

Departmental Workload and Job Satisfaction of Indonesian Nurses in Saudi Arabia: A Cross-Sectional Study

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Abstract: Indonesian foreign nurses working in Saudi Arabia have not been surveyed regarding workload and job satisfaction in the healthcare setting. Understanding the workload at hospital that influences job satisfaction provides an overview of the nurse's existence at work. This study aimed to determine the prevalence of workload, and job satisfaction of Indonesian nurses in Saudi Arabia. A cross sectional study using self-administered questionnaire by Nasa Task Load Index (NASA-TLX) was used to analyze the workload, and the Minnesota Satisfaction Questionnaire (MSQ) for the satisfaction. Data were analyzed using descriptive methods and univariate statistics by SPSS version 26. A total of 132 nurses participated in this research. Five departments, including intensive care unit (ICU), emergency department (ER), operating room (OR), hemodialysis (HD), and ward department (WD) reported high workload levels (61-80 points). Job satisfaction in five departments was neutral category, while the ward department showed dissatisfied category. The analysis of nurses characteristic revealed that the majority were age 31-40 years old (46.2%), length of work was 1-5 years (54.5%), and worked in the outpatient department (42.4%). The study suggests that healthcare management and policymaker should implement program to improve job satisfaction and reduce workload, especially foreign nurses working in critical areas, including the five departments mentioned.

Keywords: Indonesia, nurses, workload, job satisfaction, Saudi Arabia

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INTRODUCTION

Most of Indonesian nurses selected Saudi Arabia as their destination to work, even though the job satisfaction and workload have not yet been described. The increasing opportunity to work abroad makes the nursing profession more attractive ([Mujiati et al., 2020](#)). Countries such as Germany, Netherlands, and Japan also gulf countries such as Saudi Arabia, United Arab Emirates, Qatar, and Kuwait annually recruited nurses from Indonesia ([Yuko & Osuke, 2020](#)). The low interest of society in becoming nurses and the life expectancy issue in those countries are determinant that increase the demand of foreign nurses including from Indonesia ([Nugraha et al., 2021](#)).

The surplus of nursing based on data has made Indonesia become a target for developed countries to recruit nurses by memorandum of understanding or partnership agreement ([Tukayo et al., 2022](#)). The demand for nurses based on data from the Indonesian Migrant Workers Protection Agency (IMWPA) is divided into 3 countries such as Europe, Middle East, and Asia. There are 633.025 thousand nurses in 2022 that have already been licensed, increasing by almost 40% every two years ([Kemenkes RI, 2022](#)). It is the largest healthcare population that has opportunities and challenges to work abroad ([Pusdatin, 2021](#)).

The readiness of nurses to go abroad is an important thing to consider the work environment, language, and culture that will be very different from the nurse's background ([Efendi et al., 2020](#)). However, the mental readiness also a fundamental component that should be prepared before and after placement ([Saquib et al., 2019](#)). Mental readiness in many references is correlates with job satisfaction, and work environment where nurses work such as in intensive care unit (ICU), emergency department (ED), and hemodialysis department (HD) that have more impact on satisfaction ([Tolok, 2019](#)).

In Qatar, nurses in hemodialysis department spend up to 60% of their time to providing direct and indirect care ([Barrios et al., 2017](#)). Research in Saudi Arabia shows that nurses working in intensive care unit (ICU) have a high level of workload that affected their well-being ([Chetty et al., 2021](#)). In addition, Japan also faced the similar issues about nurse's workload in intensive care unit (ICU). Morning shift, male patients, medical treatment, and referral patients improved significant impact on nurse's workload ([Moghadam Kolsoom et al., 2020](#)). Study in tertiary hospital in Saudi Arabia showed that there is a correlation between physical and psychological health factor in job satisfaction that affect nurses to leave their job ([Albougami et al., 2020](#)). While in Jordan, many nurses were moderately satisfied with their quality of work and job satisfaction ([Salahat & Al-Hamdan, 2022](#)). In contrast, a qualitative study about nurse's burnout, job satisfaction among Indonesian nurses in Saudi Arabia mentioned that they were happy, and not experience burnout while working in healthcare setting ([Uswatin et al., 2024](#)).

