Depression among Adult in Jazan Region, Jizan, Saudi Arabia,2017

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ABSTRACT

By the year 2020 depression would be the second major cause of disability adjusted life years lost, as reported by the World Health Organization. Depression is a mental illness which causes persistent low mood, a sense of despair, and has multiple risk factors. Its prevalence in primary care varies between 15.3-22%, with global prevalence up to 13% and between 17-46% in Saudi Arabia. Despite several studies that have shown benefit of early diagnosis and cost-savings of up to 80%, physicians in primary care setting continue to miss out on 30-50% of depressed patients in their practices. METHODS: This descriptive cross sectional study was conducted at Jazan region ,Saudi Arabia aiming at estimating point prevalence of depression among healthy adults, data was collected by using standardized of PHQ-9 questionnaire. Collected data was analyzed by using SPSS ver. 20. RESULTS: About 347 subject adults of age 20 up to 60 years old were participated in this study, 49% were male and 51% were female, About 347 subject adults of age 20 up to 60 years old were participated in this study, 49% were male and 51% were female, majority (70%) within the age group from 30 - 40 years old, 65 % were single and 62% were students. The study indicated that about only 15% of subjects had no symptoms of depression while 85% of subjects had symptoms of depression varies from minimal symptoms to moderate major depression, where 30% had Minimal symptoms, 27% had mild major depression and 28% had moderate major depression.

Introduction

Depression is a common mental health disorder, affecting more than 350 million people of all ages worldwide, according to the World Health Organization (WHO). In 2001, the WHO identified depression as the fourth leading cause of disability and premature death in the world. It is projected to become the leading cause of burden of disease by 2030. By the year 2020 depression would be the second major cause of disability adjusted life years lost, as reported by the World Health Organization. Depression is a mental illness which causes persistent low mood, a sense of despair, and has multiple risk factors. Its prevalence in primary care varies between 15.3-22%, with global prevalence up to 13% and between 17-46% in Saudi Arabia. Despite several studies that have shown benefit of early diagnosis and cost-savings of up to 80%, physicians in primary care setting continue to miss out on 30-50% of depressed patients in their practices. Addressing the growing unmet need for developing better understanding of psychiatric diseases including major depressive disorder (MDD) in Saudi Arabia. A recent study published in the Journal of Clinical Psychiatry highlighted the large gap in the Middle East region between the number of people needing and actually receiving treatment for depression. Furthermore, the World Health Organization notes more than 75 percent of people with depression in developing countries are inadequately treated, with mental health one of the most neglected, yet essential, development issues in achieving the United Nations' Millennium Development Goals one and five. Demonstrating the local burden, in Saudi Arabia, more than 201,000 disability-adjusted life years (DALYs) are lost from depression in a year. DALYs is a measure of overall disease burden, expressed as the number of years of potential life lost due to premature death and the years of productive life lost due to disability.

Methods:

This cross-sectional study was conducted at Jazan Region, Jizan. About 347 adults of age 20–65 years were selected randomly, This descriptive cross sectional study was conducted at Jazan region. Data were collected using PHQ-2 and PHQ-9 Arabic version validated questionnaires for depression screening [42]. Other relevant demographic and personal data were also collected including age, gender, profession, social class and marital status, self-administered questionnaire were distributed online from 15 – 31 of March, 2017. Collected data were analyzed by using SPSS ver. 20

The PHQ-2 and PHQ-9 (Table 1) were analyzed in terms of calculating the severity scores for each question, for presence of depression symptoms over the last 2 weeks. The score of severity of depression varied between 0 (not present at all), 1 (present in several days), 2 (present more than half the days) and 3 (present nearly every day). The severity score of PHQ-2 was calculated and ranged between 0–6 points. Also, the severity score of PHQ-9 ranged between 0–27 points. The scores for PHQ-9 were used to determine the presence of depression and its severity depend on the following score ranges: 1–4 minimal depression, 5–9 mild, 10–14 moderate, 15–19 moderate to severe, and 20–27 severe [43]. For statistical analysis in our study, a person with minimal score (1–4) on PHQ-9, was not considered has

'depressed', and those with score ≥ 10 (moderate - severe) were categorized needing medical treatment for cost-analysis. For PHQ-2, presence or absence of depression was based on a score of 3 and above out of 6 on the screening instrument [44]. Table 1and 2

PHQ-9	Points
No syndrome	0-4
Minimal syndrome	5-9
Major depression / mild	10 -14
Major depression / moderate	15 - 19
Major depression / severe	> 20

The data was analyzed for all questions estimating frequencies, percentages, means and standard deviations, where applicable. The PHQ-9 scores were used along with various demographic variables, for comparisons, using statistical tests including Chi-square an t test.

