

## Assessment of Challenges Faced by Nurses Performing Clinical Duties While Pursuing Higher Education in Tertiary Care Hospitals of Pakistan

**Fatima Qamar**

Punjab institute of cardiology hospital Lahore

**Tahira Aslam**

RIMS collge of Nursing Multan

**Nadia Iqbal**

Shahida Islam Nursing College Lodhran

**Zia Ullah**

Mubarak Al kabeer Hospital Kuwait

**Adeela Qayyum\***

Assistant Professor, Department of Nursing, The Islamia University of Bahawalpur

Email: [adeelaqayyum151@gmail.com](mailto:adeelaqayyum151@gmail.com)

### Author Details

**Keywords:**

Nurses, higher education, clinical duties, workload, stress, tertiary care hospitals, qualitative study, Pakistan.

**Received on** 26 March, 2026

**Accepted on** 26 April, 2026

**Published on** 12 May, 2026

Corresponding E-mails & Authors\*:

**Adeela Qayyum**  
[adeelaqayyum151@gmail.com](mailto:adeelaqayyum151@gmail.com)

### Abstract

**Background:** Nurses who pursue higher education while also performing clinical duties frequently confront considerable physical, emotional, academic, and organizational hurdles. Nurses participating in postgraduate nursing programs in Pakistan's tertiary care hospitals face added stress due to growing workloads, staff shortages, and rigorous educational requirements. Improving nurses' well-being, academic performance, and patient care quality requires an understanding of these experiences. to investigate the difficulties experienced by nurses at Pakistani tertiary care hospitals who are pursuing higher education while doing out clinical tasks.

**Methods:** A qualitative phenomenological study design was employed to investigate the lived experiences of nurses participating in Master of Science in Nursing (MSN) programs

while simultaneously engaging in clinical practice. A purposive sampling method was employed to enlist 14 individuals from tertiary care hospitals associated with the university. Information was gathered via semi-structured, detailed interviews. Interviews were recorded, transcribed exactly, and examined through Braun and Clarke's thematic analysis method

**Results:** The analysis revealed four primary themes: challenges in workload and time management, psychological and emotional stress, insufficient institutional and organizational support, and coping strategies related to professional development. Participants indicated that long working hours, inadequate staffing, academic stress, emotional fatigue, work-life imbalance, and financial strain were significant challenges. Restricted workplace flexibility and inflexible academic timetables amplified stress levels. In spite of these challenges, nurses showed resilience by utilizing time management, social support, spirituality, and a strong drive for professionalism.

**Conclusion:** Nurses advancing their education while handling clinical responsibilities face various obstacles that impact their health and academic success. Supportive policies within institutions, adaptable scheduling, and organizational assistance are crucial for advancing nurses' education and enhancing healthcare quality in Pakistan.

## INTRODUCTION

Nursing is a demanding job in healthcare, involving direct patient care, safety, medication administration, monitoring, and family support. Many nurses seek higher education to enhance their skills and career prospects, but balancing work and study is challenging, especially in busy hospitals [1]. The demand for highly educated nurses is growing because of advances in healthcare technology and better patient care [2]. Healthcare systems are encouraging nurses to get higher degrees like BSN, MSN, and special certifications. This

education improves their critical thinking, leadership, and clinical skills, enhancing healthcare quality [3]. However, nurses who study while working face significant stress and heavy workloads. Balancing job responsibilities with school can lead to fatigue, emotional exhaustion, and poor work-life balance, negatively impacting their performance and job satisfaction [4].

In Pakistan, the nursing profession has changed greatly in the past ten years. The Pakistan Nursing and Midwifery Council (PNMC) has promoted professional growth and encouraged nurses to seek higher education to improve the workforce [5]. More nurses are now enrolling in BSN, Post RN, MSN, and specialty programs while working in hospitals. Nurses in tertiary care hospitals provide advanced care to critically ill patients but face challenges like heavy workloads, staff shortages, and demanding schedules. Balancing work with education can negatively affect their wellbeing and job performance [6].

