

Nursing Job Demands and Mindfulness and its Relation with Missed Nursing Care at Meniat El Nasr Central Hospital



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1- ABSTRACT

Background: Job demands among nurses can lead to health problems such as low productivity, an increase in nurses' errors, an increase in expenses, and decreased retention, which may have an influence on nurses' mindfulness. Also, delayed task completion raises the chance of errors, which ultimately affects the well-being of patients and leads to missed nursing care. **Aim:** To investigate nursing job demands and mindfulness and its relationship with missed nursing care at Meniat El Nasr Central Hospital. **Design:** A descriptive-correlated study design was used to perform the study. **Method:** There were three tools utilized: the job demand scale, mindful attention awareness scales, and missed nursing care scales. **Results:** More than half of studied nurses (57.2%) had high levels of job demand; and more than half (51.7%) of them had a high level of mindfulness, and more than one-third had a low level of missed nursing care. **Conclusion:** There is a highly statistically significant negative relationship between job demands and mindfulness. Also, there is a highly statistically significant positive relationship between job demands and missed nursing care and there is a highly statistically significant negative relationship between job mindfulness and missed nursing care. **Recommendations:** Establish an environment that lowers excessive job demands. Nurse managers have to foster a productive workplace with adequate staffing and supplies, as well as encourage collaborative work, to avoid missed nursing care. Additionally, a clear communication and feedback mechanism regarding errors should be maintained.

Keywords: Job Demand, Mindfulness, Missed Nursing Care

2- Introduction:

Nursing necessitates lots of new and complex competence, which has resulted in a rapid increase in work complexity in both the private and public sectors over the past few decades. Various workplaces, particularly healthcare environments like hospitals where nurses work, have experienced a rise in demands and strains related to their jobs as a result. A nurse's mindfulness may be impacted by the rapid rise in job demands and strains, which can lead to undesirable results like low productivity, a rise in nursing errors, more expenses, and staff turnover (Jalilian, Shouroki, Azmoon, Rostamabadi, & Choobineh, 2019). Additionally, delaying duties results in errors more often, which ultimately impacts the safety of patients and results in missed nursing care (Biganeh, Ashtarinezhad, Behzadipour, Nik, & Hosseinabadi, 2022).

Nursing profession is a highly demanding job with higher levels of challenges, especially for nurses providing direct patient care (El-Salamony & El-Ayari, 2023). Job demands were defined as the psychological, social, physical, or organizational features of an occupation that require continued cognitive, physical, or intellectual effort and thus have specific physical

and/or psychological consequences (Bakker, Demerouti, & Sanz-Vergel, 2023). Job demands, such as an excessive workload, extended time pressure, insufficient staffing, and high psychological demands from patients, are sources of stress (Peterson, Uibu, & Kangasniemi, 2022). Job demands are undesirable factors in the workplace that reduce staff nurses' productivity by causing both mental and physical signs of burnout; as a result, the nature of job demands influences the nature of burnout symptoms (El-Zohery, El-Wkeel, & El-Shaer, 2022).

Job demands can be classified into two basic categories: both qualitative and quantitative. The first category is quantitative job demand, which relates to the amount and frequency of work, also known as workload, whereas qualitative job demands refer to intellectual, psychological, and mental demands, as well as the effort required whilst at work (Mauno, Herttalaampi, Minkkinen, Feldt, & Kubicek, 2022). Job demands may be influenced by organizational factors associated with the organization's characteristics, such as the perception of a culture of competition among staff members that is viewed as a chance for

advancement and consciousness, resulting in increased demand for nurses who need updates to their knowledge, improve their skills, and effectively adjust to changes in the workplace while maintaining a high level of productivity at work. All of this will lead to an increasing demand for nurses (Babalola et al., 2022).

Job demands that hinder or block the ability of nurses to attain their objectives are referred to as hindrances. Job demands may also turn into a source of stress if they involve a lot of effort and occur at significant expenses, resulting in negative feelings like anxiety, dissatisfaction, and even emotional exhaustion (Kwong & Nasuredin, 2023). Job demand and mindfulness provide numerous viewpoints on workplace stress, and mindfulness research studies suggest that the mindful state assists individuals in distinguishing environmental characteristics from how they respond to them, reducing physical and psychological burnout (Grover, Teo, Pick, & Roche, 2017). Higher levels of mindfulness among nurses contribute to improved mental awareness, knowledge, adoption, and ability to manage stressful situations, all of which contribute to greater well-being (El-Salamony & El-Ayari, 2023).

Mindfulness is a way of being attentive to an individual's emotions, thoughts, bodily sensations, and the current situation. Openness, nonjudgment, friendliness, curiosity, acceptance, and compassion toward both one and others are often associated with mindfulness (Montalto, 2023). Mindfulness is conscious attention to the present moment without judging what may be positive or negative (Ando, Ohara, Yamauchi, MacIntyre, & Kobayashi, 2023). Mindfulness affects nurses' behaviors and features, helping them control themselves and communicate with others (Decuyper, Audenaert, & Decrame, 2020).

Nurses who practice mindfulness report higher job satisfaction and general well-being. They mentioned improved work-life balance, which led to higher job fulfillment and increased essential thinking needed to complete wide tasks and work duties (Hassan et al., 2023). Mindfulness meditation may be beneficial for a variety of physical and mental health conditions, which helps nurses learn how to relax and let go of undesirable thoughts (Pan, Gau, Hsu, Shen, & Lee, 2022). Mindfulness benefits nurses by improving productivity, job fulfillment, innovative work behavior, productivity, greater commitment to work, enjoyment, and work happiness (Dixit & Upadhyay, 2019).

