Depression Awareness And Prevalence Among Health Workers In KSA

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ABSTRACT

Objective: The objective of this present study is to estimate the prevalence of depression and identify the risk and protective factors that may predispose or protect healthcare workers in the KSA from developing depression.

Methods: In order to estimate the prevalence of depression and assess awareness levels among healthcare workers at a particular moment in time, this study will use a quantitative, descriptive cross-sectional methodology.

Results: The study included 362 participants. The study included 362 participants. The most frequent age among them was 30-39 years old (n=170, 47%), followed by 40-49 years old (n=105, 29%), then 18-29 years old (n=46, 12.7%). The most frequent gender among study participants was female (n=185, 51.1%) and male (n=177, 48.9%). The most frequent nationality among study participants was Saudi (n= 325, 89.8%), followed by non-Saudi (n= 37, 10.2%). Marital Status among study participants: most were married (n=226, 62.4%), followed by single (n=111, 30.7%), then divorced (n=21, 5.8%), and at least widowed (n=4, 1.1%). Profession among study participants: most were physicians (n=164, 45.3%), followed

by Others (n=63, 17.4%), Nurses (n=58, 16%), and Pharmacists (n=43, 11.9%). Years of Experience among study participants: most of them were more than 10 years (n=162, 44.8%), followed by 6-10 years (n=97, 26.8%), then 1-5 years (n=74, 20.4%), and at least less than 1 year (n=29, 8%). Participants were asked about average working hours per week. Most of them answered 41-50 hours (n=159, 43.9%), followed by 30-40 hours (n=133, 36.7%), then less than 30 hours (n=36, 9.9%), and more than 50 hours (n=34, 9.4%). Participants were asked, Have you ever attended any workshop/seminar related to mental health or depression? Most of them answered no (n=218, 60.2%), then yes (n=144, 39.8%). Participants were asked Are you aware of what clinical depression is. The most frequent were Yes (n=167, 46.1%), followed by not sure (n=112, 30.9%), then no (n=83, 22.9%). Participants were asked, Do you believe depression is a medical condition that requires treatment. The most frequent were yes (n=325, 89.8%), no (n=23, 6.4%), and not sure (n=14, 3.9%). Participants were asked. If you checked any problems above, how difficult have these made it for you to do your work, take care of things at home, or get along with other people; Most of them said Somewhat difficult (n=162, 44.8%), followed by Not difficult at all (n=131, 36.2%), then Very difficult (n=43, 11.9%), Extremely difficult (n=26, 7.2%).

Conclusion: The study found that depression among healthcare workers is significantly associated with age, nationality, marital status, profession, workplace setting, working hours, depression awareness, and previous history of depression. Gender showed no significant association.

INTRODUCTION

Depression is one of the most urgent yet underappreciated population health challenges globally. It was the leading contributor to years of life lost due to disability. **[1], [2]** An analysis of the Global Burden of Disease data demonstrates an increase of 49.86% in the global burden of depression from 1990 to 2017. **[5], [2]** Healthcare workers are one of the high-risk groups for adverse mental health outcomes worldwide.

Published literature establishes that Healthcare workers are susceptible to alarming levels of psychological distress, anxiety, emotional exhaustion and burnout. **[3]** This is especially relevant for depression—its prevalence among Healthcare workers ranges from 21.53% to 32.77% in high-income nations, much higher than that of the general population worldwide. Healthcare workers are subject to exceedingly high levels of academic and professional stress and must manage workplace stressors in addition to stressors in their personal lives. **[4]** Thus, not only are Healthcare workers negatively impacted by sustained exposure to high pressure, but the quality of care they provide to patients and patient safety may also be compromised. **[1], [5]**

This may result in patient dissatisfaction, high Healthcare workers turnover rates, medical errors, and associated financial costs. Increased psychological morbidity in Healthcare workers due to long working hours delivering care to critically ill patients is well described. **[6]**What we are currently experiencing with the ongoing COVID-19 pandemic is testament to this. Te resilience of Healthcare workers in the era of COVID-19 has been further eroded due to the loss of social and familial support secondary to population health measures, such as physical distancing. **[7]** The World Health Organization's Eastern Mediterranean Region comprises 21 member states and Palestine in the Middle East and North Africa and has a population size of nearly 583 million and Saudi Arabia is one of them.