Workload is a major challenge for nurses pursuing higher education, as they often work long shifts, including nights and overtime. This can make it very tiring to attend classes, prepare assignments, and study [7]. Excessive workload leads to burnout, causing emotional exhaustion and reduced professional achievement, which can negatively impact concentration, motivation, and patient safety. Time management is a major challenge for nurses in higher education. They need to balance academic work, clinical duties, and family responsibilities, which requires strong organizational skills [8]. Many nurses find it hard to find enough time for studying and assignments due to unpredictable hospital schedules. They often sacrifice sleep and personal time, leading to issues with memory, concentration, and emotional health [9]. Additionally, financial burdens from tuition, transportation, and study materials add stress, especially for those with low

salaries. This is especially true in countries like Pakistan, where financial issues can impact education and performance [10].

Family responsibilities complicate the experiences of nurses seeking higher education, especially for married women who manage childcare and caregiving duties. These obligations can lead to stress and limit time for education [11]. Organizational support is crucial for helping nurses balance work and studies, with flexible schedules and educational leave being beneficial. However, many hospitals in Pakistan do not have proper support systems for nurses in higher education. Additionally, staff shortages increase workloads, making it harder for nurses to find time for their studies [12]. Psychological stress is common among nurses in higher education due to academic pressure, exams, workload, and family expectations. This stress can lead to depression, low self-esteem, and less job satisfaction. Pakistan has also started recognizing these issues. When nurses are overwhelmed, it can affect their clinical performance, lowering attention to detail and patient safety. Educational institutions play a role, as strict schedules and heavy assignments add to the stress. Flexible learning options may help alleviate these challenges [13].

Understanding the challenges faced by working nurses is vital for healthcare leaders, educators, and policymakers. Identifying barriers can help create supportive policies for nurses' wellbeing and education. This study aims to assess the difficulties nurses encounter while working and pursuing higher education in Pakistani hospitals. It will examine issues like workload, stress, financial strain, support, and work-life balance. Findings may lead to better strategies for supporting nurses and improving care quality.

## Methodology

To investigate and comprehend the lived experiences and difficulties faced by nurses carrying out clinical responsibilities while concurrently pursuing higher education, a qualitative phenomenological study design was employed. When the goal is to fully comprehend participants' experiences, perceptions, emotions, and coping mechanisms in their native environments, qualitative research is appropriate [14]. The study's goal was to investigate nurses' actual experiences juggling clinical practice with academic obligations, hence the phenomenological approach was chosen. The study was carried out in Pakistani universities and associated tertiary care facilities where nurses were enrolled in Master of Science in Nursing (MSN) programs and actively engaged in clinical work in hospital environments. Registered nurses enrolled in MSN Nursing programs who concurrently carried out clinical responsibilities in tertiary care facilities made up the target population. To find individuals who might offer rich and pertinent information on the topic being studied, a purposive sampling strategy was employed.

The study comprised 14 individuals in total. Data saturation, which happens when no new topics or information emerge from further interviews, determines sample size in qualitative research [15]. After interviewing 14 nurses enrolled in MSN programs, data saturation was reached. The study's inclusion requirements included being a registered nurse enrolled in MSN nursing programs, having at least a year of clinical experience, and being willing to participate voluntarily. Nurses not enrolled in higher education programs, students without clinical responsibilities, nurses unavailable during the data collection period were excluded from the study.

Semi-structured, in-depth interviews were used to gather data. Participants were able to freely share their experiences during semi-structured interviews, which also

allowed the researcher to delve into particular topics pertaining to the goals of the study. Based on the goals of the study and the literature evaluation, an interview guide was created. Workload and time management, academic stress, clinical obligations, familial and social issues, organizational support, and coping mechanisms were the main topics of discussion during the interviews. Each interview took place in a private, calm setting and lasted between thirty and forty-five minutes. Among the sample interview questions were:

1. Tell us about your experience juggling clinical responsibilities and further study.
2. What are the main obstacles you encounter when juggling both obligations?
3. How does your clinical performance get impacted by your academic workload?
4. How do your family and place of employment help you?
5. What coping strategies help you manage stress and workload?