On the other hand, they disclosed a beneficial impact of nature experiences and meditation on reducing tension at the workplace and strengthening the general health of nurses, with a unique emphasis on reinforcing the attention and innovation of nurses working in challenging situations (Ch et al., 2023). Quality of nursing care is a vital measure for safety of patient, as a lack of nursing care has direct negative consequences for patients. Missed care has been linked to possibly negative outcomes. Missed nursing care has a negative influence not just on medical service quality but additionally on patient outcomes such as satisfaction and readmission rates. As a result, missed nursing care is now a major hospital issue that requires rapid action by those making decisions (Alfuqaha, Alhalaiqa, Alqurneh, & Ayed, 2023).

Missed nursing care (MNC) was recognized as a measure of both high-quality nursing care and patient safety; it is commonly associated with insufficient staffing. MNC occurs if standard nursing care is not provided or is significantly delayed, reflecting an error or oversight (Syukri & Bettywati Eliezer, 2023). MNC refers to any part of required patient care that is neglected, partially or totally, or postponed. Missed nursing care includes all aspects of care that are likely to be omitted, including hand hygiene, medication and injection administration, discharge planning, skin and oral hygiene, and helping with eating and drinking (Albsoul et al., 2023; Jackson, 2023).

Missed nursing care has been linked to adverse results for patients like medication errors, infections acquired in the hospital, and patient mortality, all of which are critical to patient safety and healthcare quality (Imam et al., 2023). There are three reasons for missing nursing care: labor resources, material resources, and communication. Additional factors that contribute to missing nursing care include staffing quantity, organizational structures, and leadership style, which have a major impact. Previous research linked nurses' demographic data to missing nursing care, including age, gender, educational qualification, job position, and years of clinical experience (Alfuqaha, Alhalaiqa, Alqurneh, & Ayed, 2023).

Additionally, higher levels of missed care are frequently caused by organizational issues such as insufficient staff, poor working conditions, lower collaboration between staff members, and a hospital's safety culture. Among these issues, nurse staffing and work environment have been

specifically recognized as factors in missed care (Nantsupawat et al., 2022). Missed nursing care had an impact on nursing, patients, and organizations because it decreased the overall level of patient quality of care, nurses and patient satisfaction, increased the chance of undesirable complications, increased patient length of stay, resulting in rising hospital expenses, a high rate of morbidity and mortality, and the risk of readmission to the hospital. So, missed nursing care is a key indicator of the quality of nursing care (Pourmovahed et al., 2023).

2.1 Significance of the Study

Nursing job demands affect the safety of patients and the quality of care because they interfere with nurses' capacity to stay concentrated and alert. High job demand is one of the most crucial health risks at work for nurses globally, resulting in significant costs regarding nurses and healthcare sitting due to nurse turnover and absences, lower productivity, sickness, a low level of health care services, and a and a higher likelihood of mistakes, which effects nurses' mindfulness. Mindfulness provides a chance to address the impact of psychological job demands on missed nursing care. Furthermore, the present study examined a theoretical framework to improve current awareness about the impact of mindfulness as a personal resource on job demands and create a link between mindfulness and missing nursing care (Nicholson, 2021).

Meniat El Nasr Hospital is committed to improving comprehensive advanced care available to all people in need. And nurses constitute most human resources in hospitals with 24-hour care services and have increased job demands. Nurses experience more stress and pressure in their workplace, which can lead to serious consequences. Hence, the present study aims to examine nursing job demands and mindfulness and their relationship with missed nursing care at Meniat El Nasr Hospital.

2.2 Aim of the Study

This study aimed to investigate nursing job demands and mindfulness and it's relation with missed nursing care at Meniat El Nasr Central Hospital.

2.3 Research Questions

- Q1. What is the level of job demand among nurse at Meniat El Nasr Hospital?
- Q2. What is the level of mindfulness among nurse at Meniat El Nasr Hospital?

Q3. What is the level of missed nursing care among nurse at Meniat El Nasr Hospital?

Q4. Is there a relationship between nursing job demands, mindfulness, and missed nursing care?

3. Method

3.1 Study Design

The descriptive correlational study design was used to perform this study.

3.2 Setting of the Study

This study was carried out at (Meniat El Nasr Central Hospital / Governmental organization affiliated with the Ministry of Health). The hospital contains 11 inpatient units and non-patient-supported units. Outpatient department, (OPD), Internal medicine (IM), Emergency department (ED), Hemodialysis department (HDD), Operation Department (ODP), Orthopedic Department (OD), Gynecology department (GD), Cardiac Care Unit (CCU), Adult Intensive Care Unit (AICU), Pediatric Intensive Care Unit (PICU), Pediatric Ward (PW), Dental Unit (DU) and other non-patient supported units as blood bank unit, radiology unit, laboratory unit, purchasing, supplies and consumable store, sterilization unit, laundry unit, reception, security and secretory unite. It consists of 3 main blocks, 1st one is supportive service and administration , 2nd one is inpatient units, 3rd one is dialysis and renal unit, with a capacity of (153) beds.

Participants

The study had a convenience sample (n = 180) of nurses who were responsible for providing patient care and available at data collection time in the previously mentioned units and had a minimum of one year experience to express their opinion about the study variables included in the study except the outpatient department (OPD) and emergency department (ED).

3.3 Tools of data collection:

In this study, three tools were used to collect data: Job demand scale (JDS), mindful attention awareness scale (MAAS), and missed nursing care survey (MNCS).

The first tool: Job Demand Scale (JDS)

This scale is composed of two parts:

The first part: It includes demographic data of the study nurses as age, gender, marital status, educational level, years of experience, working department, and working status.

The second part: This part was developed by Karasek & Theorell (1998) to assess the level

of job demands among nurses. It consists of two subscales: psychological job demands (5 items) and physical job demands (5 items). On a 5-point Likert scale, ranging from (1) strongly disagree to (5) strongly agree, respondents scored the following items: The overall job demand score in JDS ranges between 10 and 50, where higher scores (50) reflect higher job demand levels and lower scores (10) reflect lower job demand levels (Abadi, Taban, Khanjani, Konjin, & Samael, 2021).