Results

Table 1. shows the distribution of subjects according to the gender N = 347.

Gender	Fr.	%
Male	171	49.3
Female	176	50.7

Table 2. shows the distribution of subjects according to the age group N = 347.

Age Group	Fr.	%
> 20 years	27	7.7
20 - 30	232	66.9
30 - 40	52	15.0
40 -50	29	8.4
50-60	7	2.0

Table 3. shows the distribution of subjects according to the marital status N = 347.

Marital Status	Fr.	%
Single	227	65.4
Married	120	34.6

Table 4. shows the distribution of subjects according to the profession N = 347.

Profession	Fr.	%
Student	214	61.6
Employee	117	33.8
hoseheld	16	4.6

Table 6 . shows the distribution of subjects according to the syndrome of depression N = 347.

PHQ-9	Fr.	Fr.	%
No syndrome	0-4	53	15.3
Minimal syndrome	5-9	103	29.8
Major depression / mild	10 -14	93	26.9
Major depression / moderate	15 - 19	98	28.0
Major depression / severe	> 20	0	0
Total		347	100.0

Table 7 .shows the distribution of subjects according to the PHQ-2* & PHQ-9 test N = 347.

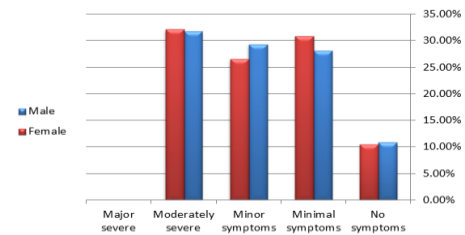|		Fr.	%
1.	Loss of interest	259	66.9
2.	Feeling depressed	291	75.2
3.	Trouble sleeping.	238	61.5
4.	Feeling tired.	310	80.1
5.	Poor appetite or eating.	242	62.5
6.	Loss of self-esteem.	229	59.2
7.	Low level of concentration.	183	47.3
8.	Low voice or edgy.	111	28.7
9.	Suicidal ideation.	85	22.0

Figure 1. shows the distribution of subjects according to the syndrome of depression and gender.
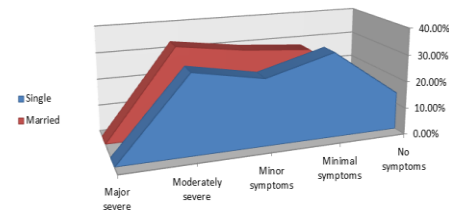
Figure 2. shows the distribution of subjects according to the syndrome of depression and marital status.

Patient health questionnaire PHQ 2* & 9: screening instrument for depression

For last 2 weeks how often have you been bothered by any of the following problems?	Nearly everyday	More than half days	Several days	Not at all
1. Loss of interest	0	1	2	3
2. Feeling depressed	0	1	2	3
3. Trouble sleeping.	0	1	2	3
4. Feeling tired.	0	1	2	3
5. Poor appetite or eating.	0	1	2	3
6. Loss of self-esteem.	0	1	2	3
7. Low level of concentration.	0	1	2	3
8. Low voice or edgy.	0	1	2	3
9. Suicidal ideation.	0	1	2	3

Table 5 . shows the distribution of subjects Socio-demographic characteristics and their associations with depression N = 347.

|		No symptoms		Minimal symptoms		Minor symptoms		Moderately severe		Major severe	
		Fr.	%	Fr.	%	Fr.	%	Fr.	%	Fr.	%
Gender	Male	18	10.8	47	28.1%	49	29.3	53	31.7%	0	0
	Female	17	10.5%	50	30.9%	43	26.5%	52	32.1%	0	0
Professional	student	17	9.2%	56	30.4%	35	31.5%	58	31.5%	0	0
	employee	14	10.9%	37	28.7%	34	26.4%	44	34.1%	0	0
	household	35	10.6%	4	25.0%	4	25.0%	5	31.2%	0	0
Marital Status	Single	18	14.0%	41	31.8%	32	24.8%	38	29.5%	0	0
	Married	17	8.5%	56	28.0%	60	30.0%	67	33.5%	0	0
Social class	low	4	16.7%	7	29.2%	6	25.0%	7	29.2%	0	0
	Medium	30	10.1%	88	29.6%	82	27.6%	97	32.7%	0	0
	high	1	12.5%	2	25.0%	4	50.0%	1	12.5%	0	0
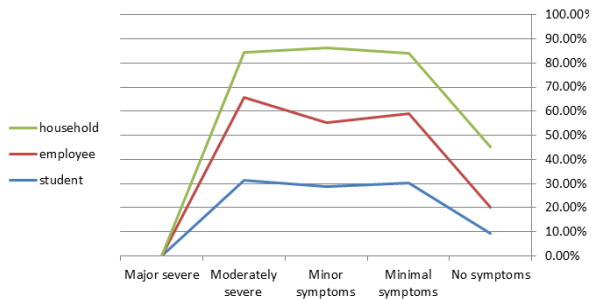
Figure 3. shows the distribution of subjects according to the syndrome of depression and profession.
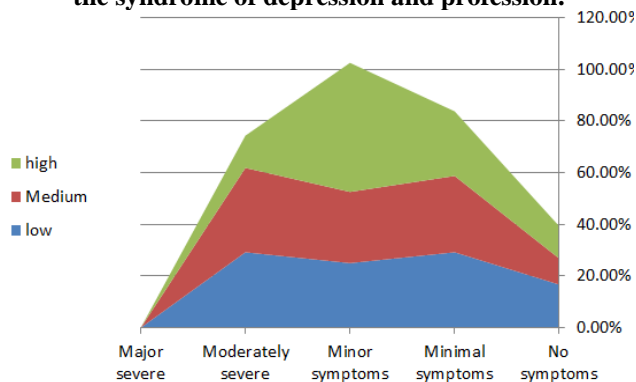

