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# MENTAL HEALTH ISSUES: STRESS, ANXIETY, AND DEPRESSION IN DIPLOMA AND DEGREE HEALTH CARE STUDENTS

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## ABSTRACT

**Background:** All healthcare students face mental health issues and their prevalence varies across different educational programs, including Lady Health Visitor (LHV), Community Midwifery (CMW), and Generic Bachelor of Science in Nursing (GBSN). High rates of mental health issues among healthcare students necessitate urgent attention and intervention.

**Objective:** To determine the frequency of stress, anxiety, and depression in diploma and degree health care students.

**Methods**: A cross sectional study, conducted at public and private institutes of nursing at Karachi form November, 2024, February, 2025. The calculated sample size was 383. A convenient sample technique was used to collect data through a validated questionnaire, DASS-21. All GBSN, LHV and CMW Students were included while all the Nursing Interns and Post RN students were excluded.

**Results:** Among total participants, 28.5 %, reported moderate level of stress. Majority of the participants, 47.5%, reported extremely severe level of anxiety, 25.6% reported moderate level of

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depression. A significant association was found between study discipline and stress levels (p = 0.004). Moreover, a significant was found between study discipline and Anxiety levels (p = 0.001). There was also significance found between study discipline and Depression levels (p = 0.001).

**Conclusion:** The findings of study highlights the need of establishing the mental health services to best deal with the all kind of academic and environmental factors which lead to mental health issues (Stress, Anxiety, and depression). Furthermore, all healthcare educational institutions must prioritize student's mental health and offer best resources to manage with these health issues.

**Keywords:** Mental Health, Depression, Anxiety, Stress, Health Care Students

## Introduction

The mental health of healthcare students has become a critical area of focus in recent years due to the increasing demands associated with healthcare education and the emotional challenges inherent in these fields(1). Research indicates that stress, anxiety, and depression are prevalent among students enrolled in healthcare-related programs, significantly affecting their academic performance, clinical skills, and overall well-being (2). The transition from theoretical knowledge to clinical practice can be particularly daunting, leading to heightened emotional strain (3).

Healthcare education programs, such as Lady Health Visitor (LHV), Community Midwifery, and Generic Bachelor of Science in Nursing (GBSN), often involve rigorous coursework and extensive clinical placements. These components are designed to prepare students for the complexities of patient care; however, they also contribute to significant stress levels as students must navigate academic demands while preparing for emotionally taxing clinical environments (4). Research shows that the cumulative pressure from these factors results in high rates of mental health issues among healthcare students, necessitating urgent attention and intervention (5, 6).

The prevalence of mental health issues varies across different programs and educational levels. For instance, diploma programs like LHV and CMW may present distinct stressors compared to degree programs such as GBSN and. Studies suggest that students in diploma programs often face unique challenges due to shorter course durations and higher expectations regarding clinical competencies(7). In contrast, students in degree programs might deal with more extensive academic workloads, which can exacerbate feelings of inadequacy and anxiety related to future (8, 9).

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Several factors contribute to the mental health challenges faced by healthcare students. Academic pressures, financial concerns, social isolation, and the emotional toll of clinical training are well-documented stressors (10, 11). Furthermore, the stigma surrounding mental health issues can prevent students from seeking the help they need, exacerbating their conditions and negatively impacting their academic performance (12, 13). A study by Firth et al (14). Emphasized that mental health issues among students not only impair academic success but can also affect their future interactions with patients, highlighting the need for effective support systems.

Understanding the prevalence of stress, anxiety, and depression among healthcare students is crucial for developing targeted interventions to support their mental health. Existing literature underscores the necessity for tailored mental health resources and support systems within educational institutions to address the unique challenges faced by students across various healthcare programs (15, 16). Research conducted by Alshahrani et al., also emphasizes the importance of implementing preventative measures and support services to promote mental well-being among healthcare students (17). By exploring these mental health challenges, this study aimed to evaluate to determine the frequency of stress, anxiety, and depression in diploma and degree health care students.