Scoring system: The scoring system of perceived job demands dimension was classified into three categories based on a predetermined cut-off point, as Low (<50%), Moderate (50%-75%), High (>75%).

The second tool: Mindful Attention Awareness Scale (MAAS):

Brown and Ryan (2003) developed this tool to measure individuals' awareness and attention to current events and experiences in their daily lives. It had 15 elements rated on a 1:6 scale (almost always = 1 to almost never = 6). The total mindfulness score of the MAAS ranges from 15 to 90, with higher scores (90) indicating high levels of mindfulness and lower scores (15) indicating low levels of mindfulness.

Scoring System: The scoring system for the perceived mindfulness dimension was classified into three categories based on a predetermined cut-off point, as follows: low (less than 50%), moderate (from 50% to 75%), and high (more than 75%).

The third tool: Missed Nursing Care Scale (MNCS)

This part was developed by Kalisch and Williams (2009) to assess the missing items of nursing care as well as the reasons for missed nursing care. This tool is divided into two parts:

The first part is used to evaluate the missing elements of nursing care. It includes 24 items: assessment (8 items), intervention - individual needs (6 items), intervention - basic care (7 items), and planning (3 items), in which the respondents were asked to rate how often they missed providing care during their most recent working shift on a 5-point Likert scale, with 1 representing never, 2 rarely, 3 occasionally, 4 often, and 5 always. The total score ranges from 24 to 120, where a higher score (120) on the scale means more nursing care that was missed and a lower score (24) means lower nursing care that was missed.

Scoring System: It was classified into three levels to assess the level of missed nursing care based on the cut-off points as follows: low (less

than 50%), moderate (from 50% to 75%), and high (more than 75%).

The second part: Investigated why nurse care was missing. It includes 17 elements divided into three subscales: human resources (9 items), material resources (3 items), and communications (5 items). In this section, nurses were asked to rate each item on a four-point scale (1 = not a reason, 2 = minor reason, 3 = moderate reason, and 4 = significant reason). The overall score varies from 17 to 68, with higher scores (68) reflecting that the item is a significant reason for missed nursing care and lower scores (17) which indicates that the item is not a reason for missed nursing care.

Validity and Reliability

A five-person panel of expert academic staff in relevant specialty fields from the Faculty of Nursing at Mansoura University revised the tools for its clarity, relevancy, comprehension, applicability, and simplicity of implementation, and then modifications were made according to their point of view. The researcher customized and translated three tools into Arabic. The study tools and some dimensions' reliability were tested and judged by utilizing the Cronbach alpha test, and the reliability of job demands, mindfulness, missed nursing care items, and missed nursing care reasons were (0.74, 0.81, 0.78, and 0.89) respectively.

3.4 Pilot Study

A sample of twenty nurses (10% of the study sample) was conducted as a pilot. Nurses were selected randomly and omitted from the entire study population to assess the tool's simplicity, feasibility, applicability, and needed time to fill it out. Modifications were made based on the findings of the pilot research.

3.5 Ethical consideration:

Mansoura University Faculty of Nursing's Research Ethical Committee provided ethical approval. The responsible administrator of Meniat El Nasr Central Hospital provided official approval to perform the study. Informed consent was obtained from nurses who agreed to participate in the study after being informed of the nature and purpose of the research. Every participant was informed that the study is completely voluntary and that they have the right to withdraw at any given time without explanation. All participants were assured of the confidentiality of the obtained data and protected the privacy of the study sample throughout the investigation. The results were utilized as part of essential research. As well as that was used for future publication and education.

Filed work

Once official permission was obtained through the proper channel of communication from the director of. Meniat El Nasr Central Hospital, the questionnaire sheet was distributed to nurses. Data were collected during the period from August 2023 to September 2023 through a self-administered questionnaire that was distributed to nurses. The aim of the study and how to fill out the questionnaire sheets were explained by the researcher. The questionnaire takes approximately 20–30 minutes to complete. Returning the questionnaires serves as an indication of nurses' willingness to engage in the study, and nurses have the ability to withdraw at any moment during the study without explanation.

Statistical Analysis

The entry of data and statistical analysis were carried out using the computer software Statistical Package for the Social Sciences (SPSS) version 23, and suitable statistical tests were applied. The acquired data was organized, tabulated, and statistically evaluated with SPSS software. Frequency and percentage have been used to present the categorical variables. The mean and standard deviation were utilized to represent the continuous variables. To compare two continuous variable means, an independent t-test was performed. When comparing the differences between more than two continuous variable means, the ANOVA test was used. A test of the Pearson correlation coefficient was used to determine whether two continuous variables were related. To investigate the independent variables of missed nursing care, multiple regression analysis was utilized. A p-value of 0.05 and 0.01 was considered statistically significant.

4. Results

Table 1. shows demographic data on the nurses according to the study. The data found that three-quarter of the studied nurse were aged between 20 and 30 ($\text{mean} \pm \text{SD} = 28.57 \pm 4.87$). The majority of the studied nurses (93.9%) were female. More than half (53.9%) have 1–5 years of experience, with a mean of 6.84 ± 5.39 . More than half (57.2%) of the study nurses had a technical degree. Less than one-quarter of the nurses work in intensive care units (22.2%). The majority of them were married (77.2%). The majority of them work a mixed shift per month (90.6%).

Figure 1. shows the levels of job demands as perceived by the studied nurses. The figure showed that more than half of the nurses investigated (57.2%) have high levels of job demand, while more than one third of the studied nurses (35%) have a moderate level. while only 7.8% of them have a low level of job demand.

