubarak AlKabeer Hospitals, in which they are considered the largest two hospitals in Kuwait, among health workers to determine if they are affected by depression. The second reason for choosing more than one hospital was preventing biases. A convenient sample of health workers including attending physicians, Doctors and nurses were invited to participate in the survey. The randomly chosen sample was from every 4th health worker. We used Hospital Anxiety and Depression Scale because of its high credibility. Consent was obtained before starting the questionnaire. The staff completed an anonymous (number of pages) questionnaires that included demographic information, smoking history, social history, personal data and history of medical treatment for depression. The variables that the survey obtained are health center, age, gender, and nationality. Career, marital & social status was also included in the study. Remaining questions evaluated presence of some chronic diseases (such as, heart disease, type 2 diabetes, obesity, and asthma), panic symptoms, and other anxiety symptoms.

Data analysis was done using SPSS. Descriptive statistical analysis will be performed using an Ipad.

### Study Instrument

The instrument that was used to discover the depression among health workers is a highly approved questionnaire called the "Hospital Anxiety and Depression Scale" (HADS) and data sheet to collect the sociodemographic data and other variables about the health workers (age, gender, marital status, chronic disease... etc.) to find out if they are somehow linked with depression. Hospital Anxiety and Depression Scale (HADS) is a brief questionnaire in which the participants are asked to respond by choosing the most suitable answer in relation to their feelings about their lives. The HADS could show a high correlation with depressive symptoms seen in health workers. It takes about 5 to 10 minutes to complete.

### Hospital Anxiety and Depression Scale (HADS)

Tick the box beside the reply that is closest to how you have been feeling in the past week. Do not take too long over your replies: your immediate is best.

| **1- I feel as if I am slowed down:** | **S** | **A** |
|---|---|---|
| Nearly all of the time | 3 | |
| Very often | 2 | |
| Sometimes | 1 | |
| Not at all | 0 | |
| **2-I still enjoy the things I used to enjoy:** | **S** | **A** |
| Definitely as much | 0 | |
| Not quite so much | 1 | |
| Only a little | 2 | |
| Not at all | 3 | |
| **3- I have lost interest in my appearance:** | **S** | **A** |
| Definitely | 3 | |
| I don't take as much care as I should | 2 | |
| I may not take quite as much care | 1 | |
| I take just as much care as ever | 0 | |
| **4-I can laugh and see the funny side of things:** | **S** | **A** |
| As much as I always could | 0 | |
| Not quite so much now | 1 | |
| Definitely not so much now | 2 | |
| Not at all | 3 | |

| **5- I look forward with enjoyment to things:** | **S** | **A** |
|---|---|---|
| Hardly at all | 3 | |
| Definitely less than I used to | 2 | |
| Rather less than I used to | 1 | |
| A much as I ever did | 0 | |
| **6-I feel cheerful:** | **S** | **A** |
| Not at all | 3 | |
| Not often | 2 | |
| Sometimes | 1 | |
| Most of the time | 0 | |
| **7- I can enjoy a good book or radio or TV programme:** | **S** | **A** |
| Often | 0 | |
| Sometimes | 1 | |
| Not often | 2 | |
| Very seldom | 3 | |
| Total | | |

Score is written under the bold S; Participant should check the box under bold A. Scores of 0-7 are considered normal.

Scores of 8-10 are considered borderline abnormal (borderline case) Scores of 11-21 are considered abnormal (depressive case) S: Score A: Answer

**Consent Form**
We are a group of medical students in the Arabian Gulf University and we are conducting a research about depression among health workers in Kuwait. The aim of our study is to estimate the prevalence of depression, its associated factors and designing preventive measures that will help in decreasing the prevalence of depression. We will be grateful if you helped us by filling the questionnaire. Confidentiality of the information given by participants will be maintained and only used for the purpose of the research.