## Methodology

The cross-sectional study design was used for current study. Study was conducted at public and private health care institutes at Karachi. All diploma and degree health care students of the public and private health care institutes at Karachi. This study was completed within 6 months from December, 2024 to January, 2025 after the approval from the Institutional Research committee (IRC) of Peace Institute of Nursing and Health Science Karachi. The sample size for this study was calculated by using OpenEpi version 3.0 software, the 53.3% prevalence rate was assumed in a same population, derived from a previous study (18) relevant to the population and outcome of interest with a 95% confidence level and a 5% margin of error. Calculated sample size was 383.A non-probability convenient sampling technique was used. All currently enrolled undergraduate

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GBSN students, undergraduate Community Midwifery (CMW) students, and all currently enrolled undergraduate Lady Health Visitors (LHV) students were included while all Nursing Interns, all passed students of CMW, LHV and those participants who were already suffering from mental issues or trauma crisis were excluded.

**Data Collection Procedure**

The data was collected by using an open excess, validated and structured questionnaire; named, DASS-21, containing the following items: It had a range of 0 to 3 on a 4-point Likert scale. 0 (applied to me to some degree, or some of the time, 1 (Applied to me to some degree, or some of the time), 2 (Applied to me to a considerable degree or a good part of time), 3 (Applied to me very much or most of the time). First permission was granted form the head of the nursing institutions before data collection. Written informed consents were taken from the selected participants. Anonymity and confidentiality were also maintained.

**Data Analysis**

The data was analysed in software Statistical Package for the Social Sciences SPSS 21.0 version. The frequency and percentage was calculated for all demographic characteristics. Associations of demographic variables with stress, anxiety and depression was analysed by Chi-Squire and Fisher exact test P-value (0.005) was considered as level of significance.

**Ethical Consideration**

Before the data collection, approval of the study was taken from Institutional Research committee (IRC) of PIONHS and permission was also taken form head of the department of selected health care institutions (Reference: PION/17/1/25). Furthermore, all participants were required to sign a written informed consent. Privacy and confidentiality were protected.

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## Results

Table 1 presents the demographic details of the study's participants including gender, age, study discipline, marital status, father occupation and institute category. Among total participants, 53.3% (n=204) were male whereas 46.7% (n=179) were female. On the basis of age, 32.4% (n=124) were aged 16-20, majority of the participants 61.6% (n=236) were between 21 to 25 years of age, 5.2% (n=20) were aged 26-30 while only 0.8% (n=3) were aged 31 above years.in the context of study discipline, 83.6% (n=320) of respondents were from Generic BSN, 8.9% (n=34) of students from Community Midwifery while all remaining participants 7.6% (n=29) were from Lady Health Visitor diploma. Regarding marital status, 11.2% (n=43) of total participant were married while 88.5 % (n=339) were predominantly unmarried, notable only 0.3% (n=1) was being widowed. With the regards of father occupational context of respondent 42.8% (n=164) of total participants reported their father ware private employ while an additional 23.5% (n=90) claimed that their fathers were unemployed while 17.8% (n=68) of participants' father were depended upon own business and remaining 1.8% (n=7) were found died. According to Institute Category, most of the participants, 68.1% (n=261) were from private Institute while 31.9% (n=122) participants were from public institutions.

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**Table No. 1** Demographic Characteristics of the Participants (n=383)

| Variable | F (%) |
|---|---|
| **Gender** | |
| Male | 204 (53.3%) |
| Female | 179 (46.7%) |
| **Age** | |
| 16-20 | 124 (32.4%) |
| 21-25 | 236 (61.6%) |
| 26-30 | 20 (5.2%) |
| 31 above | 3 (0.8%) |
| **Study Discipline** | |
| GBSN | 320 (83.6%) |
| CMW | 34 (8.9%) |
| LHV | 29 (7.6%) |
| **Marital Status** | |
| Married | 43 (11.2%) |
| Unmarried | 339 (88.5%) |
| Widower | 1 (.3%) |
| **Father Occupation** | |
| Government Employee | 54 (14.1%) |
| Private Employee | 164 (42.8%) |
| Unemployed | 90 (23.5%) |
| Deceased | 7 (1.8%) |
| Own business | 68 (17.8%) |
| **Institute Category** | |
| Public | 122 (31.9%) |
| Private | 261 (68.1%) |

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Table 2 shows that majority of the participants 28.5 %), reported moderate level of stress, followed by normal (27.9%) and mild (15.40%) level of stress. Whereas severe level of stress reported by (19.8%) of the participants. A smaller proportion (8.4%) of the participants reported extremely severe level of stress.