There is limited information describing the overall burden of depression in Healthcare workers within the KSA. The KSA countries are inundated with myriad challenges that adversely affect mental well-being, including political instability and conflict, healthcare disparities and Healthcare workers shortages, stigma, and a lack of investment in mental health services. **[8]** These challenges can have repercussions on the already limited healthcare workforce and may exacerbate the Healthcare workers shortage. One EMR country, Iran, reported a prevalence of depression among HCWs ranging from 22.00% to 45.30% in four meta-analyses published between 2019 and 2023. High depression prevalence among Healthcare workers similar to Iran is also likely to be found across the KSA region due to similarities in culture, traditions, and customs. **[9]**

According to estimates from the World Health Organization (WHO), depression affects more than 280 million people globally, making it one of the most common mental health issues. Depression is disproportionately common in healthcare settings due to a number of factors, including the heavy burden of patient care, long work hours, emotional exhaustion, and continuous stress exposure. Health professionals are particularly vulnerable to depressive symptoms because they often deal with ongoing work-related stress, particularly in high-demand settings like hospitals. **[10]** Despite this, medical professionals' depression is underdiagnosed, underreported, and frequently untreated due to stigma, ignorance, and limited access to mental health care. **[11]**

The Kingdom of Saudi Arabia's (KSA) rapidly evolving healthcare system is placing increasing strain on both public and private sector employees. While physical health is given priority, mental health, especially among caregivers, has not received the same level of attention. In addition to influencing the personal and professional functioning of healthcare workers, depression can also have an effect on patient safety, service delivery, and workforce retention. **[12], [14]** Although this topic has been the subject of many studies around the world, there is a lack of comprehensive research in Saudi Arabia that simultaneously looks at the prevalence and awareness of depression among healthcare professionals. **[15]**

This cross-sectional study aims to identify relevant sociodemographic and occupational characteristics among Saudi Arabian healthcare professionals, as well as to ascertain the prevalence of depressive symptoms and the level of depression awareness.

METHODS

Study design

In order to estimate the prevalence of depression and assess awareness levels among healthcare workers at a particular moment in time, this study will use a quantitative, descriptive cross-sectional methodology.

Study approach

The study will be carried out in a few government and private hospitals in different parts of the Kingdom of Saudi Arabia (KSA), including primary healthcare facilities, general hospitals, and tertiary care centers.

Study population

Licensed healthcare professionals who are currently working in Saudi Arabia will be among the target population. These professionals include:

- Medical professionals
- The nurses
- The pharmacists

- Technicians in the laboratory
- Staff in allied health

Inclusion Criteria

- Requirements for Inclusion: Health professionals who are 18 years of age or older
- Currently employed at medical facilities in Saudi Arabia
- Willing to grant informed consent

Criteria for Exclusion

- Students undergoing training or internships
- People on sick or mental leave
- Reluctance of medical professionals to take part

Study sample

The sample size will be calculated using the formula for cross-sectional studies, which results in a minimum required sample of approximately **323 participants**, with an additional 10–15% added for non-responses, making the final target around **360–370 participants**.

Study tool

For the current study, a questionnaire was used for data collection and was also considered a study tool.

Data collection

Three sections of a standardized self-administered questionnaire will be used:
- Data pertaining to age, gender, employment role, years of service, work hours, and other demographics
- Depression awareness scale, which was modified from previously approved instruments
- Utilizing the PHQ-9 (Patient Health Questionnaire-9), a commonly used and standardized instrument for evaluating depressive symptoms, to screen for depression.

Procedure

- Following ethical approval, permission from hospital management will be sought.
- Paper forms or safe online questionnaires will be used for data collection, guaranteeing participant privacy.
- All responses will provide their informed consent.

Data analysis

- SPSS (Statistical Package for the Social Sciences) version 26.0 will be used to code and enter the data.
- Frequencies, means, and standard deviations are examples of descriptive statistics that will be used to characterize demographic factors and awareness levels.
- To investigate correlations between depression awareness and prevalence and demographic and occupational characteristics, chi-square tests and logistic regression will be employed.
- P-values less than 0.05 are deemed statistically significant.