Eligible individuals were contacted one-on-one following institutional and ethical approval. Before conducting interviews, written informed consent was obtained and the study's goal was described. Confidentiality, voluntary participation, the opportunity to withdraw at any time, and the privacy of recorded interviews were all guaranteed to participants. With participants' consent, audio recordings of the interviews were made, and field notes were added.

The six-step paradigm created by Braun and Clarke (2006) [16] was followed in the thematic analysis of the gathered data. To find, examine, and understand patterns and themes in qualitative data, thematic analysis is frequently employed in qualitative research. The steps included:

**Step 1: Familiarization with Data:** Audio-recorded interviews were transcribed verbatim and read repeatedly to gain understanding of participants' experiences.

**Step 2: Generating Initial Codes:** Meaningful statements and important phrases related to nurses' challenges were identified and coded.

**Step 3: Searching for Themes:** Similar codes were grouped together into broader themes reflecting shared experiences.

**Step 4: Reviewing Themes:** Themes were reviewed and refined to ensure consistency and relevance to the research objectives.

**Step 5: Defining and Naming Themes:** Final themes were clearly defined and labeled according to the participants' experiences.

**Step 6: Producing the Report:** Themes were interpreted and presented with supporting participant quotations.

To ensure rigor and trustworthiness, the study followed Lincoln and Guba's criteria:

**Credibility** contain prolonged engagement with participants, member checking and verbatim transcription. **Dependability** contain detailed documentation of research procedures, and audit trail maintained throughout the study. **Confirmability** contain researcher neutrality maintained, and data supported by participant quotations. **Transferability** contain detailed contextual descriptions provided to allow applicability to similar settings.

The appropriate Institutional Review Board (IRB) provided ethical approval. The study was conducted in accordance with ethical standards. The study's aims, information confidentiality, voluntary participation, and the possibility to decline participation were all explained to the participants. To protect participant confidentiality, codes were used in place of names. Nurses' life experiences were better understood because to the qualitative phenomenological approach, which balanced clinical and academic obligations. Thematic

analysis made it possible to identify emotional experiences, coping strategies, and common problems that could not have been detected using quantitative techniques.

### Results:

This section presents the findings obtained from semi-structured interviews conducted with 14 nurses enrolled in MSN programs while simultaneously performing clinical duties in tertiary care hospitals.

#### Demographic Characteristics of Participants

Table 4.1 presents the demographic profile of 14 study participants, mostly female nurses (11 females and 3 males), indicating that women dominate the nursing workforce in higher education in Pakistan. Most participants were young, aged 25–30 years (6 participants) or 31–35 years (5 participants), suggesting that nurses often seek higher education early or in the middle of their careers to better their qualifications and opportunities. Regarding educational paths, 8 participants were in the MSN after 4 year Generic program, while 6 were in the MSN after completion of 2 years Post RN program. This shows both programs are helping nurses advance professionally, with a slight preference for the MSN Generic among participants. Most had 6–10 years of clinical experience (7 participants), indicating that moderately experienced nurses are likely to pursue further education alongside their clinical roles. Overall, the participants were mainly younger female nurses with moderate experience, engaged in postgraduate studies while balancing their clinical responsibilities.

Table 4.1 Demographic Profile of Participants (n = 14)	
Category	Frequency
Gender	

Female	11
Male	3
<b>Age</b>	
25–30 years	6
31–35 years	5
36 years and above	3
<b>Education</b>	
MSN Generic	8
MSN Post RN	6
<b>Experience</b>	
1–5 years	4
6–10 years	7
Above 10 years	3

### Thematic Analysis

Data were analyzed using Braun and Clarke's thematic analysis approach. After repeated reading and coding of interview transcripts, several codes emerged, which were grouped into subthemes and broader themes. The analysis identified four major themes:

1. Workload and Time Management Challenges
2. Psychological and Emotional Stress
3. Lack of Institutional and Organizational Support
4. Coping Strategies and Professional Growth



Figure 1: Major themes of the study

These themes describe the lived experiences of nurses balancing higher education and clinical responsibilities. Table 2 shows the main themes and subthemes about challenges nurses face while working and studying. Nurses struggle to balance their jobs and school, impacting their health and well-being. Despite these difficulties, they use coping strategies and experience positive growth in their careers.

