Biomedical and Health Informatics
Vol. 2, No. 4, 2017, pp. 20-23
http://www.aiscience.org/journal/bhi

AIS | American Institute of Science

Population Based Screening of Depressive Symptoms among Adult Cohorts at Multicultural Environment Setting

Taryam Manal Mohamed Omran[1], Waleed Al Fiasal[2, *], Hamid Hussein Y.[2], Al Kamahi Tahsen[4], Ali Al Salaq[4], Ahmed Soliman Wasfy[3]

[1]Primary Health Care Services Sector, Dubai Health Authority, Dubai, UAE
[2]Health Affairs Department, Primary Health Care Services Sector, Dubai Health Authority, Dubai, UAE
[3]Dubai Health Authority, Dubai, UAE
[4]Dubai Statistics Center, Dubai, UAE

Abstract

As per WHO Global Burden of Disease Study, depression is one of the main causes of disease-related disability worldwide and accounts for a large part of the global disease burden. The study is aiming to identify the prevalence of depressive symptoms among adult population in Dubai. Dubai Household Health Survey was conducted in 2014 as a Cross-sectional, multistage, stratified, Cluster survey. Houses were visited to obtain detailed information on the different health-related issues. According to Dubai Statistical center, [9] the total population of Dubai at the end of 2014 was 2327350 (males 1613175, females 714175) (UAE 212000, Expatriates 2115350). A sample of 3716 individuals were investigated for depressive symptoms. Depressive symptoms questions were one part of the household health survey questionnaire, which was composed of around 400 questions. Data were coded, entered to the computer, reviewed and analyzed using SPSS 21. The analysis was performed after data weighting. This procedure made the total number of the participants 3367 instead of 3716. The study revealed, Categories of “More than half of the days”, and “Almost every day” were encountered in 3.56% for the question about “having little interest or pleasure in doing things”, in 1.39% for the question about “feeling down, depressed or hopeless”, in 3.47% for the question about “trouble falling or staying asleep, or sleeping too much”, in 2.73% for the question about “feeling tired or having little energy”, in 3% for the question about “poor appetite or overeating”, in 0.63% for the question about “feeling bad about oneself”, in 1.37% for the question about “trouble concentrating”, in 1.39% for the question about “moving or speaking so slowly”, and in 0.09% for the question about “thoughts of better being dead”. The study concluded that Depressive symptoms are not uncommon among adult cohort group, nevertheless some of depressive symptoms are significantly highly prevalent among more than 0.09%-3.47% of adult populations of Dubai. Public health and mental health intervention programs need to be applied among population at risk to prevent further deterioration.

Keywords

Screening, Depressive Symptoms, Population Based, Multicultural Environment

Received: March 12, 2017 / Accepted: April 7, 2017 / Published online: August 1, 2017

@ 2017 The Authors. Published by American Institute of Science. This Open Access article is under the CC BY license.
http://creativecommons.org/licenses/by/4.0/

1. Introduction

As per WHO Global Burden of Disease Study, depression is one of the main causes of disease-related disability worldwide [1] and accounts for a large part of the global disease burden. [2] Due to its high prevalence and far-reaching consequences for individuals and society as a whole, depression and the care for those affected by it are of

* Corresponding author
E-mail address: wldalfaisal@gmail.com (W. Al Fiasal)

major public health relevance. [1, 3] The general term depression is used to describe a wide clinical spectrum, ranging from isolated depressive symptoms, through light or subthreshold forms of depressive disorder, to severe major depressive disorder. [3] Subthreshold depressive symptoms are already of great relevance in this context. Even if they do not meet the criteria of a clinical disorder, they are often associated with impairment and an increased risk for the development of major depression.

Reliable information at the population level is needed to estimate the disease burden of depression and associated care needs. [4]

Depressive symptoms are one of the most common mental health problems in adult and later life. Yet, depressive symptoms in adults are often under-identified by both clinical professionals and laypersons. Depressive symptoms can be mistaken as normal reaction to life event processes and downplayed by adult people themselves. [5]. These symptoms may also be neglected because the syndromes manifested among elders can differ from those described in the Diagnostic and Statistical Manual. [6].

Nevertheless, it is highly impractical to administer clinical diagnostic interviews to the entire old population to screen for probable depressed elders due to the high cost required. Instead, a convenient screening instrument would be of supreme value. [7]. A short form of the Center for Epidemiologic Studies Depression Scale (CES-D Scale) [8] has been frequently used in national surveys of elders in Taiwan and can serve as an effective device. Because the items of this short form of the CES-D differ from those of other previously developed short forms, a cutoff score must be determined.

2. Objectives

To identify the prevalence of depressive symptoms among adult population in Dubai.