Ethical considerations

It will be carried out on 10% of the total respondents (about 40 respondents), and the results will be checked thereof. Further, any type of discrepancy will be removed, and the questionnaire or data sheet will be revised. A pilot study may also be conducted to state the precision level of the statistical tools and even the selection criteria of the respondents. The above-stated process will be followed throughout the pilot study, and the outcomes will be analyzed. The duration, manner, and viability will also be evaluated.

RESULTS

The study included 362 participants. The most frequent age among them was 30-39 years old (n=170, 47%), followed by 40-49 years old (n=105, 29%), then 18-29 years old (n=46, 12.7%). Figure 1 shows the age distribution among study participants. The most frequent gender among study participants was female (n=185, 51.1%) and male (n=177, 48.9%). Figure 2 shows the gender distribution among study participants. The most frequent nationality among study participants was Saudi (n= 325, 89.8%), followed by non-Saudi (n= 37, 10.2%). Figure 3 shows the distribution of nationality among study participants.

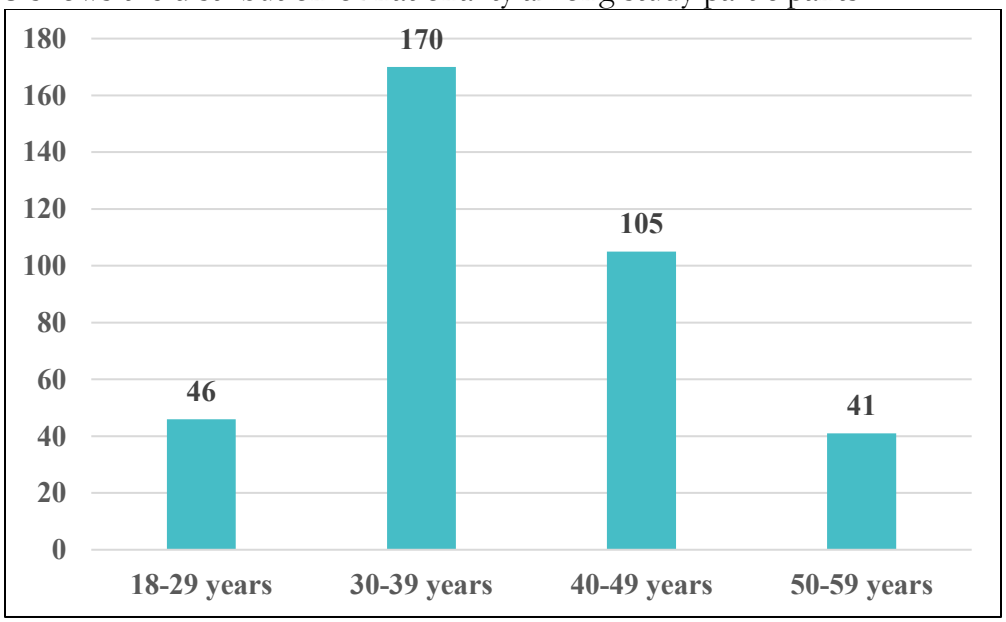

Figure 1: Age distribution among study participants

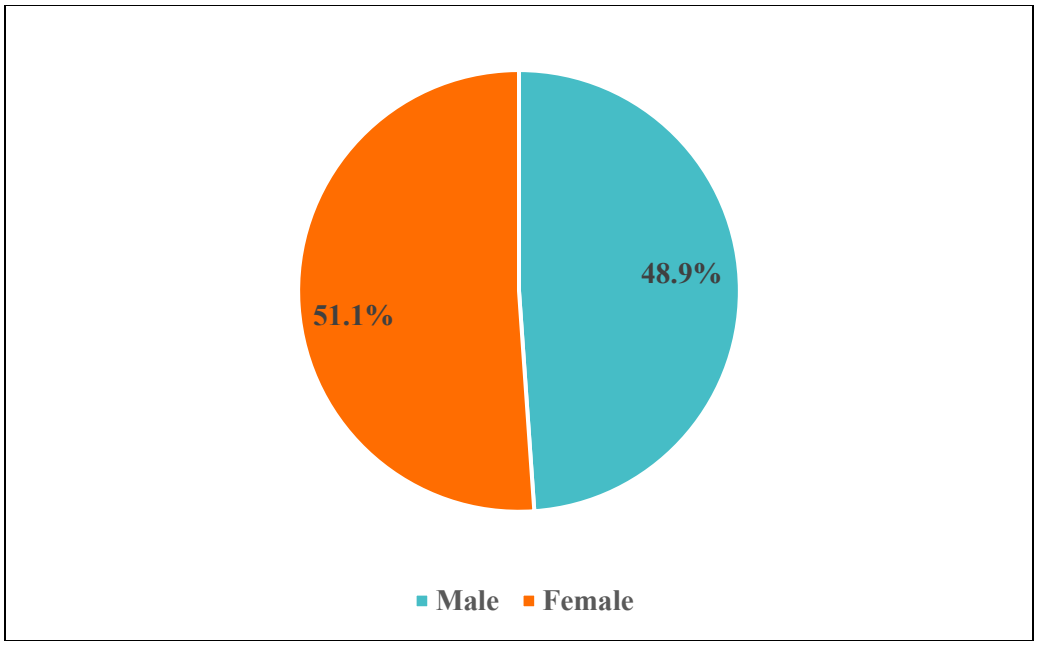

Figure 2: Gender distribution among study participants

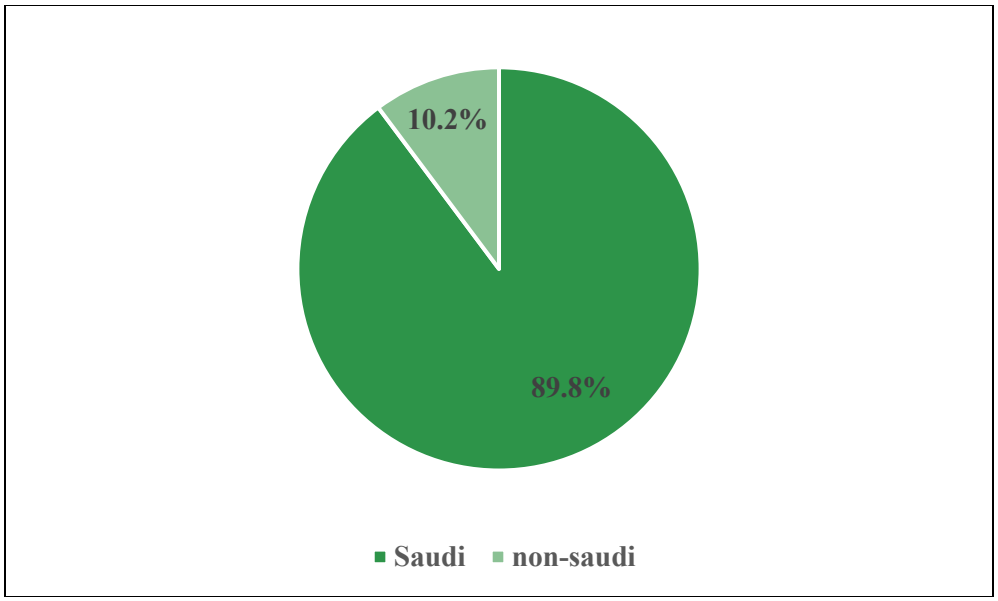

Figure 3: Nationality distribution among study participants

Marital Status among study participants: most were married (n=226, 62.4%), followed by single (n=111, 30.7%), then divorced (n=21, 5.8%), and at least widowed (n=4, 1.1%).

Profession among study participants: most were physicians (n=164, 45.3%), followed by Others (n=63, 17.4%), Nurses (n=58, 16%), and Pharmacists (n=43, 11.9%). The Profession is presented in Figure 4.