Table 2 Themes, Subthemes, and Codes

Themes	Subthemes	Codes
Theme 1: Workload and Time Management Challenges	Heavy Clinical Workload	Long duty hours, staff shortage, overtime duties
	Difficulty Managing Time	Assignment burden, lack of study time, sleep deprivation
	Academic Pressure	Exams stress, research workload, deadlines
	Emotional Exhaustion	Fatigue, burnout, frustration

<p><b>Theme 2: Psychological and Emotional Stress</b></p>	<p>Mental Stress</p> <p>Work-Life Imbalance</p>	<p>Anxiety, lack of concentration, emotional instability</p> <p>Family neglect, social isolation, reduced personal time</p>
<p><b>Theme 3: Lack of Institutional and Organizational Support</b></p>	<p>Unsupportive Workplace</p> <p>Limited Academic Support</p> <p>Resource Constraints</p>	<p>Rigid duty schedules, no study leave</p> <p>Inflexible class schedules, excessive assignments</p> <p>Financial burden, transportation issues</p>
<p><b>Theme 4: Coping Strategies and Professional Growth</b></p>	<p>Personal Coping Strategies</p> <p>Social Support</p> <p>Professional Development</p>	<p>Time management, self-motivation, prayer</p> <p>Family encouragement, peer support</p> <p>Improved knowledge, confidence, leadership skills</p>

**Theme 1: Workload and Time Management Challenges**

Participants' experiences with an overwhelming workload and challenges juggling clinical and academic obligations are reflected in this theme.

**Subtheme 1.1: Heavy Clinical Workload**

The majority of participants cited rising patient load, personnel shortages, and long duty hours as the main obstacles. Nurses acknowledged that strenuous clinical duties affected their energy and motivation for academic activity.

**One participant stated:**

"After completing 12-hour shifts, it becomes extremely difficult to attend classes or prepare assignments."

**Another participant shared:**

"Due to staff shortages, we often perform overtime duties, which affects our studies badly."

The findings indicate that excessive clinical workload creates physical fatigue and limits opportunities for effective learning.

**Subtheme 1.2: Difficulty Managing Time**

One of the members' main concerns was time management. Nurses reported having trouble juggling clinical duties, exams, assignments, and classes. One participant clarified:

"Sometimes assignment deadlines and hospital duties come together, and I feel mentally exhausted."

**Another participant stated:**

"I barely get enough sleep because I study after duty hours."

These findings suggest that competing academic and clinical demands negatively affect rest, study schedules, and overall wellbeing.

**Subtheme 1.3: Academic Pressure**

Participants talked about the pressure to perform well on tests, give presentations, and conduct research. Maintaining academic achievement while doing clinical duties was a source of concern for many nurses.

**One participant stated:**

"Research work is very stressful because we already have heavy hospital responsibilities."

The findings demonstrate that academic workload contributes significantly to stress among working nurses.

## Theme 2: Psychological and Emotional Stress

This theme draws attention to the emotional and psychological challenges that nurses face.

### Subtheme 2.1: Emotional Exhaustion

Most participants expressed feelings of fatigue, burnout, and emotional exhaustion due to continuous responsibilities.

#### One nurse shared:

"Sometimes I feel completely drained physically and emotionally."

#### Another participant reported:

"Managing both study and duty together causes severe burnout."

The findings reveal that dual responsibilities negatively affect emotional wellbeing.

### Subtheme 2.2: Mental Stress

Anxiety, tension, and decreased focus brought on by workload and academic pressure were commonly reported by participants.

#### One participant stated:

"I remain worried about assignments during duty and worried about patients during class."

These findings indicate persistent mental stress and role conflict among participants.

### Subtheme 2.3: Work-Life Imbalance

Many nurses discussed difficulties maintaining personal and family life.

#### A participant explained:

"I hardly spend quality time with my family because of studies and hospital duties."

**Another participant stated:**

“There is no balance between personal life, studies, and work.”

The findings show that balancing multiple roles affects social relationships and personal wellbeing.

**Theme 3: Lack of Institutional and Organizational Support**

The organizational obstacles that participants faced are reflected in this theme.