**Statistical Analysis**
Data will be analyzed by using Statistical Package for the social Sciences (SPSS).

**Exclusion**
Any hospital personnel who is not working in the medical field.

**Inclusion**
1. Kuwaiti health workers working in AlFarwaniya Hospital.
2. Non-Kuwaiti health workers working in AlFawaniya Hospital.
3. Kuwaiti health workers working in Mubarak AlKabeer Hospital.
4. Non-Kuwaiti health workers working in Mubarak AlKabeer Hospital.

**Sample Size**
The calculated sample size was 323 from the formula:

$$SS = \frac{Z^2 * (p) * (1-p)}{c^2}$$

In which,
z = z value
(e.g. 1.96 for 95% confidence level)
p = percentage, expressed as decimal
c = confidence interval

**Pilot Study**
A pilot study was conducted on 10 health workers who have not been included in the study. They were selected randomly from the health center. There was no need to modify the questionnaire as we did not face any problem while filling the questionnaire.

**Ethical Consideration**
The research was sent for approval to the research committee of the Arabian Gulf University and the Ministry of Health. written consent was gained from the health workers participant in the research. The health workers confidentiality was maintained and any type of harmful intervention was avoided.

**Results**
After the processing of the results, we found that 61.9% of the health workers who participated in the study were from AlFarwaniya hospital, while 38.1% were from Mubarak AlKabeer hospital. The percentages of the age groups observed were 26.9% for (20-29), 51.4% for (30-39), 13.9% for (40-49), 5.3% for (50-59), and 1.9% for (above 59). Regarding the gender, the male health workers constituted 35.9%, while the female health workers were 64.1%. The percentage of Kuwaiti health workers was low at only 13.6%, while the percentage of non- Kuwaiti health workers reached 83.6%. Career-wise, 15.2% of the health workers were doctors, 81.4% were nurses, and the other professions were 3.4%. As regards to marital status, 20.7% of the health workers were single, 73.1% were married, 4.3% were divorced, and 1.9% were widowed. The percentage of health workers living with their families were 60.7%, while those who live alone were 38.4%. The health workers who owned a home were 10.2%, and those who lived in an apartment were 36.5%, while the percentage of health workers living in a rental residence were 50.8%. Regarding smoking, 7.7% of the health workers were smokers, while 92.0% were non-smokers. Health workers with chronic disease constituted 9.3%, while those without chronic disease were 89.8%. The percentage of health workers who experienced a recent death of a relative were 29.4%, while 69.7% did not experience a recent death of a relative.

**Table 1: All Variables Statistics**

| Variables | Frequency | Percent |
|---|---|---|
| **Health Center** | | |
| ALFARWANIYA HOSPITAL | 200 | 61.9% |
| MUBARAK ALKABEER HOSPITAL | 123 | 38.1% |
| **Age** | | |
| 20 - 29 | 87 | 26.9% |
| 30 - 39 | 166 | 51.4% |
| 40 - 49 | 45 | 13.9% |
| 50 - 59 | 17 | 5.3% |
| ABOVE 59 | 6 | 1.9% |
| **Gender** | | |
| MALE | 116 | 35.9% |
| FEMALE | 207 | 64.1% |
| **Nationality** | | |
| KUWAITI | 44 | 13.6% |
| NON-KUWAITI | 270 | 83.6% |
| **Career** | | |
| DOCTOR | 49 | 15.2% |
| NURSE | 263 | 81.4% |
| OTHER | 11 | 3.4% |
| **Marital Status** | | |
| SINGLE | 67 | 20.7% |
| MARRIED | 236 | 73.1% |
| DIVORCED | 14 | 4.3% |
| WIDOWED | 6 | 1.9% |
| **Social Status** | | |
| FAMILY | 196 | 60.7% |
| ALONE | 124 | 38.4% |
| Type of House | | |
| OWNED HOME | 33 | 10.2% |
| APARTMENT | 118 | 36.5% |
| RENTAL | 164 | 50.8% |
| **Smoker** | | |
| YES | 25 | 7.7% |
| NO | 297 | 92.0% |
| **Chronic Disease** | | |
| YES | 30 | 9.3% |
| NO | 290 | 89.8% |
| **Recent Death of Relative** | | |
| YES | 95 | 29.4% |
| NO | 225 | 69.7% |