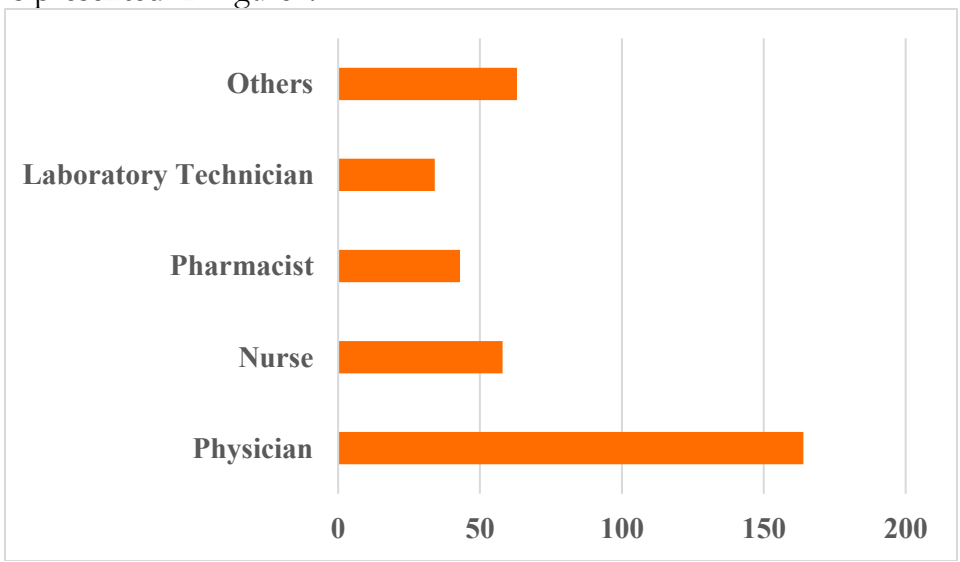

Figure 4: Profession distribution among study participants

Years of Experience among study participants: most of them were more than 10 years (n=162, 44.8%), followed by 6-10 years (n=97, 26.8%), then 1-5 years (n=74, 20.4%), and at least less than 1 year (n=29, 8%).

Participants were asked about average working hours per week. Most of them answered 41-50 hours (n=159, 43.9%), followed by 30-40 hours (n=133, 36.7%), then less than 30 hours (n=36, 9.9%), and more than 50 hours (n=34, 9.4%). Figure 5 shows the distribution of average working hours among study participants.

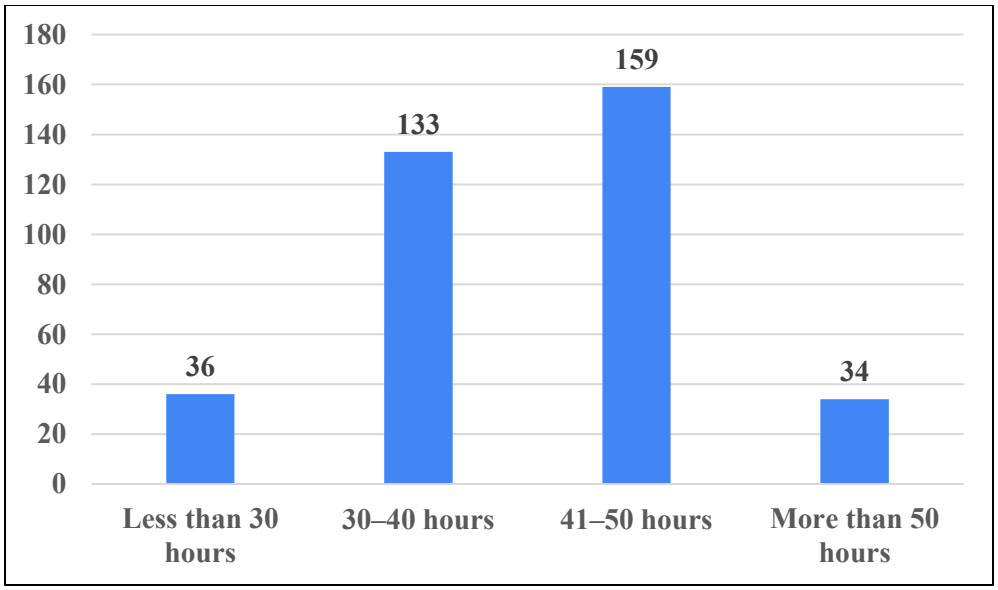

Figure 5: Average Working Hours distribution among study participants

Participants were asked, Have you ever attended any workshop/seminar related to mental health or depression? Most of them answered no (n=218, 60.2%), and yes (n=144, 39.8%). Participants were asked to indicate how often they have been bothered by the following problems over the past 2 weeks. Their responses and results are presented in Table 1.