Figure 2. shows the levels of mindfulness as perceived by the studied nurses. The figure revealed that more than half of the studied nurses (51.7%) have a high level of mindfulness. Whereas (43.9%) have a moderate level of mindfulness. And just 4.4% of the studied nurses have a low level of mindfulness.

Figure 3. shows the levels of missed nursing care among the studied nurses. The figure revealed that 67.2% of nurses have a low level of missed nursing care. Whereas less than one-third of the studied nurses (31.7%) have a moderate level of missed nursing care. whereas 1.1% of the studied nurses have a high level of missed nursing care.

Table (2). shows there was a highly statistically significant negative relationship between mindfulness, job demand, and missed nursing care ($p = 0.000$ – 0.002), respectively. Additionally, there are highly statistically significant positive relationships between job demand and missed nursing care ($p = 0.000$).

Table (1). Personal Characteristics of the Studied Nurses (n=180)

Characteristics	n	%
Age		
▪ 20-30	136	75.6
▪ 31-40	41	22.7
▪ 41-50	3	1.7
Mean±SD	28.57±4.87	
Gender		
▪ Male	11	6.1
▪ Female	169	93.9
Working Experience		
▪ 1-5	97	53.9
▪ 6-10	47	26.1
▪ 11-15	17	9.4
▪ 16-20	16	8.9
Mean±SD	6.84±5.39	
Educational level		
▪ Nursing School	2	1.1
▪ Technical degree	103	57.2
▪ Bachelor's degree	73	40.6
▪ Master's degree	2	1.1
Department		
▪ Adult Intensive care unit	40	22.2
▪ Pediatric & Neonatal Intensive Care Unit	13	7.2
▪ OR Department	23	12.8
▪ Internal Medicine Department	16	8.9
▪ Surgical Department	16	8.9
▪ Orthopedic Department	14	7.8
▪ Pediatric Department	23	12.8
▪ Gynecological Department	12	6.7
▪ Dialysis Department	23	12.8
Marital status		
▪ Single	37	20.6
▪ Married	139	77.2
▪ Divorce	2	1.1
▪ Widow	2	1.1
Work Status		
▪ Morning 6hrs	11	6.1
▪ Evening 6hrs	2	1.1
▪ Night 12hrs	4	2.2
▪ Mixed	163	90.6

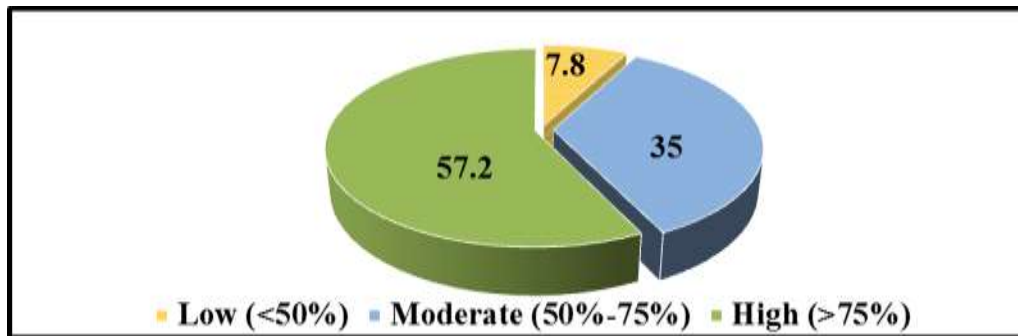


Figure (1): Levels of Job Demands as Perceived by the Studied Nurses (n=180)

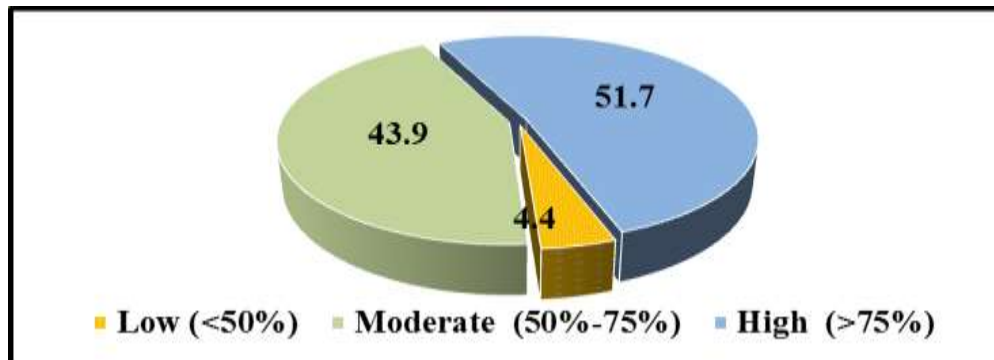


Figure (2): Levels of Mindfulness as Perceived by the Studied Nurses (n=180)

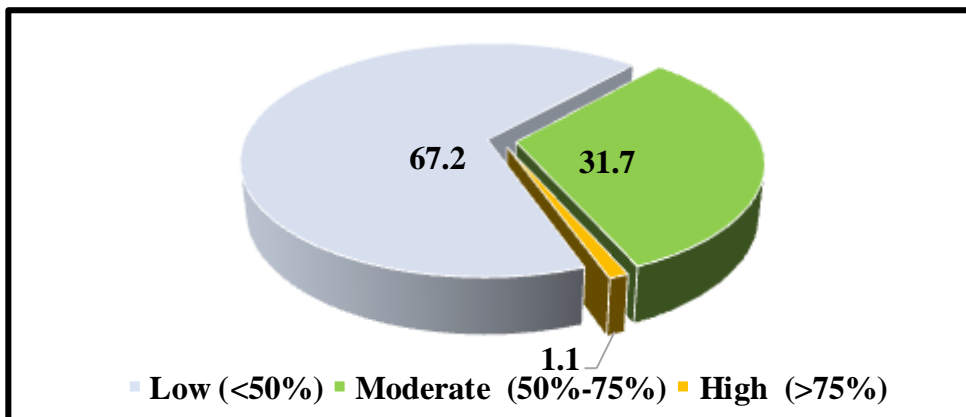


Figure (3): Levels of Missed Nursing Care Among the Studied Nurses (n=180)

Table (2). Relationship Between Job Demands, Mindfulness & Missed Nursing Care of the Studied Nurses (n=180).

