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Research Article

The Relationship Between Knowledge and Compliance with Occupational Safety and Health Implementation Among Nursing Profession Student

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Abstract: Occupational Safety and Health in Hospitals (K3RS) is an important effort in creating a safe working environment for health workers, including nursing students undergoing clinical practice. The high risk of workplace accidents highlights the importance of compliance with K3 implementation, which is influenced by, among other things, the level of knowledge. Objective: This study aims to analyze the relationship between knowledge and compliance with Occupational Safety and Health (OS H) implementation among nursing students at Muhammadiyah University of East Kalimantan. Method: This study used a quantitative method with a descriptive analytical design through a cross-sectional approach. The research sample consisted of 145 second-semester nursing students at Muhammadiyah University of East Kalimantan, selected using total sampling technique. The research instrument was a questionnaire on OSH knowledge and compliance that had been tested for validity and reliability. Data analysis was performed using Spearman's rank correlation test. Results: The analysis results showed a significant value of $p = 0.000$ ($p < 0.05$) with correlation coefficient of $r = 0.558$, indicating a significant and strong relationship between knowledge and compliance with OSH among nursing students. Conclusion: There is a significant relationship between knowledge and compliance with occupational safety and health (OSH) among nursing students. Increasing students' knowledge is expected to improve compliance with OSH during clinical practice.

Keywords: Compliance; Knowledge; Nursing Students; Occupational Health; Occupational Safety.

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1. Introduction

The goal of the Hospital Occupational Safety and Health (K3RS) initiative is to ensure that all individuals associated with healthcare facilities, including employees, patients, and visitors, are protected from various risks and hazards in carrying out their daily work. K3RS also emphasizes the process of identifying, assessing, and controlling occupational risks, as well as preventing workplace-related accidents and health problems (Marzuki et al., 2021).

According to WHO data, in the South and Southeast Asia region, which covers approximately 1.5 billion people from 11 member countries, 22.5 million cases of occupational diseases and accidents were recorded, with approximately 699,000 deaths caused by various workplace-related hazards. It is estimated that there are 5 million occupational incidents every year, which means approximately 36 cases occur every minute, 90,000 of whom die every year, and approximately 300 people die every day due to occupational diseases or accidents (Syahril et al., 2023). According to data from the Indonesian BPJS Employment, 123,041 cases of occupational accidents were recorded in 2017 and increased to 173,105 cases in 2018. According to Sofiantika & Susilo (2020), the Indonesian BPJS Employment handles approximately 130 thousand cases of occupational accidents every year, ranging from minor incidents to fatal ones. One form of work accident experienced by nurses

is injury from injection needles or other sharp objects, with a prevalence of 39.4% (Zainuddin et al., 2024)

Knowledge is key to implementing OHS. Increasing PPE use and compliance with operational requirements can be achieved through increased awareness of occupational safety procedures, which in turn influences individual behavior (Noviadi, 2022). However, several studies have shown that despite a relatively good level of knowledge among nursing students, non-compliance with OHS practices is still found, such as not using complete PPE or not following infection prevention standards (Arifuddin et al., 2023).

Reduced compliance with occupational safety and health (K3) can impact the safety of students, patients, and the work environment. Therefore, awareness and compliance with the implementation of K3 must be increased by improving knowledge and attitudes starting from the professional education period. Research is needed to investigate the relationship between knowledge and compliance with the implementation of K3 among nursing students to determine the extent to which understanding of occupational safety behavior influences it. Based on this description, researchers are interested in conducting a study entitled "The Relationship Between Knowledge and Compliance with the Implementation of Occupational Safety and Health (K3) Among Nursing Students."

2. Literature Review

Occupational Health and Safety

Occupational safety and health (K3) is an effort to protect everyone from various potential hazards in the work environment by creating a safe and healthy work environment and reducing the risk of incidents or accidents can be minimized, thereby reducing the possibility of prolonged absences and large cost burdens for the company. (Simbolon et al., 2024)

Compliance

According to Azwar (2002), compliance is a form of attitude that arises from individuals in response to rules or provisions that need to be obeyed and implemented. (Utami & Wolor, 2024)

Knowledge

According to Notoatmodjo (2010), when someone perceives something, they begin to understand it through a process of recognition. Humans are able to understand the world around them through their five senses: sight, hearing, smell, taste, and touch. Most of our knowledge as humans comes from what we see and hear. When it comes to shaping one's behavior, knowledge is a key domain. (Maridi M. Dirdjo, 2021)

3. Materials and Method

This study used a quantitative method with a cross-sectional design and a descriptive analytical approach, which aims to analyze the relationship between variables in a single observation period. The study was conducted from October to December 2025 at the Muhammadiyah University of East Kalimantan. The study population was all 153 nursing students enrolled in the 2025/2026 academic year, with a sampling technique using non-probability sampling through the total sampling method so that the entire population was sampled. The research instrument was a questionnaire consisting of a Guttman scale to measure knowledge and a Likert scale to measure compliance with occupational safety and health (K3). Data collection techniques were carried out through online questionnaires using Google Forms as primary data, and supported by secondary data from the Academic Administration Agency. Data analysis techniques included univariate analysis to describe data distribution and bivariate analysis using the Spearman correlation test to examine the relationship between variables, with data processing using SPSS (Statistical Package for Social Sciences) software.