**Subtheme 3.1: Unsupportive Workplace**

Participants reported limited flexibility in duty schedules and lack of educational leave.

**One participant stated:**

“Hospital administration does not adjust our duties according to university schedules.”

**Another participant explained:**

“Even during exams, getting leave becomes difficult.”

The findings suggest inadequate institutional support for nurses pursuing higher education.

**Subtheme 3.2: Limited Academic Support**

Some participants expressed dissatisfaction with rigid academic schedules and excessive assignments.

**A participant shared:**

“University schedules are not designed for working nurses.”

These findings indicate that academic institutions also contribute to participants’ stress.

**Subtheme 3.3: Resource Constraints**

Financial burden and transportation problems were additional challenges.

**One participant stated:**

“Managing tuition fees along with household expenses is very difficult.”

These findings highlight economic stress among nurses pursuing higher education.

#### **Theme 4: Coping Strategies and Professional Growth**

Participants reported a number of coping strategies and successful outcomes despite difficulties.

##### **Subtheme 4.1: Personal Coping Strategies**

Participants used time management, self-motivation, and spirituality to cope with stress.

**One participant stated:**

“I make study schedules and try to stay motivated.”

**Another participant shared:**

“Prayer helps me stay mentally strong.”

##### **Subtheme 4.2: Social Support**

Family members, classmates, and colleagues played important supportive roles.

**A participant explained:**

“My family motivates me to continue my education.”

These findings indicate the importance of emotional and social support systems.

##### **Subtheme 4.3: Professional Development**

Despite difficulties, participants believed higher education improved their knowledge and confidence.

**One participant stated:**

“MSN education has improved my critical thinking and patient care skills.”

**Another participant shared:**

“I feel more confident in leadership and decision-making now.”

The thematic analysis revealed that nurses pursuing higher education while performing clinical duties face multiple interconnected challenges including: Heavy workload, time management difficulties, psychological stress, work-life imbalance, lack of institutional support and financial burden. Despite these difficulties, nurses demonstrated resilience through coping strategies, social support, and strong professional motivation. The study also highlighted that higher education contributes positively to nurses' professional competence, leadership abilities, and confidence.

### Discussion

The study examined the challenges nurses face while working and studying in hospitals in Pakistan. It found that they deal with heavy workloads, time management issues, psychological stress, insufficient support, and financial problems. Yet, nurses showed resilience through coping strategies, social support, and a strong desire for professional growth. Four main themes were identified: workload challenges, emotional stress, lack of support, and coping strategies.

Nurses face a heavy clinical workload and staff shortages while trying to manage their academic responsibilities. Participants reported long working hours, which leave them with little time for studying, resting, or personal life. This situation aligns with research by Labrague and colleagues found that working nurses in postgraduate programs often feel exhausted and that this impacts their academic performance and mental health [17]. A study by Alharbi et al. indicated that long hours and rotating shifts hinder nurses' focus on their studies and lead to emotional tiredness [18]. The findings are particularly relevant in Pakistan's healthcare settings, where there are often not enough nurses for the number of patients. Due to staff shortages, nurses frequently work overtime, which limits their time and energy for academic pursuits. Research showed that

heavy workloads and soft staffing levels contribute to stress and burnout [19]. Additionally, time management is a significant issue, with conflicts arising between exam deadlines and work schedules. Participants also noted inadequate sleep, which negatively affects their ability to concentrate and perform well clinically [20].

The study reveals that nurses face significant psychological stress, anxiety, emotional exhaustion, and burnout as they manage both work and education. Participants reported feeling mentally and physically worn out due to ongoing responsibilities and conflicting demands. These results align with recent global studies showing that nurses experience high stress and burnout levels, a trend that intensified after the COVID-19 pandemic. The World Health Organization noted that increased workload and professional expectations contribute to this issue [21]. In Pakistan, nurses pursuing higher education often feel emotional instability, frustration, and anxiety due to workload and academic pressure. Burnout can lead to decreased motivation and job satisfaction, which may affect patient safety. Furthermore, participants mentioned challenges in maintaining family connections, social isolation, and personal wellbeing [22]. In Pakistani culture, female nurses particularly face added household responsibilities, leading to role conflict and emotional strain. South Asian healthcare research highlights these challenges for female healthcare workers juggling various roles.