**Table 2** Level of Stress of the study participants

| **Level of Stress** | |
|---|---|
| **Level** | **Frequency (%)** |
| Normal | 107 (27.9%) |
| Mild | 59 (15.40) |
| Moderate | 109 (28.5) |
| Severe | 76 (19.8) |
| Extremely Severe | 32( 8.4) |
| **Total** | **383 (100%)** |

Table 3 This table shows that majority of the participants (47.5%) reported extremely severe level of anxiety, followed by moderate (20.9 %) and sever (13.6%) level of anxiety. Whereas normal level of anxiety was reported by (12.3 %) of the participants. A smaller proportion (5.7 %) of the participants reported mild level of anxiety.

**Table 3** Level of Anxiety of the study participants

| **Level of Anxiety** | |
|---|---|
| **Level** | **Frequency (%)** |
| Normal | 47 (12.3) |
| Mild | 22 (5.7) |
| Moderate | 80 (20.9) |
| Severe | 52 (13.6) |
| Extremely Severe | 182 (47.5) |
| **Total** | **383 (100%)** |

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Table 4 shows that majority of the participants (25.6%) reported moderate level of depression, followed by normal (23.0 %) and sever level of depression (19.6%). Whereas (18.5%) extremely level of depression was reported by the participants. Although a smaller proportion (13.3%) of the participants reported normal level of depression.

**Table 4** Level of Depression of the study participants

| **Level of Depression** | |
|---|---|
| **Level** | **Frequency (%)** |
| Normal | 88 (23.0 %) |
| Mild | 51 (13.3%) |
| Moderate | 52 (13.6) |
| Severe | 75 (19.6%) |
| Extremely Severe | 71 (18.5%) |
| **Total** | **383 (100.0%)** |

Table 5 The relationship between stress levels and demographic characteristics was analysed using the Chi-Square and Fisher exact test. A significant association was found between stress levels and gender (p = 0.000), with females more likely to experience moderate to extreme stress (68.7%) compared to males (46.1%). However, no significant association was found between stress levels and age (p = 0.503. However, a significant association was found between study discipline and stress levels (p = 0.004), with students from the LHV discipline showing a higher proportion of moderate to extreme stress (86.2%) compared to students from the GBSN discipline (54.1%). Marital status was not significantly associated with stress levels (p = 0.789)." Though father's occupation and stress levels (p = 0.673) was not significant Conversely, a significant association was found between institute category and stress levels (p = 0.000), with students from public institutes showing a higher proportion of moderate to extreme stress (76.2%) compared to students from private institutes (47.5%).

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**Table 5** Association of demographic variables with stress

| **Characteristics** | **Stress** | | p-value |
|---|---|---|---|
| | **Normal to Mild** | **Moderate to Extreme** | |
| **Gender** | | | 0.000[a] |
| Male | 110 (53.9%) | 94 (46.1%) | |
| Female | 56 (31.3%) | 123 (68.7%) | |
| **Age** | | | 0.503[b] |
| 16-20 | 51(41.1%) | 73 (58.9%) | |
| 21-25 | 108 (45.8%) | 128 (54.2%) | |
| 26-30 | 6 (30.0%) | 14 (70.0%) | |
| 31 Above | 1 (33.3%) | 2 (66.7%) | |
| **Study Discipline** | | | 0.004 [a] |
| GBSN | 147 (45.9%) | 173(54.1%) | |
| LHV | 4 (13.8%) | 25(86.2%) | |
| CMW | 15 (14.1%) | 19(55.9%) | |
| **Marital Status** | | | 0.789 [b] |
| Married | 17 (39.5%) | 26 (60.5%) | |
| Unmarried | 149 (44.0%) | 190 (56.0%) | |
| Widower | 0 (0%) | 1 (100%) | |
| **Father's Occupation** | | | 0.673[b] |
| Govt. Employee | 25 (46.3%) | 29 (53.7%) | |
| Private Employee | 68 (41.5%) | 96 (58.5%) | |
| Unemployed | 37 (41.1%) | 53 (58.9%) | |
| Own Business | 34 (50.0%) | 34 (50.0%) | |
| Deceased | 2 (28.6%) | 5 (71.4%) | |
| **Institute Category** | | | 0.000[a] |
| Public | 29 (23.8%) | 93 (76.2%) | |

