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Short Communication

Prevalence and predictive factors of depression among medical health care workers and medical residents

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Mental health is one of the 3 essential health columns which is defined according to WHO as "a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity". Depression is one of the most common mental health. According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), depression is defined as at least two weeks period with either or both depressed mood most of the time or anhedonia with 3 to 4 of the following (change of appetite, feeling of worthlessness, insomnia, diminished of concentration, psychomotor agitation, fatigue, or thought of death or suicide) and should not be attributed to drugs or another medical condition. Globally depression is a common mental health disorder that affected 5% of world adults. Women and older people have a higher risk to have depression. From 15 to 29 years old people suicide is the 4th leading cause of death. Yearly 700 thousand die due to suicide [1]. As part of working people medical residents like all people facing depression which will affect their productivity and ability to learn. Accordingly, medical residents have the right to assess and access mental health care facilities [2]. In Saudi Arabia, there are some studies modestly trying to assess the prevalence of depression among the population in general and health care workers and the risk factors associated with depression. In this study, we try as part of the whole kingdom to find the prevalence of depression among medical residents in order to address the problem to try to solve it.

Salha Ali Almarhapi A, et al. In a cross-sectional study on 255 healthcare workers (72 physicians and 183nurses) from North West Armed Forces Hospital in Tabuk City by using a 9-item depression module of the full Patient Health Questionnaire

(PHQ) the results demonstrated 43.9% Of healthcare workers have depression and 0.8 were severe depression. 58.8% of the participant were females. Also, they found that persons who lost a beloved one or experience less than 5 years are at higher risk to developed depression comber to those without a history of beloved loss or longer work experience [3].

Mahera Abdulrahman A, et al. A cross-sectional study on 446 medical residents, in which 68% of them responded. The study was conducted in Dubai and Abu Dhabi in UAE. by using a 9-item depression module of the full Patient Health Questionnaire (PHQ) the results demonstrated 75.5%, 84% and 74% of the medical resident had moderate-to-high emotional exhaustion, high depersonalization and low sense of personal accomplishment, respectively. And depending on specialty, depression was ranked from 6% to 22%. also Among those with high depression reported burnout by 83% [4].

Nada A. AlYousefi A, et al. A cross-sectional study on 960 students. The study was conducted in Riyadh, Saudi Arabia. By using a 9-item depression module of the full Patient Health Questionnaire (PHQ) the results demonstrated 32.4% of students aged from 16 to 19 had moderate to severe depression. Also, they found the female gender and Level of the father's education as a significant predictor of depression. And a physically active lifestyle as a protective factor. Those with physical and emotional abuse had a higher risk for depression [5].

A systematic review and meta-analysis of literature containing 54 cross-sectional and longitudinal full-text articles about characteristics symptoms and prevalence of



depression published from January 1963 to September 2015 in EMBASE, ERIC, MEDLINE and PsycINFO. They found from 9447 participants in 31 cross-sectional studies and 8113 participants in 23 longitudinal studies 28.8% pooled prevalence of depression with $Q = 124.7$, $\tau^2 = 0.39$, $I^2 = 95.8\%$, $p < .001$ heterogeneity. Prevalence estimates ranged from 20.9% to 43.2% for the 9-item Patient Health Questionnaire with a cut-off of 10 or more and the 2-item PRIME-MD respectively. Also, they found an increase in the prevalence of depression by 0.5% per year with increases in a calendar year. Among 7 longitudinal studies with secondary analysis the median absolute increase by 15.8% in depression symptoms with the onset of a residency program. Between different studies, there were no significant statically differences [6].

Mehdi Marzouk A, et al. A cross-sectional study on 1700 medical residents. A study was conducted in Tunisia between 14 and 22 December 2015 by using Hospital Anxiety and Depression (HAD) questionnaire. the results demonstrated that 74.1% of residents had anxiety and 62% had depression. Also, they found the residents' age, female gender, number of night shifts and surgical specialty were scientifically associated with high HAD scores [7].

Abdullah Alshard A, et al. In a cross-sectional study on 149 medical residents completing their training programs at King Abdulaziz Medical City (KAMC), Ministry of National Guard Health Affairs in Jeddah. By using the 9-item depression module of the full Patient Health Questionnaire (PHQ). Demonstrated that 75.8% of the participants had depression as 35.6% mild, 34.2%, moderate and 6.0% severe. Also, the risk for moderate-to-severe depression increased in the resident of surgery and emergency medicine programs [8].

In conclusion, depression is one of the main medical issues which is affecting people's life by defect their productivity and living a comfortable life. Globally the disorder affects 5% of world adults and affects women more [1]. Among medical residents, the risk of depression is higher than in the normal population [6]. Among healthcare workers, being female, losing a beloved one, number of night shifts, having surgical specialty experience of fewer than 5 years, or increases in a

calendar year are considered risk factors to develop depression. However, we need to address and enhance mental health for medical residents regardless of their spatiality as any part of the community to improve their health, productivity, sustainable development and decrease their absenteeism. For that More study needed to find the risk factors and risky groups for developing depression. Also, further studies need to predict prevent and treat people with depression.

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