4. Results and Discussion

Location Overview

Muhammadiyah University of East Kalimantan (UMKT) is a private university located in Samarinda City, East Kalimantan Province. UMKT was established through the merger of two Muhammadiyah-affiliated higher education institutions: the Muhammadiyah Samarinda

College of Health Sciences (STIKES) and the Muhammadiyah Samarinda College of Economics (STIE). This merger marked the beginning of UMKT's development as a university offering higher education with various faculties and interdisciplinary study programs. (Muhammadiyah University of East Kalimantan)

Currently, UMKT manages two main campuses covering approximately 15 hectares and equipped with various facilities to support academic activities. The available facilities include representative lecture halls, laboratories that support the practical learning process, and an information technology-based library that supports educational activities, research, and scientific development for the academic community. In terms of quality assurance, UMKT has obtained Very Good accreditation status from the National Accreditation Board for Higher Education (BAN-PT), which indicates that the quality of education at this university is recognized nationally. To date, the number of UMKT students has reached more than ten thousand people, supported by professional teaching staff and alumni who have been active in various job sectors.

In implementing higher education, UMKT is based on a vision to become an Islamic university based on information technology that is superior and competitive, and plays an active role in contributing to solving social and environmental issues by 2037. This vision serves as a strategic reference in policy formulation, academic program development, and sustainable institutional management. UMKT integrates Islamic values with the use of information technology as the main foundation in learning activities, research, and community service.

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Research result

Distribution of Respondent Characteristics

In this study, traits related to respondents' demographic data, such as age and gender, are referred to as respondent characteristics.

Table 1. Frequency Distribution.

Characteristics	Criteria	Frequency	Percentage%
Gender	Man	26	17.9%
	Woman	119	82.1%
Age	20-24 Years	132	91%
	25-29 Years	11	7.6%
	>30 Years	2	1.4%
Total		145	100%

Based on the data in the frequency distribution table, the number of respondents in this study was 145 people, divided by gender and age group. Of the total respondents, 26 people, or approximately 17.9%, were male. Meanwhile, the majority of respondents, namely 119 people, or 82.1%, were female. This indicates that compared to male respondents, female respondents were much more likely to participate. Looking at the age distribution, 132 respondents (or 91.0% of the total) were in the 20-24 age group. Furthermore, the 25-29 age group consisted of 11 respondents, or 7.6%. The last age group was respondents aged 30 and over, which only numbered 2 people, or 1.4%. Overall, the data shows that the majority of respondents in this study were females aged 20-24, while other age groups and male

respondents had a much smaller proportion. This indicates that the results of this study are dominated by the views and characteristics of the young and female age groups.

Univariate Analysis

In univariate analysis, each variable is treated as an independent variable and its relationship with other variables is not taken into account. In this study, the variables examined were knowledge and compliance in implementing occupational health and safety.

Table 2. Frequency Distribution of Knowledge.

Knowledge	Frequency	Percentage
Good	106	73.1
Enough	20	13.8
Not enough	19	13.1
Total	145	100

The information obtained from the table above shows that 106 respondents (or 73.1%) of the total have good criteria, 20 people have sufficient criteria with a percentage of 13.8% and 19 people have less criteria with a percentage of 13.1%.

Table 3. Frequency Distribution of Compliance.

Compliance	Frequency	Percentage
Obedient	78	53.8%
Not obey	67	46.2%
Total	145	100%

The level of respondent compliance with occupational safety and health implementation shows that the majority of respondents, namely 78 people (53.8%), are compliant. Conversely, 67 people (46.2%) are non-compliant. The total number of respondents in this category is 145 people (100%).

Bivariate Analysis

Table 4. Relationship between Knowledge and Occupational Safety and Health Compliance in Nursing Professional Students.