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| | | | |
|---|---|---|---|
| Private | 137 (52.5%) | 124 (47.5%) | |

Table 6 The association between demographic variables and anxiety levels was analysed using the Chi-Square Fisher exact test. No significant association was found between gender and anxiety levels (p = 0.162), with males and females showing similar proportions of moderate to extreme anxiety (79.4% and 84.9%, respectively). Similarly, no significant association was found between age and anxiety levels (p = 0.838).However, a significant association was found between study discipline and anxiety levels (p = 0.001). Students from the LHV discipline showed a significantly higher proportion of moderate to extreme anxiety (100%) compared to students from the GBSN discipline (80.9%) and CMW discipline (76.5%). No significant association was found between marital status and anxiety levels (p = 0.296), with married and unmarried individuals showing similar proportions of moderate to extreme anxiety. Similarly, no significant association was found between father's occupation and anxiety levels (p = 0.114). However, a significant association was found between institute category and anxiety levels (p = 0.046). Students from private institutes showed a significantly higher proportion of moderate to extreme anxiety (79.3%) compared to students from public institutes (87.7%), although the difference was not substantial.

**Table 6** Association of demographic variables with anxiety

| **Characteristics** | **Anxiety** | | p-value |
|---|---|---|---|
| | **Normal to Mild** | **Moderate to Extreme** | |
| **Gender** | | | 0.162[a] |
| Male | 42 (20.6%) | 162 (79.4%) | |
| Female | 27 (15.1%) | 152 (84.9%) | |
| **Age** | | | 0.838[b] |
| 16-20 | 22 (17.7%) | 102 (82.3%) | |
| 321-25 | 45 (19.1%) | 191 (80.9%) | |
| 26-30 | 2 (10.0%) | 18 (90%) | |
| 31 Above | 0 (0%) | 3 (100%) | |

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| | | | |
|---|---|---|---|
| **Study Discipline** | | | **0.001**[a] |
| GBSN | 61(19.1%) | 259(80.9%) | |
| LHV | 0(.0%) | 29(100.0%) | |
| CMW | 8(23.5%) | 26(76.5%) | |
| **Marital Status** | | | 0.296[b] |
| Married | 4(9.3%) | 39(90.7%) | |
| Unmarried | 65(19.2%) | 274(80.8%) | |
| Widower | 0(.0%) | 1(100.0%) | |
| **Father's Occupation** | | | 0.114 [a] |
| Govt. Employee | 11(20.4%) | 43(79.6%) | |
| Private Employee | 25(15.2%) | 139(84.8%) | |
| Unemployed | 12(13.3%) | 78(86.7%) | |
| Own Business | 19(27.9%) | 49(721%) | |
| Deceased | 2(28.6%) | 5(71.4%) | |
| **Institute Category** | | | 0.046 [a] |
| Public | 15(12.3%) | 107(87.7%) | |
| Private | 54(20.7%) | 207(79.3%) | |

Table 7 The association between demographic variables and depression levels was analysed using the Chi-Square and Fisher exact test. A significant association was found between gender and depression levels (p = 0.020), with females showing a higher proportion of moderate to extreme depression (69.8%) compared to males (58.3%). Additionally, a significant association was found between study discipline and depression levels (p = 0.001), with students from the LHV discipline showing a significantly higher proportion of moderate to extreme depression (96.6%) compared to students from the GBSN discipline (60.6%) and CMW discipline (64.7%).Furthermore, a significant association was found between institute category and depression levels (p = 0.000), with students from private institutes showing a higher proportion of moderate to extreme depression (57.5%) compared to students from public institutes (77.0%).No significant

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associations were found between age, marital status, and father's occupation with depression levels.

