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# **Original Research Article**

# THE RELATIONSHIP BETWEEN THE WORK ENVIRONMENT AND JOB SATISFACTION OF NURSE ANESTHETISTS IN HOSPITALS, CENTRAL JAVABALI

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### Abstract

# **Background:**

*Nurse anesthetists* as medical personnel have an important role in the continuity of work in the operating room. Although they have considerable responsibility and role, no research has focused on the job satisfaction of nurse anesthetists. In addition, no literature review has shown low job satisfaction among nurse anesthetists.

#### **Objectives:**

This research aimed to determine the relationship between the work environment and job satisfaction of nurse anesthetists in hospitals.

#### Methods:

This research used a quantitative method with a cross-sectional design through an online survey. The population of this research covered all nurse anesthetists working in hospitals in Central Java and Bali, of which 108 respondents were selected as the sample using a simple random sampling. The data were collected using questionnaires and analyzed using inferential statistics, namely chi-square, to determine the relationship between the work environment and job satisfaction of nurse anesthetists.

#### **Results:**

This research showed that a total of 60 respondents (55.6%) had a high category of job satisfaction. In addition, the work environment factor (p=<0.001) significantly affected the job satisfaction of nurse anesthetists.

#### **Conclusion:**

Hospital management must strengthen the commitment related to the sense of belonging to employees by considering the work environment factor that can affect the job satisfaction of nurse anesthetists in hospitals.

Keywords: Job satisfaction, Work environment, Nurse anesthetist

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# INTRODUCTION

Anesthesiology is one of the most tensing medical disciplines with high responsibilities and stresses because it manages life-threatening scenarios (Sanfilippo et al., 2017). The existing phenomenon indicates that nurse anesthetists often do not pay attention to standard operating procedures for patients who will undergo anesthesia. This explanation is consistent with a finding that low quality of treatment refers to more medication errors and less vigilance in monitoring patients in anesthesiology (Oliveira Jr et al., 2013). One of the professions working in the surgical unit and becoming part of anesthesiology is a nurse anesthetist. According to Bacha et al. (2015), the quality of treatment is directly influenced by job satisfaction. Therefore, job satisfaction is important to investigate (Fentie et al., 2018). In this regard, hospital management must take into account the job satisfaction of employees, especially nurse anesthetists.

The research data showed a low level of job satisfaction among nurse anesthetists. A study suggested that the overall proportion of nurses' job satisfaction reached 43.6%, indicating low job satisfaction (Ayalew and Workineh, 2019). Likewise, Zhou et al. (2018) found that only 48.2% of nurses were satisfied with their jobs. Other supporting data show that anesthetists have a low level of job satisfaction. A similar study found that less than half (42.5%) of anesthetists were satisfied with their jobs, indicating low job satisfaction (Kibwana and Roosmalen 2018). Similarly, Fentie et al. (2018) confirmed that the overall job satisfaction of nurse anesthetists reached 46.9% (included in a low category of job satisfaction).

Job satisfaction is important for health professionals because it directly affects their professional practice (Silva *et al.*, 2017). Another study found that 46.1% of surgical unit nurses intended to quit their jobs due to job dissatisfaction (Sojane *et al.*, 2016). According to Sansoni (2016), job

dissatisfaction leads to nurses' resignations from hospitals. Given the facts described above, it is important to learn the relationship between the work environment and job satisfaction of nurse anesthetists in hospitals. Hence, this research is highly necessary due to the absence of previous studies discussing and focusing on the job satisfaction of nurse anesthetists in hospitals in Central Java and Bali. Based on these problems, the researchers were interested in examining the relationship between the work environment and job satisfaction of nurse anesthetists in hospitals.

**Objective(s)**: to determine the relationship between the work environment and job satisfaction of nurse anesthetists in hospitals.

### **METHODS**

Study Design

This research used a quantitative method with a cross-sectional design and a simple random sampling.

Setting

This research was conducted in all public and private hospitals in Central Java and Bali. The data were collected from February to April 2021.

# Research Subject

The population of this research covered 664 nurse anesthetists working in hospitals in Central Java and Bali. Using a simple random sampling technique, 108 respondents were selected as the sample. The inclusion criteria in this research include: 1) Nurse anesthetists who worked in hospitals in Central Java and Bali, both public and private hospitals, and 2) Nurse anesthetists who had worked for more than four years. Meanwhile, the exclusion criterion was: 1) Nurse anesthetists who did not provide feedback.

### Instruments

The questionnaires distributed in this research were developed based on a literature review consisting of three parts. The first part

requested the respondents to identify their general characteristics consisting of age, gender, education, job tenure, and workplace. The second part was related to the respondents' job satisfaction, while the third part was related to the respondents' work environment, each of which contained 10 statements with the entire questionnaire Cronbach's alpha of > 0.7, indicating strong reliability.

# Data Analysis

The data obtained were then analyzed using descriptive statistics in frequency and percentage to describe the respondents' general characteristics, including age, gender, education, job tenure, workplace and job satisfaction. Furthermore, a chi-square was also used to test the relationship between work environment and job satisfaction using SPSS version 20.