In Japan, many foreign nurses felt positive impact on working especially the generous support from the workplace, beneficial experience, and determinant to live (Shoki et al., 2024). A specific study about foreign nurses in Saudi Arabia found that job satisfaction was still not optimal for non-Saudi nurses. Internal and internal factor, such as professional independency, promotions at work, and salaries made dissatisfied ([Al-sabhan et al., 2022](#)). Saudi Arabia is one of the countries in the Middle East for nurses to work abroad. The Indonesian National Nurses Association (INNA) in Saudi Arabia states that there are 240 Indonesian nurses registered at Saudi Commission for Health Specialists (SCFHS). Most of them working in healthcare services such as public and private hospitals, clinic, comprehensive rehabilitation center, and home care ([Fahrudin et al., 2023](#)).

Opportunities for careers in government and private health services are still excellent for Indonesian nurses to work. In addition, job satisfaction either external or internal factors influence nurses to stay or leave their job while good salary, work environment, professional colleagues and service management is the important to extended or not the contract ([Al-sabhan et al., 2022](#)). However, a research states that job satisfaction for those healthcare workers in Saudi Arabia still within moderate limits with a notes that working weekends and participation in nursing research need attention ([Bdair & Alshloul, 2021](#)). Those are some of the job satisfaction and workload that many researchers explored either in quantitative or qualitative methods. In facts, there is no research related to foreign nurse's especially Indonesian nurse in Saudi Arabia that specific concerned of workload and job satisfaction in each departments by using self-administered questionnaire approach. This study aims to fill the gap in the literature and previous study by examining the prevalence of workload, and job satisfaction of Indonesian nurses in Saudi Arabia. It is important to provide an overview for nurses who plan to work, and prepare themselves before and after placements in order to avoid the uncertainty of nurse's career in abroad. The findings will provide insights for healthcare administrators, and policymaker to create supportive work environments that foster job satisfaction and optimal performance.

METHODS

This research was quantitative descriptive study with a cross-sectional approach. The independent variable was workload and job satisfaction while dependent variable was Indonesian nurses in Saudi Arabia. The research conducted between July, 23 until 5 September 2023 while the data collecting, analyzing, and reporting conducted on September 6 until September 12, 2023. The respondents were 132 Indonesian nurses who working in six departments including intensive care unit, outpatient department, emergency, ward, hemodialysis, and operation room in public and private healthcare

settings. The inclusion criteria were able to participate in this study, having a license from Saudi Commission for Health Specialties (SCFHS), and working in health services in Saudi Arabia while the exclusion criteria were those with no license, unable to fill out the questioners, and those who terminated from Saudi Arabia. The sampling technique was total sampling and implemented by self-questionnaire through Google form. It was shared through the Indonesian nurse’s whatsapp group created by Indonesian National Nurses Association (INNA) in Saudi Arabia.

The Nasa Task Load Index (NASA-TLX) was used as a subjective measurement instrument that was developed by NASA’s Ames Research in 1980 and adopted with different field to assess the workload ([Barrios et al., 2017](#)). The NASA-TLX questionnaire consisted of six component such as mental, physical, temporal, performance, effort, and frustration level. The scoring scale was used from 0 to100 points with 5 category such as low (0-20 points), moderate (21-40 points), average (41-60 points), high (61-80 points), and very high (81-100 points).

The Minnesota Satisfaction Questionnaire (MSQ) was used for job satisfaction and addopted from previous reserach that have simillar concern on job satisfaction. The validity and reliability have been carried out by [Helena Martins and Teresa Proença \(2012\)](#) without any changing of 20 items of the questionnaire ([Martins & Proença, 2014](#)). The MSQ questionnaire used the short questions that consisted in 20 aspects of the job satisfaction measurements and rated on a 5 point Likert-scale such as very dissatisfied (1), dissatisfied (2), neutral (3), satisfied (4), and very satisfied (5). Each category classified into different interpretations score such as very dissatisfied (1.00-1.90), dissatisfied (2.00-2.90), neutral (3.00-3.90), satisfied (4.00-4.90), and very satisfied (5.00). Those data were collected and analyzed using SPSS version 26. The univariate analysis conducted to describe nurse’s characteristic such as age, length of work and work department. Other characteristic was assessed the workload and job satisfaction in each department among Indonesian nurses in Saudi Arabia. This study was approved by The Medical and Health Research Ethics Committee of Faculty of Medicine, Public Health and Nursing Universitas Gadjah Mada, number KE-FK-0370-EC-2023.