**Table 7 Association of demographic variables with depression**

| Characteristics | Depression | | p-value |
|---|---|---|---|
| | Normal to Mild | Moderate to Extreme | |
| **Gender** | | | 0.020[a] |
| Male | 85(41.7%) | 119(58.3%) | |
| Female | 54(30.2%) | 125(69.8%) | |
| **Age** | | | 0.554[b] |
| 16-20 | 51(41.1%) | 73(58.9%) | |
| 21-25 | 81(34.3%) | 155(65.7%) | |
| 26-30 | 6(30.0%) | 14(70.0%) | |
| 31 Above | 1(33.3%) | 2(66.7%) | |
| **Study Discipline** | | | **0.001[a]** |
| GBSN | 126(39.4%) | 194(60.6%) | |
| LHV | 1(3.4%) | 28(96.6%) | |
| CMW | 12(35.3%) | 22(64.7%) | |
| **Marital Status** | | | 0.757[b] |
| Married | 14(32.6%) | 29(67.4%) | |
| Unmarried | 125(36.9%) | 214(63.1%) | |
| Widower | 0 (.0%) | 1(100.0%) | |
| **Father's Occupation** | | | 0.645[b] |
| Govt. Employee | 22(40.7%) | 32(59.3%) | |
| Private Employee | 55(33.5%) | 109(66.5%) | |
| Unemployed | 31(34.4%) | 59(65.6%) | |
| Own Business | 29(42.6%) | 39(57.4%) | |
| Deceased | 2(28.6%) | 5(71.4%) | |

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| | | | |
|---|---|---|---|
| **Institute Category** | | | **0.000** [a] |
| Public | 28(23.0%) | 94(77.0%) | |
| Private | 111(42.5%) | 150(57.5%) | |

**Discussion**

Stress is a response to any physical or psychological disturbance that upsets homeostasis. The stimuli are referred to as stressors, and the stress response is the result of behavioural and physiological changes brought on by exposure to stressors (19). In this study, the 53.3% of the participants were male 46.7% were female, similarly another study conducted in 2024 in Pakistan where the male female participants ratio was 51.9% male, 48.9% female (20). In the current study, the levels of stress, anxiety and depression were assessed among diploma and degree health care students, among all (8.4%) (47.5 %), (18.5%) of the participants reported extremely severe level of stress, anxiety and depression respectively. Closely aligned to the findings of a study which reported 47.5% anxiety among nurses (21). Another study was conducted in Afghanistan, where 48.8% of the participants were reported severe level of Anxiety (22). Dissimilarly, a study was done in Nepal revealed 7% level of Stress. The common sources stress were assignment and workload (23). However a study was conducted in Turkey where findings revealed 9.2% extremely sever level of stress while 18.5% severe level of depression (24). Another study in Gana reported 19.3% high level of depression (25). Results of this study rarely divergent to the study findings that was conducted in Sri Lanka reported 27.7% stress level (26). Comparable findings reflect from a study conducted in India, findings discovered 29.9% of stress (27) . Results are consistent with the findings of a study done in Pakistan showed 19.41% moderate level of Anxiety and 13.52% with moderate level of depression (28).Moreover divergent findings revealed in a study conducted in Jordan ,reported 21.3% Moderate Anxiety (29). Although dissimilar to the findings of a study done in Vietnam reported 13.2% depression among nurses (30). Dissimilarly, another study conducted in Pakistan in 2024 reported a higher level of anxiety (83.6%) among newly graduated students, highlighting significant mental health concerns during the transition from academia to professional life (31). In contrast, a 2023 study from Pakistan found lower level of overall anxiety 13.5%, among nurses however postgraduate students being less likely to experience anxiety