# Ethical Consideration

This research has received ethical approval from the ethics committee of Institute of Technology and Health Bali Number: 04.0259/KEPITEKES -BALI/III/2021.

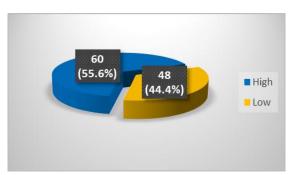
# RESULTS

Table 1 presents the following information. Most respondents were over 36 years old, with a total of 104 respondents (96.3%). In addition, most respondents were male, with a total of 99 respondents (91.7%). As for the educational background, most of the respondents graduated with a bachelor's degree, with a total of 56 respondents (51.9%). For job tenure, a total of 101 respondents (93.5%) had worked in the field of anesthesia services for more than 11 years. For the workplace, 98 respondents (90.7%) had worked in public hospitals.

**Table 1**. The Respondents' General Characteristics (n = 108)

	()	
General	n (%)	
Characteristics		
Age (year)		
27 - 35	4 (3.7)	
≥ 36	104 (96.3)	
Gender		
Male	99 (91.7)	
Female	9 (8.3)	
Education		
Associate's Degree	52 (48.1)	
Bachelor's Degree	56 (51.9)	
Job Tenure (year)		
5 - 10	7 (6.5)	
≥ 11	101 (93.5)	
Workplace		
<b>Public Hospitals</b>	98 (90.7)	
Private Hospitals	10 (9.3)	

Figure 1 shows that the number of respondents with high job satisfaction reached 60 respondents (55.6%).



**Figure 1.** Job Satisfaction of Nurse Anesthetists in Hospitals (n = 108)

The results of the bivariate analysis using a chi-square, as presented in Table 2, showed that the work environment had a significant effect on job satisfaction with a p-value of < 0.001.

**Table 2.** Bivariate Analysis of the Relationship between Work Environment and Job Satisfaction of Nurse Anesthetists in Hospitals (n = 108)

Variable	Job Satisfaction		
	High f (%)	Low f (%)	p-value
Environment			
Good	31	7	< 0.001
	(81.6%)	(18.4%)	
Not Good	29	41	
	(41.4%)	(58.6%)	

#### DISCUSSION

The findings in this research are almost consistent with Mileto & Barbara (2014) that the respondents' level of job satisfaction was high (53.6%). Similarly, Blaauw et al. (2013) show that the majority of respondents (52.1%) are satisfied with their jobs in hospitals in South Africa. Job satisfaction refers to one's good attitude and feeling towards his job. That is, a positive and pleasant attitude towards a job indicates job satisfaction (Desalegn et al., 2015). Someone achieving high satisfaction tends to be more productive and creative in the occupied field of work. In contrast, Khunou, S.H., and Maselesele (2016) suggested that the majority of professional nurses (79.3%) were dissatisfied with their jobs.

In this research, the work environment significantly affected job satisfaction. The work environment referred to in this case is the physical work environment. Therefore, the driving factor for job satisfaction is a healthy work environment (Friese and Himes-ferris, 2013). This research also found that the work environment was positively correlated with job satisfaction. In other words, the better the work environment, the higher the respondents' job satisfaction. It can happen because the work environment is more likely to influence the respondents' mood in doing their jobs. Therefore, the work environment greatly impacts jobs and one's intention to carry out

his duty. This is in line with the theory stating that the work environment directly affects employees' emotions (Silitonga, 2020).

Furthermore, the work environment (in this case referring to the physical work environment, such as adequate medical facilities and equipment in the workplace) can cause the respondents to feel comfortable. A conducive work environment with adequate facilities and complete medical equipment can also provide a sense of pleasure and allow the respondents to feel satisfied with their jobs to work optimally. This is strengthened by some research stating that the work environment positively affects job satisfaction (Al-hamdan *et al.*, 2016; Bhandari *et al.*, 2015; Kibwana and Roosmalen, 2018; Oliveira *et al.*, 2017).

### **CONCLUSION**

The work environment has a significant effect on job satisfaction. In other words, a better work environment can increase the job satisfaction of nurse anesthetists.

# **SUGGESTIONS**

Hospitals, especially the management, are expected to continuously pay attention to employee job satisfaction by improving the work environment, particularly medical facilities and equipment.

# **ACKNOWLEDGMENT**

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# DECLARATION OF CONFLICTING INTEREST

We strictly declare that we have consented and have no conflict of interest.

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This research was carried out using funding from the authors themselves.

# **AUTHOR CONTRIBUTION**

**Ni Nyoman Ari Kundari Dewi:** Initiated the main idea, made a proposal, arranged permission and research ethics, collected and analyzed data, and prepared research manuscripts

**I Ketut Swarjana:** Analyzed data and prepared research manuscripts

**IGNM Kusuma Negara:** Analyzed data and prepared research manuscripts

Yustina Ni Putu Yusniawati: Analyzed data and prepared research manuscripts

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