RESULTS

Table 1. Demographic characteristics of nurses (n=132)

Demographic Data	Frequency	Percentage (%)
Age (Years)		
20-30	44	33.3
31-40	61	46.2
> 40	27	20.5
Length of work (Years)		
1-5	72	54.5
6-10	24	18.2
>10	36	27.3
Department (Workplace)		
ICU	16	12.1
ER	37	28.0
OR	4	3.0
HD	9	6.8
WARD	10	7.5
OPD	56	42.4

The demographic data in [table 1](#) shows the distribution of nurses by age was dominated between 31-40 years (46.2%). The length of work dominated by 1-5 years (54.5%) and the department where

the nurse's work dominated in outpatient department (OPD) were (42.4%). In [table 2](#) shows the classification of nurse's workload in each department. Intensive care unit (ICU), emergency, hemodialysis, ward, and operating room were significant department of high workload with those score around 61-80 points.

Table 2 Classification of nurses workload (n=132)

No	Department	Frequency	Score	Classification
1	Emergency (ER)	37	71.11	High
2	Intensive Care Unit (ICU)	16	76.59	High
3	Hemodialysis (HD)	9	65.71	High
4	Ward	10	70.32	High
5	Surgery Room (OR)	4	70.86	High
6	OPD	56	60.86	Average

In [table 3](#) shows the distribution of job satisfaction that content departments, category, frequency, and percentage.

Table 3 Job satisfaction Categories (n=132)

No	Department	Category	Frequency	Percentage (%)
1	Emergency (ER)	Very dissatisfied	0	0
		Dissatisfied	16	43.2
		Neutral	21	56.8
		Satisfied	0	0
		Very satisfied	0	0
2	Intensive Care Unit (ICU)	Very dissatisfied	0	0
		Dissatisfied	7	43.8
		Neutral	9	56.2
		Satisfied	0	0
		Very satisfied	0	0
3	Hemodialysis (HD)	Very dissatisfied	0	0
		Dissatisfied	3	33.3
		Neutral	6	66.7
		Satisfied	0	0
		Very satisfied	0	0
4	Ward	Very dissatisfied	0	0
		Dissatisfied	6	60
		Neutral	4	40
		Satisfied	0	0
		Very satisfied	0	0
5	Surgery Room (OR)	Very dissatisfied	0	0
		Dissatisfied	0	0
		Neutral	4	40
		Satisfied	0	0
		Very satisfied	0	0
6	Outpatients (OPD)	Very dissatisfied	0	0
		Dissatisfied	24	42.9
		Neutral	32	57.1
		Satisfied	0	0
		Very satisfied	0	0

The result of job satisfaction of Indonesian nurses based on the data and classified into each departments were five departments in neutral category, while one department on dissatisfied category. Those departments that have neutral level of satisfaction were emergency department (56.8%), ICU department (56.2%), OR departments (40%), HD department (66.7%), and OPD (57.1%). In addition, ward department was one of the department on dissatisfied result (60%).

DISCUSSION

Indonesian nurses are still among the top five healthcare workers who live and work in Saudi Arabia. Most foreign nurses, such as India, the Philippines, and Malaysia also participate similarly to other nurses in many hospitals ([Fahruddin et al., 2023](#)). This study explained that foreign healthcare workers especially Indonesian nurses, faced workload and job satisfaction issues in many departments in healthcare settings. The results showed that five departments was a significant in high category, and job satisfaction in neutral category except ward department.