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compared to undergraduate students (OR = 0.34, p = 0.002). The difference in findings suggests that anxiety levels may vary depending on academic level, coping mechanisms, and external stressors (32). In the current study findings, a significant association were found between gender and level of stress female were more likely to experience extreme stress level 68.7%, compared to male 46.1%. Sharply in contrast with a study who reported 35.1% stress in male and 26.8% in female (33). However, a significant association was found between study discipline and stress levels (p = 0.004), with students from the LHV discipline showing a higher proportion of moderate to extreme stress (86.2%) compared to students from the GBSN discipline (54.1%), as well as between institute category and stress levels (p = 0.000), with students from public institutes showing a higher proportion of moderate to extreme stress (76.2%) compared to students from private institutes (47.5%). This is due to financial burden on the students for paying fees to the private institutes. Results are inconsistent with a study where assistance nurses reported higher level of stress/anxiety 38% than other discipline (34). The findings of present study reported moderate level of stress (55.9%), Anxiety (76.5%) and depression (64.7%) among CMW discipline. Remarkably, the study conducted in Australia (2021), revealed moderate to severe symptoms of depression, anxiety, and stress were 48.5%, 37.2%, and 40.2% (35). Surprisingly, another study was conducted in Iran (2022) revealed moderate level of depression and anxiety (13.70%) and (10.95%) while only mild stress reported, (15%) (36). Alarmingly, LHV discipline reported extreme level of anxiety 100% than the other discipline reflects comparable findings from a study who reported 76.4% of health care worker with anxiety (37). Hardly consistent with this findings another study reported that 47.7% LHV revealed that they will be stressful throughout their course and most of them were facing financial difficulties (38).

**Strengths and Limitations of the Study**

It is a pioneer study, first time conducted among health care students, Generic Bachelor of Science in Nursing, Lady Health Visitor, and Community Midwifery. The current study was conducted in multiple health care settings (private and public) which provide good enough insights regarding mental health issues of all the health care students.

As the current study design was cross sectional so it could not be representative of all health care students (GBSN, LHV, CMW) limits the generalization of findings.

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**Recommendations**

**1. Mental Health Services**

All healthcare educational institutions should provide accessible mental health support services, including counselling and medication therapy, to help students manage depression, anxiety, and stress.

**2. Stress Management Workshops**

Awareness sessions and stress management workshops must be conducted on regular basis to minimize the prevalence of mental health issues.

**3. Faculty and Staff Training**

The head of the health care institutions must ensure that all faculty and administrative staff are encourage to take mindfulness training program to deal with mental health issues

**4. Future Research Studies**

It is recommended to conduct further research to explore the effects of stress, anxiety, and depression and the academic and environmental mental health issues within all organizations.

**REFERENCES**

1. Kumar R. Essentials of Psychiatry and Mental Health Nursing: Elsevier Health Sciences; 2020.

2. Al-Maraira OA, Shennaq SZ. Investigation of depression, anxiety and stress levels of health-care students during COVID-19 pandemic. Mental Health Review Journal. 2021;26(2):113-27.

3. Adedokun C. Stress and Other Factors That Impact Academic Performance Among Nursing Students: Wilmington University (Delaware); 2024.

4. Karaduman GS, Bakir GK, Sim-Sim MMSF, Basak T, Goktas S, Skarbalienė A, et al. Nursing students' perceptions on clinical learning environment and mental health: a multicenter study. Revista latino-americana de enfermagem. 2022;30:e3581.

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https://jmhsr.com/index.php/jmhsr

5. Raynor APA, Fortington DL, Casson MS, Fox-Harding DC, Kadlec DD, Nimphius PS. EVALUATION OF THE HEALING MENTAL HEALTH PROGRAM. Journal of Clinical Exercise Physiology. 2024;13(s2):474-.

6. Campbell F, Blank L, Cantrell A, Baxter S, Blackmore C, Dixon J, et al. Factors that influence mental health of university and college students in the UK: a systematic review. BMC public health. 2022;22(1):1778.