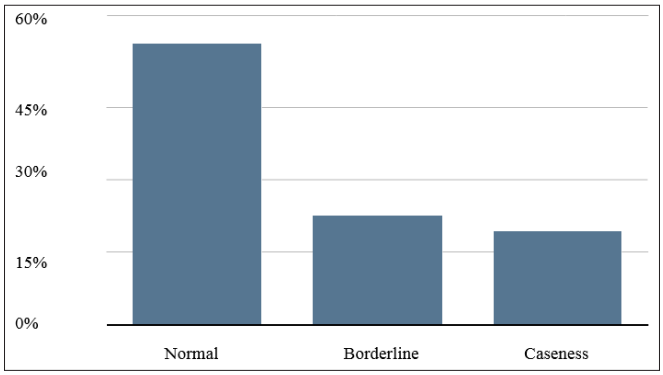
**Depression Status**

The valid data obtained from 311 individuals showed that 58.2% of the health workers were normal, 22.5% were borderline cases, while 19.3% were cases of depression.

**Table 2: Depression Status**

| | Frequency | Percent |
|---|---|---|
| Normal | 181 | 58.2% |
| Borderline | 70 | 22.5% |
| Caseness | 60 | 19.3% |
| Total | 311 | 100% |

**Chart 1:** Depression Statu




**Age**

In our study we have compared age with depression as a risk factor among the sample and found out that a total sample of 309; 60 of them were observed to be depressed and a real cases of depression.

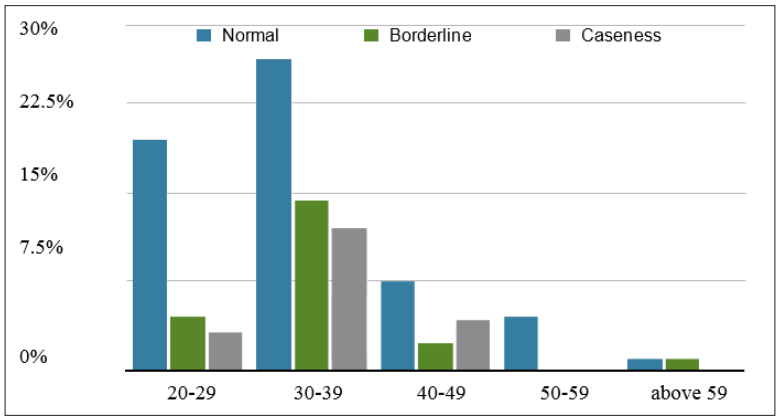
We had subdivided this risk factor into 5 classes. The first division has the ones who's ages are between 20 to 29 and 10 (3.2%) cases out of 84 (27.2%) of them were having depression; however, the 2nd class includes who is between 30 to 39, the results showed that this subdivision had most of our sample and have the highest percentage of depression among this class which is 12% (37) out of 52.4% (162). 3rd division who are between 40 to 49 had 13 (4.2%) real depression cases among 43 (13.9%) of this class. In addition, the 4th and 5th subdivisions that were dealing up with whom are within 50 to 59 and who's above 59 had no cases of depression.

So overall, we can conclude from our study that a percentage of 19.4% of health workers were found up to be depressed.

**Table 3: Depression in Relation to Age**

| | | Depression Status | | | |
|---|---|---|---|---|---|
| | | Normal | Borderline | Caseness | |
| 20 - 29 | Count | 60 | 14 | 10 | 84 |
| | % within Age | 71.4% | 16.7% | 11.9% | 100.0% |
| 30 - 39 | Count | 81 | 44 | 37 | 162 |
| | % within Age | 50.0% | 27.2% | 22.8% | 100.0% |
| 40 - 49 | Count | 23 | 7 | 13 | 43 |
| | % within Age | 53.5% | 16.3% | 30.2% | 100.0% |
| 50 - 59 | Count | 14 | 0 | 0 | 14 |
| | % within Age | 100.0% | 0.0% | 0.0% | 100.0% |
| ABOVE 59 | Count | 3 | 3 | 0 | 6 |
| | % within Age | 50.0% | 50.0% | 0.0% | 100.0% |
| Total | Count | 181 | 68 | 60 | 309 |
| | % within Age | 58.6% | 22.0% | 19.4% | 100.0% |
| P. Value | 0.001 | | | | |
| Mean | 34.96 | | | | |
| Std. Deviation | 7.446 | | | | |