	Job demands		Missed nursing care	
	r	p	r	p
Mindfulness	- 0.52	0.000**	-0.23	0.002**
Missed Nursing Care	0.36	0.000**		

** highly statistically significant ($p \leq 0.01$)

5. Discussion

High demands, hierarchies, multidisciplinary conflicts, high levels of stress,

and frequent turnover are common issues seen in the hospital setting and in the medical sector's work environments. These demanding workplaces and

working conditions can be destructive to medical care organizations ability to offer patients high-quality care, in addition to being damaging to nurses working in the healthcare sector (**Holm, Jönsson, & Muhonen, 2023**). Job demands might have an influence on a nurse's moment-to-moment, or state, mindfulness by minimizing their ability to remain mindful of the present moment and/or nonjudgmental. Low state awareness may result in mental exhaustion and depersonalization, both of which lead to missed nursing care (**Huang, Xie, Cheung, Zhou, & Ying, 2021**).

The study aims to examine nursing job demands and mindfulness and its relation with missed nursing care at Meniat El Nasr Central Hospital.

Regards level of job demand at Meniat El Nasr Central Hospital.

The results of the present study revealed that the majority of the studied nurses have high job demands at Meniat El Nasr Central Hospital. This may be due to Meniat Al-Nasr Central Hospital is one of the healthcare settings that provides integrated, advanced, and safe health care services to a wide range of people according to high quality standards. Therefore, it is witnessing a high rate of people looking for health care services and care, which, in turn, puts pressure and burden on the hospital and healthcare provider, especially nurses. An increase in demand for healthcare services leads to increased burden and pressure, which requires nurses to give high-quality care to various types of patients and their families.

The results of the current study were supported by **Elnady, Omar, and Abd-Elrhman (2023)**, who studied job demands, resources, and its relation to nurses' professional quality of life and job crafting during COVID-19 pandemic at Mallawi General Hospital in Minya Governorate, Egypt, and found the majority of nurses had a high level of job demands owing to the number of nurses in the hospital who face demanding work conditions, potentially characterized by heavy workloads, time pressures, and challenging responsibilities.

Additionally, **Navajas-Romero et al. (2020)**, who analyzed the job demands control support model in work-life balance among nurses in the European context, founded that those nurses had a high level of job demand that affected nurses because they were working with or being in close contact with supplies that can be transmissible of infection such as trash, blood and other body fluids, lifting or moving patients, having to

maintain tiring or painful positions and performing repetitive hand or arm movement, handling or being in skin contact with chemical products or substances, and carrying or moving heavy things.

On the other hand, this result was contradictory to the result of **El-Zohery, El-Wkeel, and El-Shaer (2022)**, who conducted a study about the relation between job demands and safety attitudes among staff nurses at Dikrnis General Hospital and found that those nurses had a moderate level of job demands. This could be related to travel to work and an increased workload during COVID-19, which causes nurses to feel overwhelmed since the hospital calls them on their day off duties, the workplace is unsafe, and there is a shortage of resources and supplies.

Furthermore, **Elsayed (2019)**, who conducted a study on nurses' job crafting and its relationship with their job demands, job resources, and career competencies at Mansoura University Emergency Hospital, observed that the studied nurse had a moderate level of job demands, which may be due to shortages of staff which raise work stress and require nurses to do a lot of work in a short period of time.

Regards the level of nursing mindfulness at Meniat El Nasr Central Hospital.

The current study's findings indicate that the nurses within the study exhibit a high level of mindfulness. They may have been better able to be nonjudgmentally conscious and tolerant of their situations because of their age, experience, and willingness to learn and grow into more compassionate and open-minded individuals toward both themselves and their patients. They also paid attention to their desired outcome. Keeping their attention on the here and now is also not a problem for them. Additionally, they complete work autonomously while maintaining awareness of what they are doing and paying careful attention to detail.

The findings of the current study were consistent with those of **Chen et al. (2023)**, who investigated the relationship between fatigue, and perceived symptoms among frontline nurses who conducted DNA sample collection during COVID-19 in China and reported that these nurses exhibited high levels of mindfulness.

Also, **Si, Xue, Song, Liu, and Zhang (2023)** revealed that the nurse under study possessed a high level of mindfulness. The study examined the relationship between ethical leadership and nurse wellbeing and the mediating role of workplace mindfulness among nurses in Central China. This

could be connected to their high level of nurse wellbeing, which has been shown to be highly beneficial in lowering clinical nurses' negative feelings, lowering their turnover rate, and raising the standard of nursing care.

Conversely, the present study disagrees with the findings of **Yu, Song, Hua, Shi, and Zhao (2022)** and **De Cieri, Shea, Cooper, and Oldenburg (2019)**, who found that the studied nurses exhibited a moderate level of mindfulness.

Regards level of nursing missed nursing care at Meniat El Nasr Central Hospital.

The current study's findings indicate that the nurses under investigation have a low level of missed nursing care. This is because they have a high level of patients, are compassionate toward themselves and their patients, and have a sufficient number of staff nurses. Also, it may be due to the nursing focus on the role and responsibility of nurses toward patients and the importance of conducting nursing care in time to attain quality care.

The findings were supported by the **Ibrahim and El-Wkeel (2021)** study, which investigated the relationships between job burnout, job satisfaction, and missed nursing care among staff nurses at Emergency Hospital Mansoura University and noticed that the nurses who were studied had a low level of missed nursing care. This could be attributed to good patient care assignment, supervision, or a high level of loyalty and dedication.