7. Malki SS, Hamouda G, Felemban O. Relationship between Perceived Organizational Support and Quality of Nurses' Work Life at King Fahad General Hospital.

8. Rasmussen B, Hutchinson A, Lowe G, Wynter K, Redley B, Holton S, et al. The impact of covid-19 on psychosocial well-being and learning for australian nursing and midwifery undergraduate students: a cross-sectional survey. Nurse education in practice. 2022;58:103275.

9. Ali Y, Khan S, Ali J, Ejaz K, Fatima K, Qayyum S, et al. Knowledge and practices of nurses regarding blood transfusion in a public sector hospital. Pakistan Journal of Population and Therapeutics and Clinical Pharmacology https://doi org/1053555/jptcp v31i2. 2024;4238.

10. Wilson W, Raj JP, Rao S, Ghiya M, Nedungalaparambil NM, Mundra H, et al. Prevalence and predictors of stress, anxiety, and depression among healthcare workers managing COVID-19 pandemic in India: a nationwide observational study. Indian Journal of Psychological Medicine. 2020;42(4):353-8.

11. Pallanti S, Salerno L. The burden of adult ADHD in comorbid psychiatric and neurological disorders. Springer, 2020.

12. Li Z-S, Hasson F. Resilience, stress, and psychological well-being in nursing students: A systematic review. Nurse education today. 2020;90:104440.

13. Ali Y, Khan S, Alamgir A, Younas M, Qayyum S. Prevalence of Workplace Violence against Female Nurses at Tertiary Care Hospital Karachi, Pakistan: Prevalence of Workplace Violence against Female Nurses. Pakistan Journal of Health Sciences. 2023:296-300.

14. Liu Y, Pan H, Yang R, Wang X, Rao J, Zhang X, et al. Test anxiety and emotion regulation among undergraduate medical students in China: the mediating role of psychological resilience. 2020.

15. Arian M, Jamshidbeigi A, Kamali A, Dalir Z, Ali-Abadi T. The prevalence of burnout syndrome in nursing students: A systematic review and meta-analysis. Teaching and Learning in Nursing. 2023;18(4):512-20.

16. Belk JA. Massively Parallel Interrogation of Anti-Viral and Anti-Cancer Immunity: Stanford University; 2022.

17. Alshahrani AM, Al-Shahrani MS, Miskeen E, Alharthi MH, Alamri MMS, Alqahtani MA, et al., editors. Prevalence of depressive symptoms and its correlates among male medical students at the University of Bisha, Saudi Arabia. Healthcare; 2024: MDPI.

18. Pulagam P, Satyanarayana PT. Stress, anxiety, work-related burnout among primary health care worker: a community based cross sectional study in Kolar. Journal of Family Medicine and Primary Care. 2021;10(5):1845-51.

19. Khan S, Punjwani SK. Reconsidering the Mental Health of Women. A Scoping Review of Poly Cystic Ovary Syndrome and Meditation Therapies. Indus Journal of Bioscience Research. 2025;3(1):600-7.

20. Ali Y, Khan S, Mumtaz A, Awais M, Khifs SA, Ashraf B, et al. Incidence of Renal Impairment in Elderly Hospitalized Patients. Journal of Health and Rehabilitation Research. 2024;4(2):1386-90.

21. Asad MJ, Majeed HM. Relationship between Cigarette Smoking and Anxiety Level among Nurses. The Malaysian Journal of Nursing (MJN). 2024;16(1):149-58.

22. Pun KM, Samson P, Timalsina R. Stress, stress responses and coping strategies among bachelor nursing students. Journal of Patan Academy of Health Sciences. 2018;5(2):74-80.

23. Samsoor AA, Stanikzai MH. Depression, anxiety and stress symptoms among afghan healthcare workers: A cross-sectional analytical study. Indian Journal of Occupational and Environmental Medicine. 2024;28(2):154-8.