**Chart 2: Depression in Relation to Age**



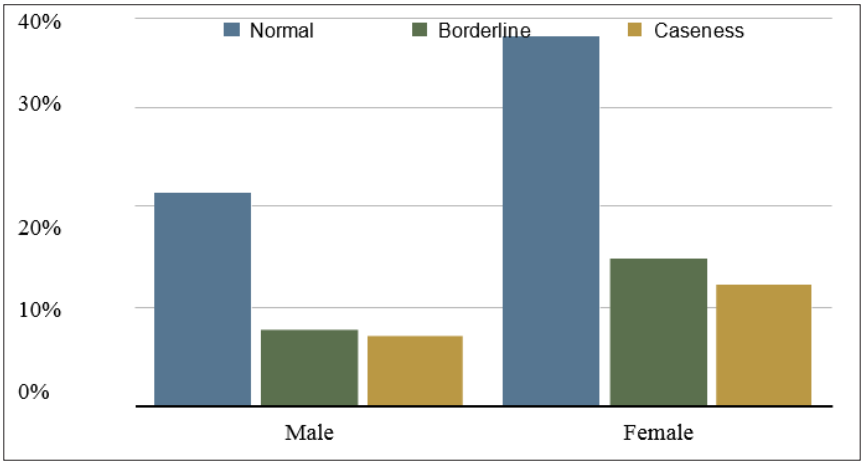

**Gender**

Shows the different depression status between the males and females. It seems that females show depressive symptoms more than males. However, relatively, males are more depressed because the number of males in this study is less, around 116 are males and 207 are females. Out of the 323 health workers, 7.1% of males were depressed compared to the 12.2% who were females.

**Table 4: Depression in Relation to Gender**

| | | Depression Status | | | Total |
|---|---|---|---|---|---|
| | | Normal | Borderline | Caseness | |
| KUWAITI | Count | 20 | 9 | 15 | 44 |
| | % within Nationality | 45.5% | 20.5% | 34.1% | 100.0% |
| NON-KUWAITI | Count | 152 | 61 | 45 | 258 |
| | % within Nationality | 58.9% | 23.6% | 17.4% | 100.0% |
| Total | Count | 172 | 70 | 60 | 302 |
| | % within Nationality | 57.0% | 23.2% | 19.9% | 100.0% |
| P. Value | 0.037 | | | | |