In alignment with the present findings, **Kim and Lee (2020)**, who conducted a study about the effects of compassion competence on missed nursing care, professional quality of life, and quality of life among Korean nurses, found that the studied nurses had a low level of missed nursing care. This could be related to compassionate skills, which was an important indicator of not just lower missed nursing care but also higher feelings of compassion and reduced burnout.

On the other hand, this finding contradicts (**Alanazi, Lapkin, Molloy, & Sim, 2023**), who investigated safety culture, quality of care, missed care, nurse staffing, and their impact on pressure injuries in Saudi Arabia and noticed that those nurses had a high level of missed nursing care due to a lack of resources and time. Furthermore, **Khrais, Alsadi, Oweidat, and Ahmad (2023)** studied the factors of missing nursing care in Jordanian hospitals during the COVID-19 pandemic and reported that the studied nurses had a

moderate level of missed nursing care because of communication issues.

Regarding relationship between job demands and mindfulness among studied nurses.

The present study found a highly statistically significant negative relationship between job demands and mindfulness among the nurses studied. This may be due to when nurses are aware of and comprehend cause-and-effect sequences within their own, they have a greater awareness of job demands and can deal with them in manners that do not result in missed nursing care. Nurses who are more mindful tend to be more attentive to the current task and can more effectively convert their intentions into meaningful experiences (**Sarwat & Shahzad, 2017**).

This result was supported by **Steven Grover et al. (2017)** found a significant negative relationship between job demand and mindfulness as a personal resource for reducing work stress among Australian nurses, using the job demands-resources model.

Conversely, the results of this study are at odds with that of **De Cieri et al. (2019)**, who conducted a study on the effects of work-related stressors and mindfulness on mental and physical health among Australian nurses and healthcare workers and found a highly statistically significant positive relationship between job demand and mindfulness.

Regarding relationship between mindfulness and missed nursing care among the studied nurses.

This study found a highly statistically significant negative relationship between mindfulness and missing nursing care among the nurses who were studied. This is related to the staff nurses' high level of mindfulness. In these instances, a method like mindfulness that promotes self-compassion and calmness may be useful. Furthermore, create healthier work settings that help nurses put problems in context and promote good reactions to missed nursing care. Greater attentiveness and reduced interruption in the clinical situation can enhance abilities and lower the likelihood of clinical errors.

This result is supported by **Nicholson (2021)**, who conducted the study about exploring relationships between mindfulness, job stress, job demands, and missed nursing care among nurses who worked in America and found there were negative statistically significant relations between mindfulness and missed nursing care.

Regarding the relationship between job demands and missed nursing care among studied nurses.

The findings of this study demonstrated a highly statistically significant positive relationship between job demands and missing nursing care among the nurses surveyed. This could be due to nursing care demands that nurses need to offer advanced and comprehensive care to ensure safe patient outcomes; when nurses do not accomplish needed nursing care duties, it frequently results in missing nursing care.

Nicholson (2021) provided support for this finding. Her study examined the relationships between mindfulness, job stress, job demands, and missed nursing care among American nurses and noticed a positive, statistically significant relationship between job demands and missed nursing care. Additionally, Srulovici and Yanovich (2022), who studied missed nursing care, found a statistically significant positive correlation between job demands and missed nursing care.

6. Conclusion

According to the current study's findings, the majority of nurses at Meniat El Nasr Central Hospital expressed high job demand, more than fifty percent reported high mindfulness, and the most reported low levels of missed nursing care. Furthermore, job demands and mindfulness have a highly statistically significant negative relationship, while job demands and missing nursing care have a highly statistically significant positive relationship. Additionally, there is a highly statistically negative correlation between missed nursing care and mindfulness.

7. Recommendations

The following recommendations are suggested based on the study findings:

For nurses:

- Using time management skills to manage tasks to prevent a higher workload and its associated negative effects.
- Using effective delegation and open communication from the head nurse and staff nurse to reduce workload.

For nurses' supervisors:

- Planning for scheduled meetings with nurses to talk and express their feelings about job demands problems so that these problems are addressed and solved.
- Concerning continuity of nursing care by putting staff nurses' safety before anything.

For nursing director:

- Organizing training programs for nurses regarding how to overcome stress caused by job demands.
- Implementing ongoing training programs on safety concerns, crisis management techniques, different cultures, and their area of practice.

For Future Research

- Future research should focus on developing strategies on how to reduce job demands effectively and efficiently to attain the best results in work engagement for nurses.
- Future research should focus on developing strategies to improve mindfulness among health care professionals.

8. Reference

- Abadi, M., Taban, E., Khanjani, N., Konjin, Z., Khajehnasiri, F. & Samael, S. (2021). Relationships between job satisfaction and job demand, job control, social support, and depression in Iranian nurses. *The Journal of Nursing Research*, 29 (2) 1-8.
- Alanazi, F. K., Lapkin, S., Molloy, L., & Sim, J. (2023). Safety culture, quality of care, missed care, nurse staffing and their impact on pressure injuries: A cross-sectional multi-source study. *International Journal of Nursing Studies Advances*, 5(100125), 100125. <https://doi.org/10.1016/j.ijnsa.2023.100125>
- Albsoul, R. A., Safadi, R. R., Alshyyab, M. A., FitzGerald, G., Hughes, J. A., & Ahmad, M. (2023). Missed nursing care in medical and surgical wards in Jordan: A cross-sectional study. *Policy, Politics & Nursing Practice*, 24(2), 140–150. doi:10.1177/15271544231155845
- Alfuqaha, O. A., Alhalaiqa, F. N., Alqurneh, M. K., & Ayed, A. (2023). Missed nursing care before and during the COVID - 19 pandemic: A comparative cross - sectional study. *International Nursing Review*, 70(1), 100–110. doi:10.1111/inr.12795
- Ando, Y., Ohara, R., Yamauchi, K., MacIntyre, R., & Kobayashi, T. (2023). The mediatory role of sense of coherence for mindfulness and stress response among nursing students in Japan: A cross-sectional survey. doi:10.21203/rs.3.rs-2418833/v1