Table1: Distribution of Participants' Responses to Depression Symptoms Over the Past 2 Weeks

Please indicate how often you have been bothered by the following problems over the past 2 weeks.	Not at all	Several days	More than half the days	Nearly every day
Little interest or pleasure in doing things	99 (27.3%)	167 (46.1%)	46 (12.7%)	50 (13.8%)
Feeling down, depressed, or hopeless	100 (27.6%)	166 (45.9%)	49 (13.5%)	47 (13%)
Trouble falling or staying asleep, or sleeping too much	65 (18%)	170 (47%)	61 (16.9%)	66 (18.2%)
Feeling tired or having little energy	42 (11.6%)	176 (48.6%)	73 (20.2%)	71 (19.6%)
Poor appetite or overeating	112 (30.9%)	124 (34.3%)	72 (19.9%)	54 (14.9%)
Feeling bad about yourself, or that you are a failure, or have let yourself or your family down	154 (42.5%)	116 (32%)	50 (13.8%)	42 (11.6%)

Trouble concentrating on things, such as reading or watching TV	95 (26.2%)	169 (46.7%)	47 (13%)	51 (14.1%)
Moving or speaking so slowly that other people could have noticed. Or the opposite — being so fidgety or restless that you've been moving a lot more than usual	192 (53%)	108 (29.8%)	21 (5.8%)	41 (11.3%)
Thoughts that you would be better off dead, or thoughts of self-harm	256 (70.7%)	71 (19.6%)	18 (5%)	17 (4.7%)

Participants were asked Are you aware of what clinical depression is. The most frequent were Yes (n=167, 46.1%), followed by not sure (n=112, 30.9%), then no (n=83, 22.9%).
Participants were asked, about Do you believe depression is a medical condition that requires treatment. The most frequent were yes (n=325, 89.8%), no (n=23, 6.4%), and not sure (n=14, 3.9%).
Participants were asked. If you checked any problems above, how difficult have these made it for you to do your work, take care of things at home, or get along with other people; Most of them said Somewhat difficult (n=162, 44.8%), followed by Not difficult at all (n=131, 36.2%), then Very difficult (n=43, 11.9%), Extremely difficult (n=26, 7.2%). Figure 6 shows participants' lifestyle modification status.