**Chart 3: Depression in Relation to Gender**



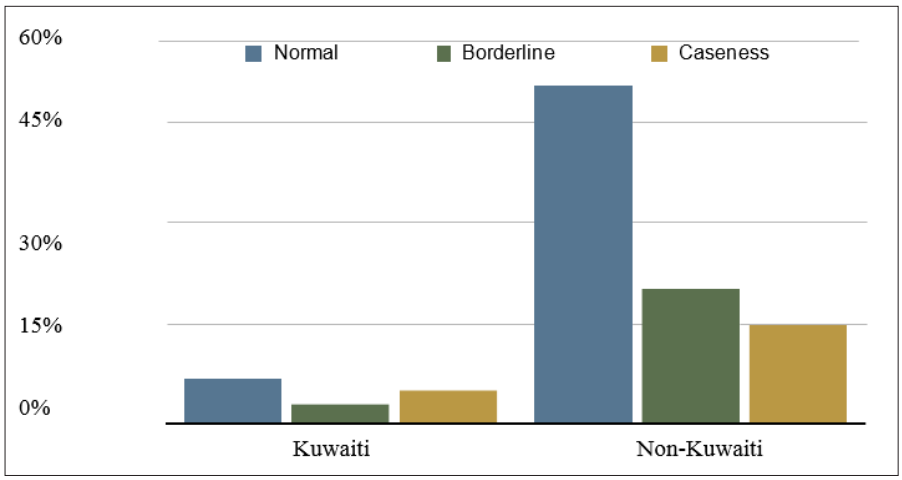

**Nationality**

The table demonstrates the prevalence of depression between Kuwaiti and non-Kuwaiti health workers. It seems that Kuwaiti health workers show depressive symptoms more than the non- Kuwaiti. It shows that 44 (14%) health workers who participated in the study were Kuwaiti, 34.1% of them have depression. On the other hand, 17% of the 258 (85.4%) non-Kuwaiti health workers have depression.

**Table 5: Depression in Relation to Nationality**

| | | Depression Status | | | Total |
|---|---|---|---|---|---|
| | | Normal | Borderline | Caseness | |
| MALE | Count | 66 | 24 | 22 | 112 |
| | % within Gender | 58.9% | 21.4% | 19.6% | 100.0% |
| FEMALE | Count | 115 | 46 | 38 | 199 |
| | % within Gender | 57.8% | 23.1% | 19.1% | 100.0% |
| Total | Count | 181 | 70 | 60 | 311 |
| | % within Gender | 58.2% | 22.5% | 19.3% | 100.0% |
| P. Value | 0.943 | | | | |

**Chart 4: Depression in Relation to Nationality**



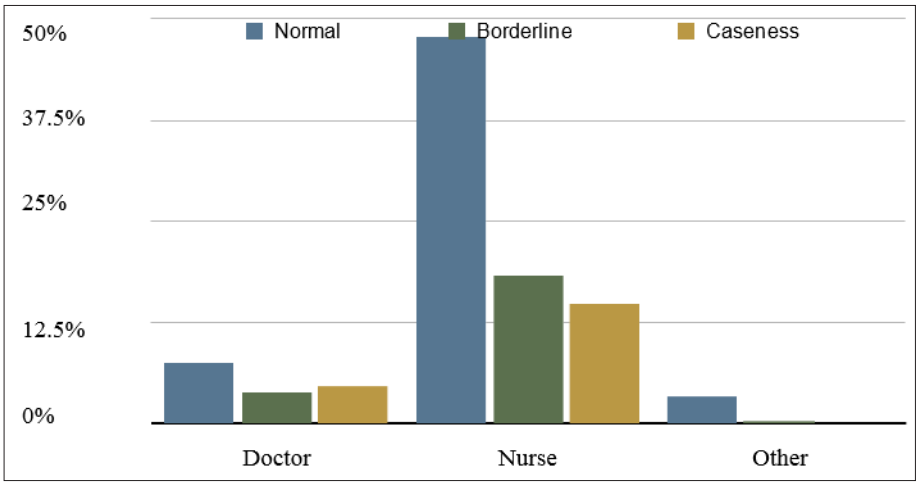

**Career**

The table below demonstrates depression among health workers based on their career. It appears that doctors have highest depression rate (28%) then the nurse and finally the other careers.

**Table 6: Depression in Relation to Career**

| | | Depression Status | | | Total |
|---|---|---|---|---|---|
| | | Normal | Borderline | Caseness | |
| DOCTOR | Count | 23 | 12 | 14 | 49 |
| | % within Career | 46.9% | 24.5% | 28.6% | 100.0% |
| NURSE | Count | 148 | 57 | 46 | 251 |
| | % within Career | 59.0% | 22.7% | 18.3% | 100.0% |
| OTHER | Count | 10 | 1 | 0 | 11 |
| | % within Career | 90.9% | 9.1% | 0.0% | 100.0% |
| Total | Count | 181 | 70 | 60 | 311 |
| | % within Career | 58.2% | 22.5% | 19.3% | 100.0% |
| P. Value | 0.074 | | | | |