The study found a significant lack of support from institutions and organizations for nurses wanting to pursue higher education. Nurses faced strict work schedules, difficulties in taking leave for exams, and limited flexibility at work. This is consistent with a previous study by Alharbi et al., which highlighted that lack of support and inflexible schedules hinder nurses' education [18]. Labrague and De los Santos (2021) also noted that organizational support can help reduce stress and improve academic success for

working nurses. The absence of supportive educational policies in hospitals may stem from staff shortages and high clinical demands, leading administrations to prioritize service over education, restricting opportunities for adjusting schedules or taking academic leave [17]. Furthermore, participants expressed dissatisfaction with rigid university schedules and overwhelming assignments, which Rayan et al. (2025) found to increase stress for nursing students. Financial challenges, including tuition and living expenses, also emerged as significant obstacles, particularly in developing countries like Pakistan, where economic stress greatly impacts nurses' education [20].

Participants showed resilience and effective coping methods despite facing challenges. Nurses used time management, self-motivation, spirituality, and social support to handle stress and further their education. This aligns with studies that highlight planning, emotional support, and religious practices as key coping strategies for managing work-related stress. In Pakistani culture, spirituality and prayer are important for emotional strength. Family and peer support were crucial as participants received motivation from relatives and classmates. Similar research by Younas et al. (2021) noted the role of social support in reducing stress for nursing students [22]. Participants saw higher education as beneficial for career growth, improving critical thinking, communication, leadership skills, and confidence in patient care, showing that advanced nursing education leads to better clinical outcomes.

The study used a qualitative approach with 14 participants. While the sample size achieved data saturation, the results may not apply to all nurses in Pakistan due to different experiences across regions and institutions. The research focused only on nurses in MSN programs from specific hospitals and universities, which means it does not include those in other programs like Post RN BSN or doctoral studies.

Data were gathered through interviews based on self-reported experiences. Some participants might have held back information due to fear of judgment or bias, and emotional experiences can vary greatly among individuals. The study only included nurses pursuing higher education while working, missing insights from hospital administrators, faculty, and family members, which could have broadened understanding. Additionally, the research was limited to tertiary care hospitals, and findings may not apply to smaller healthcare facilities. The study did not quantitatively assess stress or burnout levels. Time constraints may have affected the depth of interviews. Despite these limitations, the study provides valuable insights into nurses managing higher education and clinical duties in Pakistan.

### Conclusion

The study found that nurses who work while pursuing higher education face many challenges that impact their professional, academic, psychological, and personal wellbeing. Key issues include heavy workloads, time management struggles, academic stress, emotional exhaustion, work-life imbalance, financial pressure, and a lack of support from their workplaces. Balancing job duties with education creates significant physical and emotional strain due to long hours and staff shortages, leading to fatigue and burnout. There is also limited flexibility in schedules, further increasing stress for these nurses. Despite these challenges, nurses remain motivated to continue their studies for better professional growth and patient care. To improve nurses' wellbeing and support their education, healthcare institutions in Pakistan need to implement supportive policies like flexible scheduling, educational leave, and counseling services, benefiting both the nurses and healthcare quality overall.