- Babalola, M. T., Ren, S., Ogbonnaya, C., Riisla, K., Soetan, G. T., & Gok, K. (2022).** Thriving at work but insomniac at home: Understanding the relationship between supervisor bottom-line mentality and employee functioning. *Human Relations; Studies towards the Integration of the Social Sciences*, 75(1), 33–57. doi:10.1177/0018726720978687
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. (2023).** Job demands–resources theory: Ten years later. *Annual Review of Organizational Psychology and Organizational Behavior*, 10(1), 25–53. doi:10.1146/annurev-orgpsych-120920-05393
- Biganeh, J., Ashtarinezhad, A., Behzadipour, D., Khanjan, N., Ni, A. & Hosseinabadi, M. (2022).** Investigating the relationship between job stress, workload and oxidative stress in nurses. *International Journal of Occupational Safety and Ergonomics*, 28(2) 1176–1182.
- Brown KW & Ryan RM. (2003).** The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Pers Soc Psychol*, 84(4):822-48. doi: 10.1037/0022-3514.84.4.822. [PubMed: 12703651].
- Ch, N. A. N., Ansah, A. A., Katrahmani, A., Burmeister, J., Kun, A. L., Mills, C., ... Lee, J. D. (2023).** Virtual nature experiences and mindfulness practices while working from home during COVID-19: Effects on stress, focus, and creativity. *International Journal of Human-Computer Studies*, 171(102982), 102982. doi:10.1016/j.ijhcs.2022.102982
- Chen, J.-Q., Zhang, X.-Q., Shen, J.-H., Guo, Y.-F., Lei, G.-F., Tong, L., Wang, H., & Li, D.-H. (2023).** The relationship between mindfulness, fatigue, and perceived symptoms among frontline nurses who performed nucleic acid sample collection during the COVID-19 in China: A cross-sectional study. *Psychology Research and Behavior Management*, 16, 1165–1180. <https://doi.org/10.2147/PRBM.S401764>
- De Cieri, H., Shea, T., Cooper, B., & Oldenburg, B. (2019).** Effects of work - related stressors and mindfulness on mental and physical health among Australian nurses and healthcare workers. *Journal of Nursing Scholarship*, 51(5), 580–589. <https://doi.org/10.1111/jnu.12502>
- Decuypere, A., Audenaert, M. & Decramer, A. (2020).** Leader mindfulness: Wellbeing throughout the organization. The palgrave handbook of workplace wellbeing, 1–28. https://doi.org/10.1007/978-3-030-02470-3_73-1
- Dixit, A., & Upadhyay, Y. (2019).** Mindfulness, employee engagement and innovative work behaviour: A review of literature. *VSRD International Journal of Business and Management Research*. doi:10.1186/s12913-022-07608-z
- Elnady, F. M., Omar, A. A., & Abdelrhman, E. S. A. (2023).** Job demands, resources and its relation to nurses' professional quality of life and job crafting during COVID-19 pandemic. *Egyptian Journal of Nursing and Health Sciences*, 4(2), 67–93.
- El-Salamony, A. A. W., & El-ayari, O. S. M. (2023).** Effect of mantram repetition as mindfulness strategy on psychological wellbeing among nurses in psychiatric wards. *International Egyptian Journal of Nursing Sciences and Research*, 3(2), 204–220.
- Elsayed, R. S. (2019).** Nurses' job crafting and its' relationship with their job demands, job resources, and career competencies. *International Journal of Novel Research in Healthcare and Nursing*, 6(2), 1459–1474.
- El-zohery, L., El-wkeel, N., & El-shaer, A. (2022).** The relation between job demands and safety attitudes among staff nurses. *Mansoura Nursing Journal*, 9(1), 57–66. doi:10.21608/mnj.2022.259001
- Ghanbari, N., Nooripour, R., Heydari, F., Ilanloo, H., Ronzani, T. M., Chip Lavie, C., & Kakabraee, K. (2022).** Persian validation of the Mindful Attention Awareness Scale (MAAS) in Iranian substance abusers: Validity and reliability. *Journal of Kermanshah*