**Chart 5: Depression in Relation to Career**



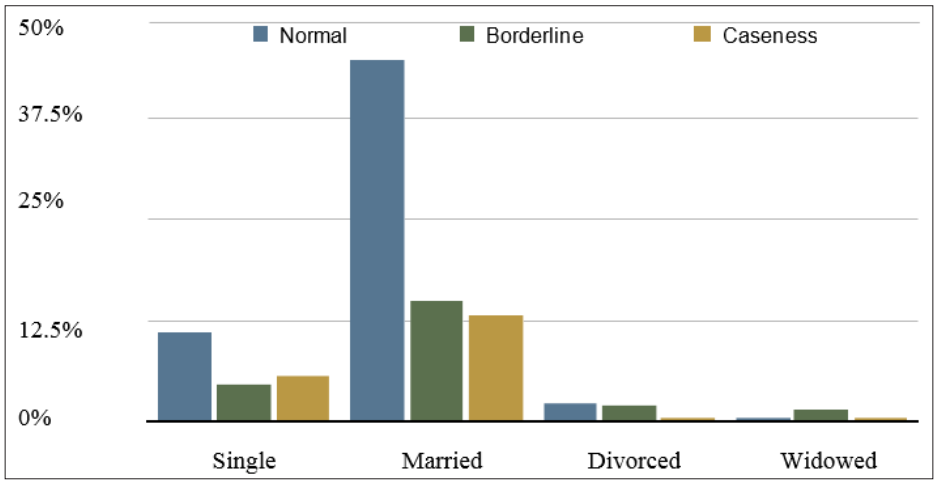

**Marital Status**

The collected data indicated that 28.3% of single individuals are depressed, while 68.3% of the married individuals are depressed cases. As for divorced individuals only 1.7% of them are depressed. Similar to divorced individuals, 1.7% of widowed individuals are depressed cases.

**Table 7: Depression in Relation to Marital Status**

| | | Depression Status | | | Total |
|---|---|---|---|---|---|
| | | Normal | Borderline | Caseness | |
| SINGLE | Count | 23 | 12 | 14 | 49 |
| | % within Career | 46.9% | 24.5% | 28.6% | 100.0% |
| MARRIED | Count | 148 | 57 | 46 | 251 |
| | % within Career | 59.0% | 22.7% | 18.3% | 100.0% |
| DIVORCED | Count | 10 | 1 | 0 | 11 |
| | % within Career | 90.9% | 9.1% | 0.0% | 100.0% |
| WIDOWED | Count | 181 | 70 | 60 | 311 |
| | % within Career | 58.2% | 22.5% | 19.3% | 100.0% |
| Total | Count | 181 | 70 | 60 | 311 |
| | % within Marital Status | 58.2% | 22.5% | 19.3% | 100.0% |
| P. Value | 0.031 | | | | |

**Chart 6: Depression in Relation to Marital Status**



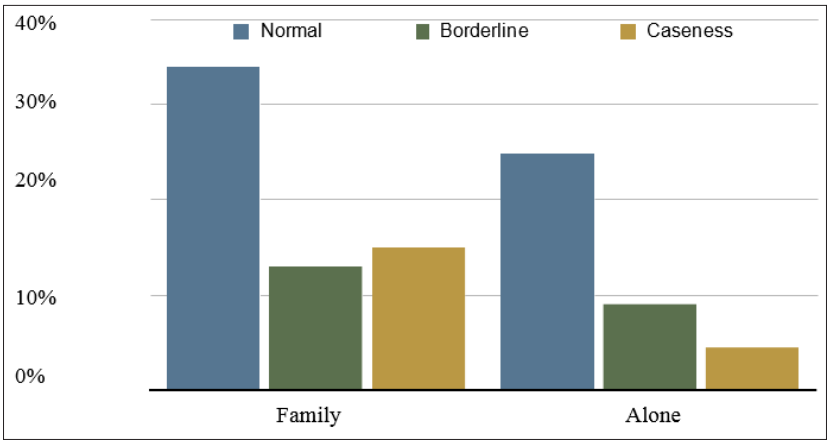

**Social Status**

From the data collected in this study, it was revealed that around 190 (61.7%) of the workers were living with their families. However, 24.2% of them are depressed. some of the participants, around 118(38.3%) of them were living alone with a depression percentage of 4.5% (Table.4).