3. Methods

Dubai Household Health Survey was conducted in 2014 as a Cross-sectional, multistage, stratified, Cluster survey. Houses were visited to obtain detailed information on the different health-related issues. According to Dubai Statistical center, [9] the total population of Dubai at the end of 2014 was 2327350 (males 1613175, females 714175) (UAE 212000, Expatriates 2115350). A sample of 3716 individuals were investigated for depressive symptoms. Depressive symptoms questions were one part of the household health survey questionnaire, which was composed of around 400 questions. Data were coded, entered to the computer, reviewed and analyzed using SPSS 21. The analysis was performed after data weighting. This procedure made the total number of the participants 3367 instead of 3716.

4. Results

The study showed in Tables 1-10 show the results accordingly. Categories of "More than half of the days", and "Almost every day" were encountered in 3.56% for "Having little interest or pleasure in doing things" (Table 1), 1.39% for "Feeling down, depressed or hopeless" (Table 2), 3.47% for "Trouble falling or staying asleep, or sleeping too much" (Table 3), 2.73% for "Feeling tired or having little energy" (Table 4), 3% for "Poor appetite or overeating" (Table 5), 0.63% for "Feeling bad about oneself" (Table 6), 1.37% for "Trouble concentrating" (Table 7), 1.39% for "Moving or speaking so slowly" (Table 8), 0.09% for "Thoughts of better being dead" (Table 9).

Table 1. Little interest or pleasure in doing things you usually enjoy.

Having little interest or pleasure in doing things	No	%
Not at all	2952	87.67
Several days	295	8.76
More than half the days	88	2.61
Almost everyday	32	0.95
Total	3367	100.0

Table 2. Feeling down, depressed, or hopeless.

Feeling down, depressed or hopeless	No	%
Not at all	3106	92.25
Several days	214	6.36
More than half the days	27	0.80
Almost everyday	20	0.59
Total	3367	100.0

Table 3. Trouble falling or staying asleep, or sleeping too much.

Trouble falling or staying asleep, or sleeping too much	No	%
Not at all	2833	84.14
Several days	417	12.39
More than half the days	92	2.73
Almost everyday	25	0.74
Total	3367	100.0

Table 4. Feeling tired or having little energy.

Feeling tired or having little energy	No	%
Not at all	2712	80.55
Several days	563	16.72
More than half the days	69	2.05
Almost everyday	23	0.68
Total	3367	100.0

Table 5. Poor appetite or overeating.

Poor appetite or overeating	No	%
Not at all	2855	84.79
Several days	411	12.21
More than half the days	77	2.29
Almost everyday	24	0.71
Total	3367	100.0

Table 6. Feeling bad about self — or a failure or have let self or your family down.

Feeling bad about oneself	No	%
Not at all	3245	96.38
Several days	101	3.00
More than half the days	12	0.36
Almost everyday	9	0.27
Total	3367	100.0

Table 7. Trouble concentrating on things, such as reading the newspaper or watching television.

Trouble concentrating	No	%
Not at all	3152	93.61
Several days	169	5.02
More than half the days	33	0.98
Almost everyday	13	0.39
Total	3367	100.0

Table 8. Moving or speaking so slowly? Fidgety or restless that you have been moving around a lot more than usual.

Moving or speaking so slowly	No	%
Not at all	3176	94.33
Several days	144	4.28
More than half the days	24	0.71
Almost everyday	23	0.68
Total	3367	100.0

Table 9. Thoughts off dead or of hurting self in some way.

Thoughts of better being dead	No	%
Not at all	3346	99.38
Several days	18	0.53
More than half the days	1	0.03
Almost everyday	2	0.06
Total	3367	100.0

As for “How the problems mentioned made it difficult do work, take care of things at home, or get along with other people?” Table 10 explain the result. The problem contributed more than half the days, and almost every day in 1.19%.

Table 10. Contribution of mental health to difficulties in doing work, taking care of things at home, or getting with other people.

Contribution of mental health	No	%
Not at all	3157	93.76
Several days	170	5.05
More than half the days	36	1.07
Almost everyday	4	0.12
Total	3367	100.0

As for diagnosis of depression within the last 12 month?” Table 11 explain the result. Two persons only answered yes.

Table 11. Frequency of depression among the survey population.