Figure 4. shows the distribution of subjects according to the syndrome of depression and social class.

Discussion

About 347 subject adults of age 20 up to 60 years old were participated in this study, 49% were male and 51% were female, majority (70%) within the age group from 30 - 40 years old, 65 % were single and 62% were students. The study indicated that only 15% of subjects had no symptoms of depression while 85% of subjects had symptoms of depression varies from minimal symptoms to moderate major depression, where 30% had Minimal symptoms, 27% had mild major depression and 28% had moderate major depression with the average of 28%. This finding is greator to to that reported by Al Ibrahim et al., in their systematic review in 2010 [19] and an other study conducted in 2007 (**Moataz M** et al 2007) while anothes study conducted for adults found that the prevalence was 49.9%, of which 31% were mild, 13.4% moderate, 4.4% moderate-severe and 1.0% severe cases (Waleed Al-Qadhi 2017).

Our findings provide no gender gender differences in the prevalence and presentation of depressive symptoms, where this finding is opposite to another study which found difference regarding to gender Our study found that there were no A significant relationship between depression and gender . Different findings was reported in many studies either local [(**Moataz M** et al 200718, 20, 22, 23] or international [4, 11, 52].

In our study we also found no significant relationship of depressive symptoms with other demographic variables such as; age, profession, marital status and social class, this findings was similar to many international studies [4, 16, 18, 21],

In Saudi Arabia, prevalence has been estimated in several studies, with rates varying in different populations, age groups, times, and geographic locations. Psychiatric morbidity in primary care was estimated in 1995 around 30-46% of the visiting patients [17]. In 2002, depression and anxiety disorders were noted around 18% among adults in central Saudi Arabia [18]. Al Ibrahim et al., in 2010 showed an overall prevalence of 41% in a systematic review on depression [19]. El Rufaie et al., noted a 17% prevalence of depression among residents of Dammam [20]. Al Qahtani et al., in Asir reported a 27% prevalence of depression in the year 2008 [21]. Abdul Wahid et al. in 2011, reported an overall prevalence of depression nearing 12%, with 6% as severe cases, in the south-eastern region [22]. In Riyadh Becker et al., found depression prevalence to be 20% in primary care settings [23, 24].

Saudi Arabia has a high prevalence of depression, and as population grows, along with rising risk factors of depression such as chronic disease, stress of modernization, sedentary life style and social isolation, coupled with pre-existing stigmas of having a mental health disorder, paucity of psychiatrist and resources supporting mental health, the direct and indirect costs of depression are expected to rise [26]. In Saudi Arabian health care system in general and primary care settings in particular, data regarding cost of treatment of depression are rare to find. No Saudi studies regarding the cost of treatment, lost productivity and/or monetary benefit of screening for depression were found upon literature review. United States Preventive Services Task Force (USPSTF) has recommended screening elderly, adults and adolescents 12–18 years of age for depression [4, 33, 34]. Ultra-short screening instrument, Patient Health Questionnaire (PHQ-2) asking two simple questions about mood and anhedonia, is as effective as longer screening instruments, such as the Beck Depression Inventory (BDI) or Zung Depression Scale (ZDS) [32, 35, 36]. PHQ-9 is one of the most common instruments used for depression screening, and it is increasingly being used for confirmation of a positive PHQ-2 result. The PHQ-9 is valid, takes two to five minutes to complete [4, 37, 38].

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