**Table 8: Depression in Relation to Social Status**

| | | Depression Status | | | Total |
|---|---|---|---|---|---|
| | | Normal | Borderline | Caseness | |
| FAMILY | Count | 104 | 40 | 46 | 190 |
| | % within Career | 54.7% | 21.1% | 24.2% | 100.0% |
| ALONE | Count | 76 | 28 | 14 | 118 |
| | % within Career | 64.4% | 23.7% | 11.9% | 100.0% |
| Total | Count | 180 | 68 | 60 | 308 |
| | % within Marital Status | 58.4% | 22.1% | 19.5% | 100.0% |
| P. Value | 0.029 | | | | |

**Chart 7: Depression in Relation to Social Status**



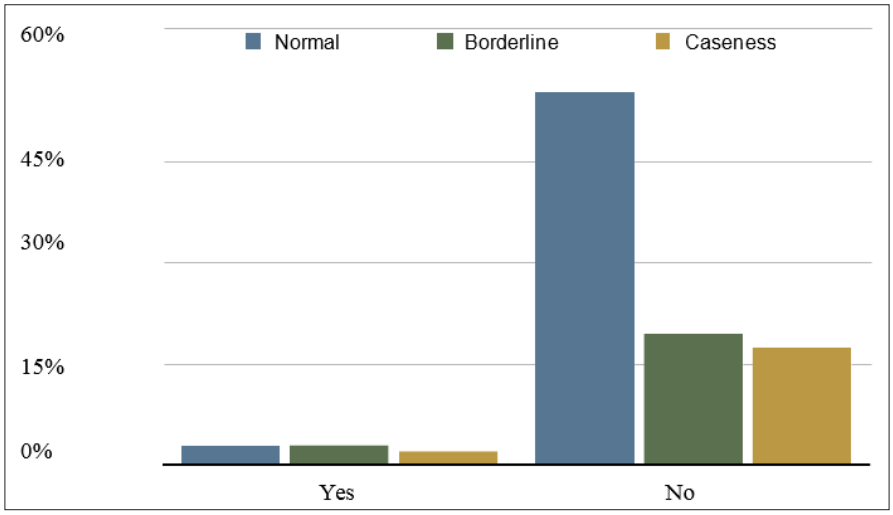

**Smoking**

The table display the spread of depression among smokers and non-smokers health workers. It shows health workers who don't smoke were 286, 171 of them were normal, 61 were border line and 54 were depressed. On the other hand the health worker 24 Health worker were smoking 9 of them were normal, 9 were border line and 6 were depressed.

**Table 9: Depression in Relation to Smoking**

| | | Depression Status | | | Total |
|---|---|---|---|---|---|
| | | Normal | Borderline | Caseness | |
| YES | Count | 9 | 9 | 6 | 24 |
| | % within Smokers | 37.5% | 37.5% | 25.0% | 100.0% |
| NO | Count | 171 | 61 | 54 | 286 |
| | % within Smokers | 59.8% | 21.3% | 18.9% | 100.0% |
| Total | Count | 180 | 70 | 60 | 310 |
| | % within Smokers | 58.1% | 22.6% | 19.4% | 100.0% |
| P. Value | 0.087 | | | | |