Studies about job satisfaction in healthcare settings in Saudi Arabia have similarly found that job satisfaction among foreign nurses is still inadequate. Internal and external factors, including autonomy, and promotion contribute to affecting satisfaction ([Al-sabhan et al., 2022](#)). The prevalence of job satisfaction among local and foreign nurses are differs. Local nurses who earn higher salaries have lower levels of satisfaction, while foreign nurses have average levels of satisfaction ([Al Bazroun et al., 2023](#)).

The results of this research found job satisfaction was on neutral category in five departments, it indicates that job satisfaction level of Indonesian nurses in Saudi Arabia was normal. However, the result of this study opposite with recent study about burnout, job satisfaction and intention to leave among Indonesian nurses in Saudi Arabia that mentioned about different things related to the psychological which is some nurses felt happy and not experience burnout ([Uswatin et al., 2024](#)).

Job satisfaction also related to the work environment, there is a positive association between work environment and job satisfaction of nurses in public and teaching hospital ([Al-Hamdan et al., 2017](#)). Other research showed that the sources of job dissatisfaction were related to healthcare management including responsibilities at work, working condition, and compensation issues ([Al-Haroon & Al-Oahtani, 2020](#)). However, either work environment or healthcare management are related to improve significant job satisfaction among healthcare workers.

The workload of healthcare workers is one of the indicators used to assess hospital performance, including outcomes, staff turnover, and quality of care ([Bdair & Alshloul, 2021](#)). These factors are also associated with hospital concerns about improving patient safety, leadership, and training. Therefore, better strategies for workload and job satisfaction management will indicate good leadership management ([Uswatin et al., 2024](#)).

Based on this research, the workload among Indonesian nurses in five departments, such as hemodialysis, ER, operating room, OPD, and ICU department, was shown at a high level, although the workload in ward department was still at an average level. Another research in Japan found similar results, indicating that the workload related to the occupancy rate in the intensive care unit (ICU) department was higher during the first 24 hours of service ([Sardo et al., 2023](#)).

A retrospective research about workload in intensive care unit found that there is correlation between workload in ICU department with clinical characteristics of patient in critical condition. Patient admission in ICU increased nurse workload, while patient discharged in average level ([Simões et al., 2021](#)). Other study finding indicated that intensive care unit has significant workload affected delivery of nursing care, patient safety, but not impact on nurses well-being ([Banda et al., 2022](#)).

Additionally, another research showed that critical area departments such as emergency, intensive care unit, and paediatric still produce a workload that impacts job satisfaction among nurses. However, both workload and job satisfaction are correlated particularly when nurses face the challenge of working in different cultures and countries ([Batarfi et al., 2023](#)). This study described a similar result with another study that critical area of hospital workplace given high nurses workload, job satisfaction

results in many research was similar but another result showed in different category. In fact, the results of job satisfaction category for Indonesian nurses in five departments in Saudi Arabia was on neutral category except ward department on dissatisfied category. However, the result was bring another point of view in term of job satisfaction among foreign nurses in Saudi Arabia.

In conclusion, workload and job satisfaction of Indonesian nurses in Saudi Arabia was different in many departments. This research has implications for the management of healthcare settings in planning, organizing, implementing, and evaluating leadership strategies, particularly for foreign healthcare workers. The findings in this study can be used as a reference or basis for future research with different approaches, either in research methods or subjects. This research has some limitations related to the sampling technique used. The total sampling in this research can be influence the findings. Additionally, the research methodology by cross sectional study cannot generalize the results, and the self-administrated questionnaire could be biased because some nurses were not on their own time.

CONCLUSION

Workload and job satisfaction are two criteria that affect the well-being of nurses wherever they work. This research found that five departments, particularly critical areas such as the intensive care unit (ICU) department, emergency, hemodialysis, operating room, and outpatient department, experience high workloads among Indonesian nurses in Saudi Arabia. Job satisfaction in each departments showed that ward department classified into dissatisfied category. It is crucial for healthcare management and policymakers to address these issues by implementing strategies to balance workloads and enhance job satisfaction. Intervention could include such as workload management, job satisfaction programs, and supportive work environments to improve those issues. Future research should continue to explore these relationships and develop tailored intervention to support foreign nurses in diverse healthcare settings either in Saudi Arabia or other gulf countries.

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