24. Dülger H, Ayaz-Alkaya S. Prevalence of Stress, Anxiety, Depression, and Sleep Quality Among Young Adults in Turkiye: A Cross-Sectional Study. Journal of Evaluation in Clinical Practice. 2025;31(1):e70002.

25. Amadu PM, Hoedoafia RE, Dassah G, Cletus LK, Kpebu SEA, Aarah-Bapuah M, et al. The Prevalence of Depression, Anxiety, and Stress Among Undergraduate Nursing Students in the

University for Development Studies, Tamale. Fortune Journal of Health Sciences. 2024;7(2):178-91.

26. Kithmini J, Kaarthiga S, Perera V, Deshapriya H, Gamage C, Fernando N. Depression, Anxiety, and Stress among Allied Health Sciences undergraduates: A Cross-Sectional Study at a Defence University in Sri Lanka. KDU Journal of Multidisciplinary Studies. 2024;6(1).

27. Baruah C, Saikia H, Gupta K, Ohri P. Prevalence and correlates of depression, anxiety and stress among nursing students. Indian Journal of Community Health. 2022;34(2):259-64.

28. Awan AS, Brohi F, Buriro H, Soomro M, Sarki B. ASSESS THE LEVEL OF DEPRESSION, ANXIETY, AND STRESS AMONG UNDERGRADUATE PUBLIC NURSING STUDENTS, PAKISTAN. Insights-Journal of Health and Rehabilitation. 2025;3(1 (Health & Allied)):536-44.

29. Masha'al D, Shahrour G, Aldalaykeh M. Anxiety and coping strategies among nursing students returning to university during the COVID-19 pandemic. Heliyon. 2022;8(1).

30. Tran TTT, Nguyen NB, Luong MA, Bui THA, Phan TD, Tran VO, et al. Stress, anxiety and depression in clinical nurses in Vietnam: a cross-sectional survey and cluster analysis. International journal of mental health systems. 2019;13:1-11.

31. Ahmed F, Ali Y, Malik AA, Khan AU. Investigating The Level of State Anxiety Among Newly Enrolled Undergraduate Female Nursing Students in Karachi, Pakistan. Indus Journal of Bioscience Research. 2024;2(02):1267-72.

32. Alamgir A, Ali Y, Khan S, Yousufzai AUR, Khan F. Prevalence of Anxiety associated with COVID-19 Pandemic among University Students of Karachi: Prevalence of Anxiety associated with COVID-19 Pandemic. Pakistan Journal of Health Sciences. 2023:44-9.

33. Kakemam E, Kalhor R, Khakdel Z, Khezri A, West S, Visentin D, et al. Occupational stress and cognitive failure of nurses and associations with self-reported adverse events: A national cross-sectional survey. Journal of advanced nursing. 2019;75(12):3609-18.

34. Prasad K, McLoughlin C, Stillman M, Poplau S, Goelz E, Taylor S, et al. Prevalence and correlates of stress and burnout among US healthcare workers during the COVID-19 pandemic: a national cross-sectional survey study. EClinicalMedicine. 2021;35.

35. Wynter K, Redley B, Holton S, Manias E, McDonall J, McTier L, et al. Depression, anxiety and stress among Australian nursing and midwifery undergraduate students during the COVID-19 pandemic: a cross-sectional study. International Journal of Nursing Education Scholarship. 2021;18(1):20210060.

36. Haririan H, Samadi P, Lalezari E, Habibzadeh S, Porter JE. Nursing and midwifery students' mental health status and intention to leave during Covid-19 pandemic. SAGE Open Nursing. 2022;8:23779608221120506.

37. Tüğen LE, Göksu M, Erdoğdu AB. The level of anxiety in healthcare workers and their children during the COVID-19 pandemic. Psychiatry Research. 2023;326:115309.

38. Siddiqui S, Shah N, Ayub R, Khan N. '˜ STUDENT LADY HEALTH VISITORS': THEIR STRESS PROFILE AND WILLINGNESS TO PRACTICE. Journal of Ayub Medical College Abbottabad. 2012;24(3-4):159-61.