**Chart 8: Depression in Relation to Smoking**



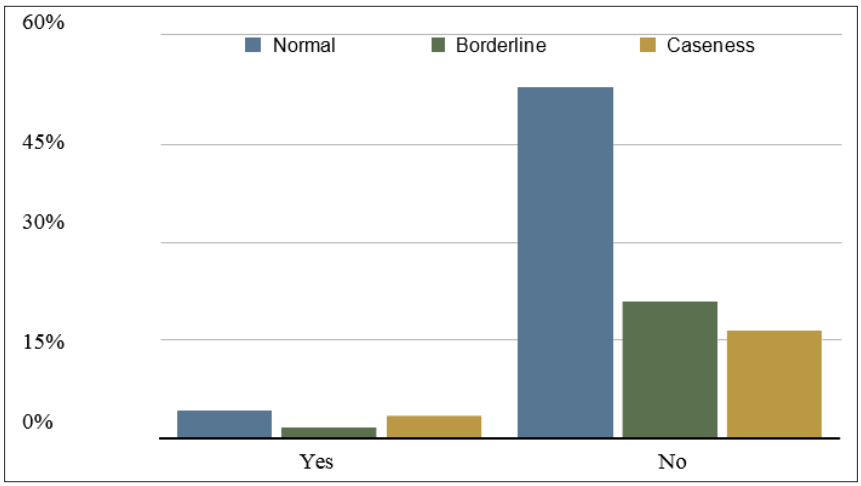

**Chronic Disease**

After conveying the survey, 10 individuals with chronic disease were depressed. The low number suggests that chronic diseases have a minimal effect on the depression status, which does not establish a direct relation between them.

**Table 10: Depression in Relation to Chronic Disease**

| | | Depression Status | | | Total |
|---|---|---|---|---|---|
| | | Normal | Borderline | Caseness | |
| YES | Count | 13 | 5 | 10 | 28 |
| | % within Chronic Disease | 46.4% | 17.9% | 35.7% | 100.0% |
| NO | Count | 166 | 64 | 50 | 280 |
| | % within Chronic Disease | 59.3% | 22.9% | 17.9% | 100.0% |
| Total | Count | 179 | 69 | 60 | 308 |
| | % within Chronic Disease | 58.1% | 22.4% | 19.5% | 100.0% |
| P. Value | 0.075 | | | | |

**Chart 9: Depression in Relation to Chronic Disease**




## Discussion

After collecting data from 311 valid health workers in Kuwait, it appears that those who were normal comprise 58.2%, 22.5% were borderline, while 19.3% were depressed. When we compared between males and females, it seems that females are more depressed than males (63.3% of the depressed were females while 36.7% of them were males). When we look to the depression status in relation to career, nurses were much more depressed than doctors (76.7% of the depressed were nurses, while only 23.3% of them were doctors). Concerning chronic disease status, we noticed that there is no strong relation between chronic diseases and depression. Looking at the other studies conducted to estimate the prevalence of depression among health workers, a study conducted in the Kingdom of Saudi Arabia showed that 75% of the health workers (nurses) were normal, 15% were borderline, while 10% were depressed. Another study was done in Iraq revealed that 70.25% of the health workers have depressive symptoms.

One of the studies conducted in Nigeria revealed that the percentage of depressed health workers was 14.9%, of those depressed 18.0% were female, while 8.7% were male. Another study conducted in New York, United states of America, showed that 54% of health workers showed minimal signs of depression, 22% showed mild signs, and 8% showed high signs. A previous study conducted in Brazil revealed that 28.4% of the nurses working in medical field were depressed. In another study conducted in Zhejiang University, China, to compare the depression levels between doctors and nurses, the results were as follows: 47% of the doctors were depressed, while 52% of the nurses were depressed. A study performed in Mexico showed that health workers with chronic diseases are depressed, establishing a link between chronic diseases and depression status.

## Conclusion

This study, which was providing an estimation to the prevalence of depression among health workers in Kuwait, showed that there is a difference in the prevalence of depression between the genders, as it was higher among female than male health workers. Social status also has some association with depression. All the findings that we have reached in our study reflect the importance of developing solutions in order to decrease the prevalence of depression in those who work in the medical field. Establishment of new rules to decrease working hours and at the same time increase the number of workers to compensate and reduce the work load. Another way to reduce the prevalence of depression is to held workshops and seminars on overcoming depression for the health workers so that it alleviates the work stress.

## Limitations

The number of health workers was low; so, we should have increased the number of participants to make a more generalized judgment. If the type of our study was a case-control study instead of a cross-sectional, we could have received a more accurate result. The short period was one of our limitations, since it hindered us from obtaining more health workers data, more time to analyze the data and establish a relation between the variables.

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