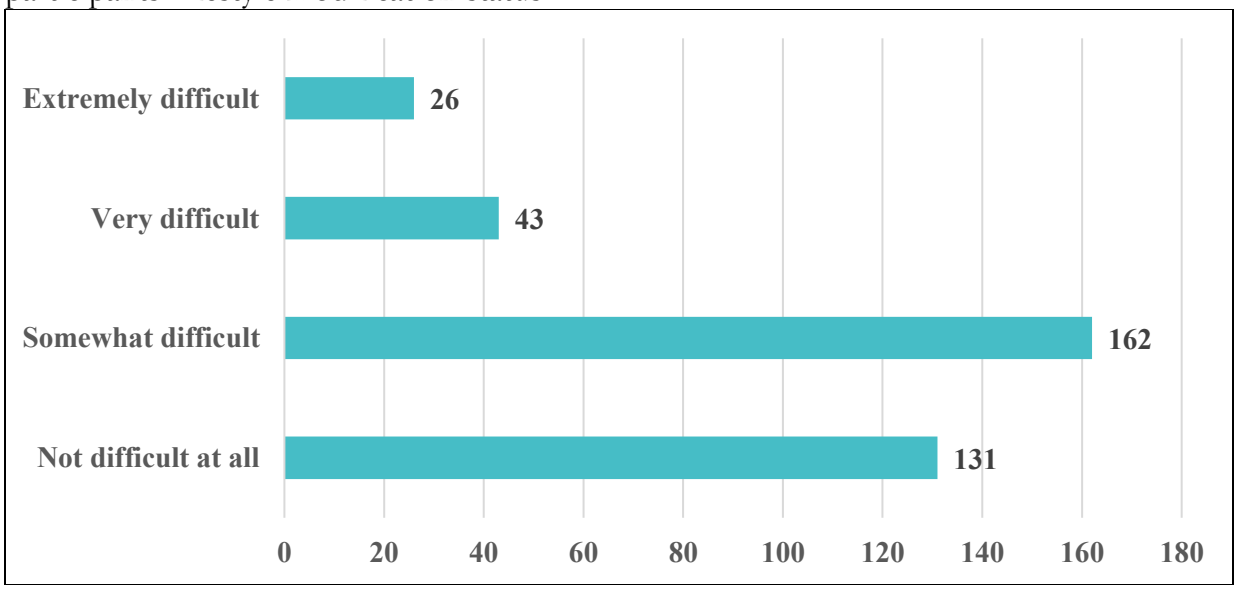

Figure 6: lifestyle modification status distribution among study participants

CONCLUSION

The study found that depression among healthcare workers is significantly associated with age, nationality, marital status, profession, workplace setting, working hours, depression awareness, and previous history of depression. Gender showed no significant association.

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ANNEX 1: DATA COLLECTION TOOL

Q1. Age:

☐ 18-29 years ☐ 30-39 years ☐ 40-49 years

☐ 50-59 years ☐60-69 years ☐ 70 years and more

Q2. Gender:

☐ Male ☐ Female

Q3. Nationality:

☐ Saudi ☐ non-Saudi

Q4. Marital Status:

☐ Single ☐ Married ☐ Divorced ☐ Widowed

Q5. Profession:

☐ Physician ☐ Nurse ☐ Pharmacist

☐ Laboratory Technician ☐ Radiologist ☐ Others (please specify): _____

Q6. Years of Experience in Healthcare:

☐ Less than 1 year ☐ 1–5 years

☐ 6–10 years ☐ More than 10 years

Q7. Workplace Setting:

☐ Primary Health Center ☐ Government Hospital

☐ Private Hospital ☐ Tertiary Care Center

Q8. Average Working Hours Per Week:

☐ Less than 30 hours ☐ 30–40 hours

☐ 41–50 hours ☐ More than 50 hours

Q9. Have you ever attended any workshop/seminar related to mental health or depression?

☐ Yes ☐ No

Q10. Are you aware of what clinical depression is?

☐ Yes ☐ No ☐ Not sure

Q11. Which of the following do you consider symptoms of depression? (You may select more than one)

☐ Persistent sadness

☐ Fatigue or loss of energy

☐ Increased appetite

☐ Difficulty sleeping

☐ Feelings of hopelessness

☐ Hallucinations

Q12. Do you believe depression is a medical condition that requires treatment?

☐ Yes ☐ No ☐ Not sure

Q13. In your opinion, what are the possible causes of depression among health workers? (Choose all that apply)

☐ Work-related stress

☐ Night shifts or long hours

☐ Exposure to trauma or death

☐ Lack of family support

☐ Financial problems

☐ Genetic predisposition

☐ Others (please specify): _____

Q14. Do you think mental health services in your workplace are accessible and adequate?

☐ Yes ☐ No ☐ Not sure

Q15. Have you ever recommended or referred someone for mental health counseling or treatment?

☐ Yes ☐ No

Please indicate how often you have been bothered by the following problems over the past 2 weeks.

Q16. Little interest or pleasure in doing things

☐ Not at all ☐ Several days ☐ More than half the days ☐ Nearly every day

Q17. Feeling down, depressed, or hopeless

☐ Not at all ☐ Several days ☐ More than half the days ☐ Nearly every day

Q18. Trouble falling or staying asleep, or sleeping too much

☐ Not at all ☐ Several days ☐ More than half the days ☐ Nearly every day

Q19. Feeling tired or having little energy

☐ Not at all ☐ Several days ☐ More than half the days ☐ Nearly every day

Q20. Poor appetite or overeating

☐ Not at all ☐ Several days ☐ More than half the days ☐ Nearly every day

Q21. Feeling bad about yourself, or that you are a failure, or have let yourself or your family down

☐ Not at all ☐ Several days ☐ More than half the days ☐ Nearly every day

Q22. Trouble concentrating on things, such as reading or watching TV

☐ Not at all ☐ Several days ☐ More than half the days ☐ Nearly every day

Q23. Moving or speaking so slowly that other people could have noticed. Or the opposite — being so fidgety or restless that you've been moving a lot more than usual

☐ Not at all ☐ Several days ☐ More than half the days ☐ Nearly every day

Q24. Thoughts that you would be better off dead, or thoughts of self-harm

☐ Not at all ☐ Several days ☐ More than half the days ☐ Nearly every day

Q25. If you checked any problems above, how difficult have these made it for you to do your work, take care of things at home, or get along with other people?

