



## Depression among Nurses and its Association with their Clinical Performances at Tertiary Care Hospital, Lahore

*Tayyaba shakeel<sup>1</sup>, Amara Gull<sup>1</sup>, Amber Naveed<sup>1</sup>, Jessica Kennedy<sup>1</sup>, \*Ajmal Iqbal<sup>1</sup>, Suneela Kiran<sup>1</sup>, Zanoobia Tariq<sup>1</sup>, Mashal Kainat<sup>1</sup>, Hina Khan<sup>1</sup>, Carol Nasir<sup>1</sup>*

<sup>1</sup>Saida Waheed FMH College of Nursing, Lahore, Pakistan

### ABSTRACT

Depression is classified as a combination of manifestations of symptoms related to physiological, emotional, and behavioral alteration such as disturbance in sleep patterns, inability to concentrate, alteration of cognition, and feelings of culpability. The literature on fundamental behavioral psychology and in what way nurses' managing approaches alleviate the contrary effects of mental suffering and burnout in healthcare settings. Therefore this study sought to determine that depression among nurses can affect their performance at work ultimately affecting the quality of care provision to the patients. An analytical cross-sectional study was performed and 100 nurses were selected through non-probability convenience sampling. Out of these 100 nurses, 56 nurses answered that they were experiencing some sort of depression or its associative symptoms and 38 nurses' performance was affected and the value of the odds ratio was calculated as 2.3. In conclusion to the findings of this study, it has been observed that there is a significant link between the depression and performance of nurses. Healthcare institutions must formulate policies regarding the distribution of workload, generous paybacks, and daycare centers for the children of working nurses, etc.

**Keywords:** depression, manifestation, performance, burnout, behavioral psychology.

### 1. Introduction

Depression is classified as a combination of manifestations of symptoms related to physiological, emotional, and behavioral alteration such as disturbance in sleep patterns, inability to concentrate, alteration of cognition, and feelings of culpability (Awadalla, Davies & Glazerbrook, 2020). Finding from a review of different studies established that anxiety levels among nurses vary individually and are usually linked with nursing the patients, assessment and huge amount of work, and undesirable collaborations with other healthcare workers (Fonseca et al, 2019). The continually mounting occurrence of diseases and death rates caused by those diseases, the unavailability of resources, increased burden due to work, scarcity of personal protective equipment (PPEs), and lack of support can affect the health of nurses (Lai et al., 2020). In such conditions, regardless of the stark challenges, nurses were anticipated to work for longer shift hours and they were exposed to an increased probability of contamination and amplified burden of work while caring for the patients (Dai et al., 2020). Due to the specific aura of their professional responsibilities, nurses are usually exposed to a huge load of work with great accountability, a great amount of peer pressure, and the requirement to work in different time rotations such as morning, evening and night shifts (Huang et al., 2018). The US National Institute for Occupational Safety and Health (NIOSH) grades the profession of nursing among the top 40 occupations with an increased frequency of sickness caused by a huge burden of work (Pourteimour, Yaghmaei & Babamohamadi, 2021). Successful individuals select more malleable, careful, and stimulating gears in accomplishing objectives; they are supplementarily liable and usually deal with their failure more efficiently with health coping mechanisms (Shariffard et al, 2020). Dissatisfaction with job affects the business deleteriously and leads to insurgence, absence from work, and diminished accountability and commitment of nurses. Furthermore, lack of job satisfaction can cause medical and nursing errors, and other unwanted operational disruptions (Mousazadeh et al, 2022). In addition, the literature on fundamental behavioral psychology and in what way nurses' managing approaches alleviate the contrary effects of mental suffering and burnout in healthcare settings (Lou et al, 2022).

Therefore this study sought to determine that depression among nurses can affect their performance at work ultimately affecting the quality of care provision to the patients.

### 2. Methodology

**Research design:** An analytical cross-sectional study was performed to find the correlation between depressions among nurses with their clinical performance.

**Research Setting:** This study was performed at a tertiary care hospital in Lahore, Pakistan.

**Study Population:** The target population in the study was registered nurses working in different healthcare services.

**Sampling method:** A non-probability convenience sampling method was used to collect the sample.

**Sample size:** A total of 100 nurses were investigated to assess any kind of depression and its association with their clinical performance.

**Inclusion Criteria:** Those nurses meeting the following criteria were selected as study participants:

1. Nurses between the age group of 20-40 years.
2. Nurses working in the critical areas of the hospital like the ICU, CCU & and Operation Theatres.
3. Nurses having work experience of more than 1 year in the research setting.

**Exclusion Criteria:** Those nurses meeting the following criteria were not recruited as study participants:

1. Nurses having any sickness or disability.

**Research Instrument:** A pre-designed questionnaire consisting the close-ended questions was used to collect the data. The research instrument was broken into 3 parts based on questions related to; 1) demographic characteristics, 2) assessing the evidence of depression, and 3) clinical performance.