Depression	No	%
Yes	2	0.06
No	3365	99.94
Total	3367	100.0

5. Discussion

The current study showed that depressive symptoms among adult group of Dubai Population are not uncommon; the results provide up-to-date information on the prevalence and distribution of two important aspects of depression among the adult population. The depressive symptoms prevalence was from 0.09%-3.47% among Dubai adult population. This study outcome was similar to another study carried out in Germany. [4] They included persons aged 18–65 years. 12-month prevalence of diagnosed depression was calculated as percentages with 95% confidence intervals (95% CI) of the total numbers of all participants who gave valid answers. Participants who provided no or incomplete answers to the PHQ-9 and those who gave no answer or replied “Don’t know” to the questions on diagnosed depression were excluded from the relevant analyses.

To date, no comparative data for Germany are available on the prevalence of current depressive symptoms among the general adult population. However, the National Health and Nutrition Examination Survey (NHANES) and the Behavioral Risk Factor Surveillance System (BRFSS) in the USA have been recording current depressive symptoms for many years using the PHQ-9 with a cut-off of ≥10 points. [10 The measured point prevalence of 6.8% (NHANES 2005–2008) and 8.7% (BRFSS 2006) are similar to the overall prevalence of 8.1% now recorded by DEGS.

Current gender distribution of depressive symptoms in the international research is showing a significantly higher prevalence among men than women. Prevalence is highest in the age group from 18–29 years (11.8 and 8.0%) and decreases thereafter. This decrease in prevalence with increasing age is statistically significant overall (pTrend=0.01) and among men (pTrend=0.02) but not among women (pTrend=0.09). The lowest prevalence is found among women and men aged 70–79 years (7.7 and 4.2%). Women show a higher prevalence than men in all age groups. Overall, there is an inverse relationship between socioeconomic status and the prevalence of current depressive symptoms The prevalence among persons with low SES (13.6%) is almost twice as high as among those with high SES (4.6%, pTrend<0.0001). This social gradient is more marked among women than men (pTrend<0.0001 in each case). With regard to size of municipality, the lowest overall prevalence of current depressive symptoms is found among persons who live in small towns (5.8%, 95% CI 4.7–7.1), compared to persons from large towns (9.4%, 95% CI 7.6– 11.6, p=0.03), medium-sized towns (9.1%, 95% CI 7.5–11.0, p=0.02) and rural areas (7.4%, 95% CI 6.0–9.1, p=0.8). This relationship is similar for men and women and also remains after statistical adjustment for age, sex and SES. [4]

6. Conclusion

Depressive symptoms are not uncommon among adult cohort group; nevertheless some of depressive symptoms are significantly highly prevalent among more than 0.09%-3.47% of adult populations of Dubai. Public health and mental health intervention programs need to be applied among population at risk to prevent further deterioration.

References

[1] Vos T, Flaxman AD, Naghavi M et al (2013) Years lived with disability (YLDs) for 1160 sequelae of 289 diseases and injuries 1990–2010: a systematic analysis for the Global Burden of Disease Study 2010. Lancet 380:2163–2196.

[2] Murray CJL, Vos T, Lozano R et al (2012) Disability adjusted life years (DALYs) for 291 diseases and injuries in 21 regions, 1990–2010: a systematic analysis for the Global Burden of Disease Study 2010. Lancet 380:2197–2223.

[3] Wittchen HU, Jacobi F, Klose M, Ryl L (2010) Depressive Erkrankungen. Gesundheitsberichterstattung des Bundes, Heft 51. Robert Koch-Institut, Berlin.

[4] M. A. Busch · U. E. Maske · L. Ryl · R. Schlack · U. Hapke Robert Koch Institute, Department of Epidemiology and Health Monitoring, Berlin Prevalence of depressive symptoms and diagnosed depression among adults in Germany. 2009. http://edoc.rki.de/oa/articles/reLPtVNhg9T2/PDF/22QgLkX1lQgU.pdf

[5] Mui, A. C. and Yang, P. S. (2005). The foundations of gerontological social work practice in Taiwan. YehYeh Publishing House, Taipei.

[6] Small, G. W. (1998) Treatment of geriatric depression. Depression and Anxiety, 8, 32-42. doi:10.1002/(SICI)1520-6394(1998)8:1+<32::AID-sDA6>3.0.CO;2-J.

[7] Katona, C. L. E. (1994) Depression in old age. Wiley, New York.

[8] Radloff, L. S. (1977) The CES-D scale: A self-report depression scale for research in the general population. Applied Psychological Measurement, 1, 385-401. doi: 10.1177/014662167700100306.

[9] Dubai Statistics Center. Population Bulletin, Emirate of Dubai, 2014. Available from: https://www.dsc.gov.ae/Publication/Population%20Bulletin%20Emirate%20of%20Dubai%202014.pdf Accessed on Tuesday 13 December 2016.

[10] Reeves WC, Strine TW, Pratt LA et al (2011) Mental illness surveillance among adults in the United States. MMWR Surveill Summ 60(Suppl 3):1–29.