☐ Not difficult at all ☐ Somewhat difficult ☐ Very difficult ☐ Extremely difficult

APPENDIX 2: Participants' responses to scale items

Age	Frequency	Percent
18-29 years	46	12.7
30-39 years	170	47.0
40-49 years	105	29.0
50-59 years	41	11.3
60-69 years	0	
70 years and more	0	
Total	362	100.0

Gender	Frequency	Percent
Male	177	48.9%
Female	185	51.1%
Total	362	100.0

Nationality	Frequency	Percent
Saudi	325	89.8%
non-Saudi	37	10.2%

Total	362	100.0

Marital Status	Frequency	Percent
single	111	30.7
married	226	62.4
divorced	21	5.8
widowed	4	1.1
Total	362	100.0

Profession	Frequency	Percent
Physician	164	45.3
Nurse	58	16.0
Pharmacist	43	11.9
Laboratory Technician	34	9.4
Others	63	17.4
Total	362	100.0

Years Experience	Frequency	Percent
Less than 1 year	29	8.0
1–5 years	74	20.4
6–10 years	97	26.8
More than 10 years	162	44.8
Total	362	100.0

Workplace Setting	Frequency	Percent
Primary Health Center	95	26.2
Government Hospital	202	55.8
Private Hospital	45	12.4

Tertiary Care Center	20	5.5
Total	362	100.0

Working Hours	Frequency	Percent
Less than 30 hours	36	9.9
30–40 hours	133	36.7
41–50 hours	159	43.9
More than 50 hours	34	9.4
Total	362	100.0

workshop	Frequency	Percent
Yes	144	39.8%
No	218	60.2%
Total	362	100.0

Recommended someone mental health counseling	Frequency	Percent
Yes	199	55.0
No	163	45.0
Total	362	100.0

Which of the following do you consider symptoms of depression? (You may select more than one)	Frequency	Percent
Persistent sadness	60	21.7%
Fatigue or loss of energy	56	20.3%
Increased appetite	35	12.7%
Difficulty sleeping	51	18.5%
Feelings of hopelessness	54	19.6%
Hallucinations	20	7.2%

In your opinion, what are the possible causes of depression among health workers? (Choose all that apply)	Frequency	Percent

Work-related stress	131	47.6%
Night shifts or long hours	60	21.8%
Exposure to trauma or death	25	9.1%
Lack of family support	16	5.8%
Financial problems	30	10.9%
Genetic predisposition	13	4.7%
Others (please specify): _____	0	

	Yes	No	Not sure
Are you aware of what clinical depression is?	167 (46.1%)	83 (22.9%)	112 (30.9%)
Do you believe depression is a medical condition that requires treatment?	325 (89.8%)	23 (6.4%)	14 (3.9%)
Do you think mental health services in your workplace are accessible and adequate?	62 (17.1%)	202 (55.8%)	98 (27.1%)

Recommended someone for mental health counseling	Frequency	Percent
Yes	199	55.0
No	163	45.0
Total	362	100.0

Difficult made do your work	Frequency	Percent
Not difficult at all	131	36.2
Somewhat difficult	162	44.8
Very difficult	43	11.9
Extremely difficult	26	7.2
Total	362	100.0

Chi-Square Test:

Test Statistics

	Age	Gender	Nationality	Marital Status	Profession	Workplace Setting	Working Hours	Aware of clinical depression	Depression medical condition
Chi-Square	121.116[a]	.177[b]	229.127[b]	343.569[a]	152.282[c]	215.392[a]	139.901[a]	30.171[d]	519.354[d]
df	3	1	1	3	4	3	3	2	2
Asymp. Sig.	.000	.674	.000	.000	.000	.000	.000	.000	.000

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 90.5.

b. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 181.0.

c. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 72.4.

d. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 120.7.