**Hypothesis:**

**H<sub>0</sub>:** There is no association between depression and the performance of nurses.

**H<sub>a</sub>:** There is an association between depression and the performance of nurses.

**Data Analysis:** The measured responses were analyzed for descriptive statistics; a 2×2 contingency table was formulated and Odds Ratio was calculated.

### 3. Results

All the nurses working at the critical care units were approached and requested to answer the questions. A total of 100 nurses responded to the questionnaire form. Of all the interviewees, 80% of them were females, 55% of nurses were between the age group of 26-30 years, marital status of 66% of nurses was single, and 47% of nurses had work experience ranging from 1 -5 years. Table 1 below showcases the demographic characteristics of the participants.

Table 1. Demographic characteristics of participants

		Frequency	Percentage
Gender	Male	17	17%
	Female	80	80%
Age	20 - 25	32	32%
	26 - 30	55	55%
	31 - 35	10	10%
	36 - 40	3	3%
Marital Status	Single	66	66%
	Married	34	34%
Work Experience	1 to 5 years	47	47%
	6 to 10 years	31	31%
	11 to 15 years	12	12%
	≥ 16 years	10	10%

After measuring the participants' responses, they were summed up in 2×2 contingency table, 56 nurses answered that they were experiencing some sort of depression or its associative symptoms and 38 nurses' performance was affected as they were not able to complete their tasks in time and they were extending their duties beyond end of shift to complete their tasks. Table 2 below illustrates the 2×2 contingency table and odds ratio to assess degree of association between depression and performance of nurses.

Table 2: 2×2 contingency table and Odds ratio

		Performance		Total
		Affected	Not affected	
Depression	Yes	26 a	30 b	56
	No	12 c	32 d	44
Total		38	62	100

$$\text{O.R.} = \frac{a \times d}{b \times c}$$

$$\text{O.R.} = 2.3$$

Out of 56 nurses who were experiencing depression and/or its symptoms, 26 nurses' performance was affected and value of odds ratio came up to be 2.3, indicating that nurses having depression have 2.3 times more chances that they might not be able to perform efficiently. Figure 1 shows the percentage of nurses feeling depress that ultimately affecting their performance.

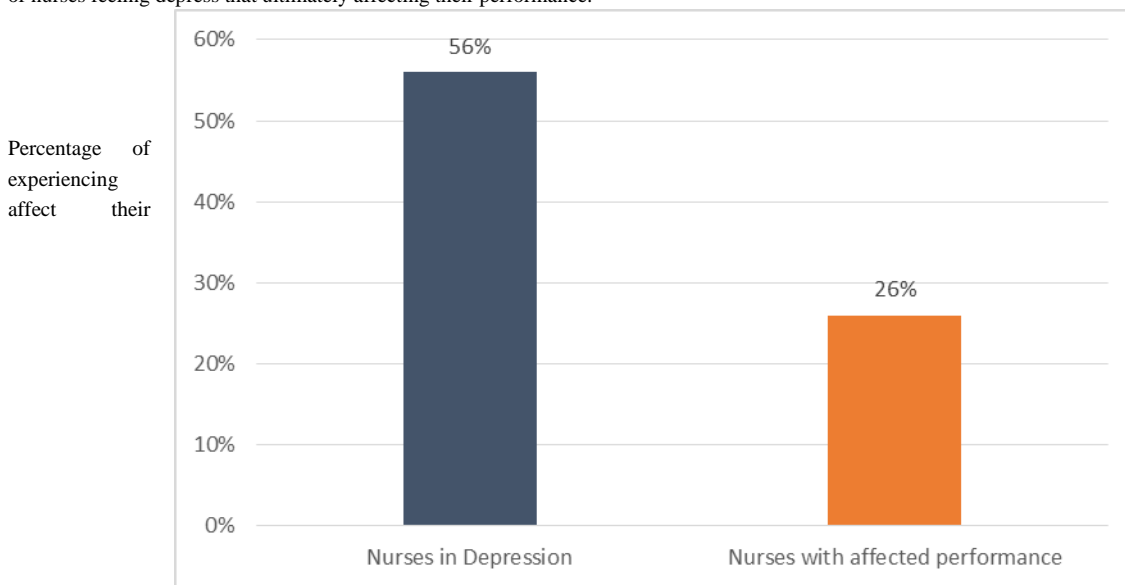


Fig. 1. Percentage of nurses experiencing depression that affect their performance

Fig. 1. Percentage of nurses experiencing depression that affect their performance

Odds ratio suggest a strong association between depression and performance of nurses therefore, null hypothesis was rejected base on these interpretations.

#### 4. Conclusion

In conclusion to the findings of this study, it has been observed that there is a significant link between the depression and performance of nurses. There are a number of factors that can contribute to the depression of nurses and among these, numerous elements of depression can be controlled or modified. Healthcare institutions must formulate policies regarding the distribution of workload, generous paybacks, and daycare centers for the children of working nurses, etc. Healthcare organizations can provide a healthier work environment which can help reduce the burnout of nurses. Prospective studies must be designed in such a way that the extraneous variables that can affect the relationship between depression and the performance of nurses must be controlled to generate strong evidence and more interventional studies should be devised as well.

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