- University of Medical Sciences*, 26(1).
<https://doi.org/10.5812/jkums.121711>
- Grover, S. L., Teo, S. T. T., Pick, D., & Roche, M. (2017).** Mindfulness as a personal resource to reduce work stress in the job demands-resources model. Stress and health. *Journal of the International Society for the Investigation of Stress*, 33, 426–436. <https://doi.org/10.1002/smi.2726>
- Hassan, N. S., Jalil, A. A., Hitam, C. N. C., Sawal, M. H., Rahim, M. N. S., Hussain, I., Prasetyoko, D. (2023).** Enhanced photooxidative desulphurization of dibenzothiophene over fibrous silica tantalum: Influence of metal-disturbance electronic band structure. *International Journal of Hydrogen Energy*, 48(17), 6575–6585. doi:10.1016/j.ijhydene.2022.02.008
- Holm, K., Jönsson, S., & Muhonen, T. (2023).** How are witnessed workplace bullying and bystander roles related to perceived care quality, work engagement, and turnover intentions in the healthcare sector? A longitudinal study. *International Journal of Nursing Studies*, 138(104429), 104429. doi:10.1016/j.ijnurstu.2022.104429
- Huang, C., Xie, X., Cheung, S. P., Zhou, Y., & Ying, G. (2021).** Job demands, resources, and burnout in social workers in China: mediation effect of mindfulness. *International journal of environmental research and public health*, 18(19), 10526.
- Ibrahim, I. A., & El-Wkeel, N. S. (2021).** Exploring the relationships between job burnout, job satisfaction, and missed nursing care among staff nurses. *Tanta Scientific Nursing Journal*, 2(21), 97–120
- Imam, A., Obiesie, S., Gathara, D., Aluvaala, J., Maina, M., & English, M. (2023).** Missed nursing care in acute care hospital settings in low-income and middle-income countries: a systematic review. *Human Resources for Health*, 21(1). doi:10.1186/s12960-023-00807-7
- Jackson, D. (2023).** Missed nursing care, low value activities and cultures of busyness. *Journal of Advanced Nursing*, 79(12), 4428–4430. doi:10.1111/jan.15701
- Jalilian. H., Shouroki. F., Azmoon. H., Rostamabadi. A., & Choobineh1. A. (2019).** Relationship between Job Stress and Fatigue Based on Job Demand-control-support Model in Hospital Nurses. *International Journal of Preventive Medicine*. 10(1) 1-6.
- Kalisch BJ & Williams RA. (2009):** Development and psychometric testing of a tool to measure missed nursing care. *Journal of Nursing Administration* 39(5), 211-219.
- Karasek, R., & Theorell, T. (1990).** Healthy work: Stress, productivity, and the reconstruction of working life. New York: Basic Books, 346.
- Khrais, H., Alsadi, M., Oweidat, I., & Ahmad, M. (2023).** Determinants of missed nursing care in Jordanian hospitals during COVID-19 pandemic. *Nursing Open*, 10(3), 1565–1573. <https://doi.org/10.1002/nop2.1407>
- Kim, C., & Lee, Y. (2020).** Effects of compassion competence on missed nursing care, professional quality of life and quality of life among Korean nurses. *Journal of Nursing Management*, 28(8), 2118–2127. <https://doi.org/10.1111/jonm.13004>
- Kwong, B. Y., & Nasuredin, J. (2023).** The relationship between work-family conflict, job demands, and resilience towards job burnout among nurses in Selangor. *Management of Technology and Business*, 4, 313–329.
- Mauno, S., Herttalaampi, M., Minkkinen, J., Feldt, T., & Kubicek, B. (2023).** Is work intensification bad for employees? A review of outcomes for employees over the last two decades. *Work and Stress*, 37(1), 100–125. doi:10.1080/02678373.2022.2080778
- Montalto, J. (2023).** The effects of mindfulness on stress reduction and academic performance in students studying health sciences. https://dune.une.edu/na_capstones/51
- Nantsupawat, A., Poghosyan, L., Wichaikhum, O.-A., Kunaviktikul, W., Fang, Y., Kueakomoldej, S., Turale, S. (2022).** Nurse staffing, missed care, quality of care and adverse events: A cross - sectional study. *Journal of Nursing Management*, 30(2), 447–454. doi:10.1111/jonm.13501
- Navajas-Romero, V., Ariza-Montes, A., & Hernández-Perlines, F. (2020).** Analyzing the job demands-control-support model in work-life balance: A study among nurses in the European Context. *International Journal of Environmental Research and Public*

- Health*, 17(8), 2847.
<https://doi.org/10.3390/ijerph17082847>
- Nicholson, K. L. (2021).** Exploring relationships between mindfulness, job stress, job demands and missed nursing care. The Catholic University of America nursing care. Doctorate theses. Faculty of Conway School of nursing of the Catholic University of America. *Nursing Journal*, 10(2), 201–217.
<https://doi.org/10.12816/0029158>
- Pan, W.-L., Gau, M.-L., Hsu, T.-C., Shen, S.-C., & Lee, T.-Y. (2022).** Applying mindfulness techniques to the management of depressive tendencies in women in Taiwan in the perinatal period: A qualitative study. *Asian Nursing Research*, 16(3), 149–154. doi:10.1016/j.anr.2022.05.004
- Peterson, H., Uibu, E., & Kangasniemi, M. (2022).** Care left undone and work organisation: A cross - sectional questionnaire - based study in surgical wards of Estonian hospitals. *Scandinavian Journal of Caring Sciences*, 36(1), 285–294. doi:10.1111/scs.12987
- Pourmovahed, Z., Liravi, A., & Nazmieh, H. (2023).** The effect of teamwork training on missed nursing care among NICU nurses during the COVID-19 pandemic. *World Journal of Peri & Neonatology*.
<https://doi.org/10.18502/wjpn.v5i2.11991>
- Sarwat, N., & Shahzad, K. (2017).** An investigation into the role of mindfulness on the relationship between hindering job demands and stress-related presenteeism. *Pakistan Journal of Social Sciences*, 37(2), 608–619.
- Si, X., Xue, H., Song, X., Liu, X., & Zhang, F. (2023).** The relationship between ethical leadership and nurse well - being: The mediating role of workplace mindfulness. *Journal of Advanced Nursing*, 79(10), 4008–4021.
<https://doi.org/10.1111/jan.15719>
- Srulovici, E., & Yanovich, O. (2022).** Missed nursing care: Testing the moderation - mediation energetic and motivational pathways via a nested design. *Journal of Advanced Nursing*, 78(8), 2339–2348. <https://doi.org/10.1111/jan.15144>
- Syukri, M., & Bettywati Eliezer, M. (2023).** Factors involved in missed nursing care: A Systematic Review. *Journal of Client-Centered Nursing Care*, 9(2), 89–102.
- Yu, J., Song, Y., Hua, D., Shi, Y., & Zhao, J. (2022).** Factors influencing mindfulness among clinical nurses in China: An observational cross - sectional study. *Journal of Nursing Management*, 30(3), 758–766.
<https://doi.org/10.1111/jonm.13560>