**Reference:**

- Sultan A, Khanum S, Naz N, Khan S, Ali S. The caring competencies of nursing students: Comparing the four and two-year Bachelor of Nursing Programme. *Journal of Pakistan Medical Association*. 2024 Jan 31;74(1):123-.
- Pepito JA, Locsin R. Can nurses remain relevant in a technologically advanced future?. *International journal of nursing sciences*. 2019 Jan 10;6(1):106-10.
- Frangieh J, Hairston D, Johanson L, Lucas L, Hughes V. Mind the gap: Bridging leadership skill development in entry-level professional nursing through competency-based education. *Journal of Professional Nursing*. 2025 Oct 13.
- Abuhammad S, Alzoubi KH, Al-Azzam S, Karasneh R, Masadeh MM, Alameddine M. Work-life balance, job satisfaction, and burnout among nurses in Jordan: A cross-sectional study. *Plos one*. 2025 Oct 16;20(10):e0334603.
- Rani M. Midwifery Mentorship in Pakistan. In *Global Midwifery Mentorship 2025 Sep 22* (pp. 267-278). Routledge.
- Nakweenda M, Anthonie R, van der Heever M. Staff shortages in critical care units: Critical care nurses experiences. *International Journal of Africa Nursing Sciences*. 2022 Jan 1;17:100412.
- Vetbuje BG. Burnout of nurses due to workload and long working hours during shifts. *Int Arch Nurs Health Care*. 2023;9(4):191.
- Kurniawati F, Fikaris MF, Eryani IS, Rohendi A, Wahyudi B. The effect of workload, burnout, and work motivation on nurse performance. *Jurnal Aplikasi Manajemen*. 2023 Dec 1;21(4):915-27.

- Irani E, Hirschman KB, Cacchione PZ, Bowles KH. How home health nurses plan their work schedules: A qualitative descriptive study. *Journal of clinical nursing*. 2018 Nov;27(21-22):4066-76.
- Samejo DK, Qammar R, Aftab M. Analyzing The Role of Household Financial Challenges on Mental Health and Educational Outcomes in Pakistan. *Journal of Asian Development Studies*. 2024 May 28;13(2):1232-40.
- Abo Habieb EE, Elwkeel NS. Influence of perceived organizational support, work life balance on staff nurses' workflow at Main Mansoura University Hospital. *Assiut Scientific Nursing Journal*. 2020 Dec 1;8(23):10-9.
- Ali H, Arif S, Iqbal S. FACTORS RELATED TO PURSUING HIGHER EDUCATION AMONG NURSES IN A DEVELOPING CONTEXT. *Rehman Journal of Health Sciences*. 2024 Dec 31;6(2):117-23.
- Salman M, Mustafa ZU, Rao AZ, Khan QU, Asif N, Hussain K, Shehzadi N, Khan MF, Rashid A. Serious inadequacies in high alert medication-related knowledge among Pakistani nurses: findings of a large, multicenter, cross-sectional survey. *Frontiers in Pharmacology*. 2020 Jul 14;11:1026.
- Creswell JW, Poth CN. *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications; 2016 Dec 19.
- Polit DF, Beck CT. *Nursing research: Generating and assessing evidence for nursing practice*. Lippincott Williams & Wilkins; 2008.
- Braun V, Clarke V. *Using thematic analysis in psychology*. *Qualitative research in psychology*. 2006 Jan 1;3(2):77-101.

- Labrague LJ, de Los Santos JA. Fear of Covid-19, psychological distress, work satisfaction and turnover intention among frontline nurses. *Journal of nursing management*. 2021 Apr;29(3):395-403.
- Alharbi K. Exploring the power of emotional intelligence: a comprehensive evaluation of its impact on the clinical competence of nursing students. *BMC nursing*. 2025 May 15;24(1):536.
- Badil B, Shah H, Ur-Rehman R, Ali SA, Siddiqui A. Occupational Stress among Nurses of Tertiary Care Hospitals in Karachi, Pakistan. *Journal of the Dow University of Health Sciences (JDUHS)*. 2016 Dec 25;10(3):96-100.
- Rayan A, Al-Jaafreh I, Baqees MH, Alhalaiqa F, Al-Ghabeesh S, Alyami H. Influence of organizational culture on nursing perception of quality of healthcare services and intent to stay among nurses employed in public hospitals: A cross-sectional study. *Applied Nursing Research*. 2025 Dec 19:152042.
- World Health Organization. *National health workforce accounts: a handbook*. World Health Organization; 2023 Nov 23.
- Younas A, Rasheed SP, Sommer J. Current situation and challenges concerning nursing education in Pakistan. *Nurse education in practice*. 2019 Nov 1;41:102638.
- Cho H, Steege LM. Nurse fatigue and nurse, patient safety, and organizational outcomes: A systematic review. *Western Journal of Nursing Research*. 2021 Dec;43(12):1157-68.