Knowledge	Compliance				Total		Sig.	r
	Obedient		Not obey					
	n	%	n	%	n	%		
Good	75	51.7	31	21.4	106	73.1		
Enough	2	1.4	18	12.4	20	13.8	0.000	0.558
Not enough	1	0.7	18	12.4	19	13.1		
Total	**78**	**53.8**	**67**	**46.2**	**145**	**100**		

Based on the data in the table above, there is a positive correlation between knowledge and compliance; of the 106 respondents, 75 (51.7%) were fully compliant, while 31 (21.4%) were not fully compliant. In sufficient knowledge, there were 20 people with details of 2 people (1.4%) compliant and 18 people (12.4%) non-compliant. In insufficient knowledge, there were 10 people with details of 1 person (0.7%) compliant and 18 people (12.4%) non-compliant. In addition, a significance value of 0.000 was obtained, the value <0.05, "then H0 is rejected and H1 is accepted, which means there is a relationship between knowledge and compliance. The correlation coefficient figure of 0.558 means that the level of closeness of the relationship (correlation) between the knowledge variable and compliance is 0.558 or falls into the moderate criteria and the direction of the relationship is positive."

Discussion

Univariate Analysis

Respondent Characteristics

This research was conducted after the researcher obtained ethical feasibility approval issued and reviewed by the Health Ethics Commission of the Faculty of Medicine, Mulawarman University. This study involved 145 second-semester undergraduate students of the Nursing Study Program at the University of Muhammadiyah East Kalimantan as respondents. The number of respondents was equivalent to the population because this study used a total sampling technique. From the 145 respondents involved, diverse demographic

characteristics were obtained, including age and gender. All respondents were students who had taken courses (Hospital Occupational Health and Safety) and had undergone practice in hospital practice areas.

a. Gender

The results of the study showed that the total number of respondents was 145 people grouped by gender. Of these, 26 respondents (17.9%) were male, while the majority of respondents, namely 119 people (82.1%), were female. The dominance of women in nursing education remains a phenomenon found in many countries. Various studies show that the proportion of female students in nursing study programs is much greater than that of male students, which is influenced by social views that associate the nursing profession with feminine characteristics, such as gentleness, patience, and concern for others. Studies that discuss nursing as a gender-constructed profession show that these perceptions play a role in shaping individual interests and choices regarding education (Prosen & Čekada, 2025). Furthermore, cross-cultural qualitative research reveals that gender stereotypes still influence the experiences of male students during nursing education. The social construction that views nursing as a profession identical to women can influence the acceptance and academic experiences of male students in nursing education environments (Olgay et al., 2025). Thus, studies on gender dynamics in the nursing profession confirm that in professional practice and based on ethical work principles, nurses' competencies and roles are not determined by gender. Differences in duties and functions within nursing services are based more on service needs and professional abilities, rather than on differences. (Masibo et al., 2024)

b. Age

Based on the age characteristics of the respondents, the results of the study indicate that the majority of respondents were in the 20–24 age group. This age group numbered 132 people and covered 91.0% of the total respondents. In this study, the majority of participants were young adults, defined here as those in the 20–24 age group. This phase is a transitional period from adolescence to adulthood, marked by various important changes, including the formation of self-identity, increased social responsibility, the development of interpersonal relationships, and adjustments to individual roles in the environment (Dwilianto et al., 2024). This view is in line with studies stating that early adulthood, which generally occurs at the age of 18–25, is a period when individuals begin to develop more mature social, emotional, and cognitive abilities, while also attempting to determine direction and goals (Fadli et al., 2023). Furthermore, psychosocial phenomena such as the quarterlife crisis often emerge during this developmental stage, reflecting challenges in the process of adjustment, making important decisions, and managing personal expectations regarding the adult life they are currently living. (Psychology, 2021)

c. Knowledge

According to the study, the majority of respondents had a good level of knowledge. Of the 145 respondents, 106 (73.1%) had good knowledge of the research topic. This finding indicates that the majority of respondents had adequate understanding and were able to optimally absorb information related to the research topic. The high proportion of respondents with good knowledge may reflect the effectiveness of the process of conveying information, education, or previous experience. On the other hand, there were 20 respondents (13.8%) who were included in the sufficient knowledge category. This group indicates that respondents already have a basic understanding of the topic being studied, but still need reinforcement or in-depth information to improve their level of knowledge. In addition, 19 respondents (13.1%) were in the insufficient knowledge category, indicating that a small number of respondents still have limited understanding of the research topic. Based on the findings of this study, the presence of respondents with sufficient and insufficient levels of knowledge indicates that follow-up can be directed at strategies to increase knowledge so that the distribution of understanding becomes more even and optimal. Theoretically and empirically, knowledge is related to the educational process because education (especially formal education) plays a role in developing thinking skills and facilitating individuals' acceptance and processing of new information. Research also shows that higher levels of education tend to improve knowledge levels, making strengthening education/training a relevant step to encourage increased knowledge. (Kesehatan et al., 2022)

d. Compliance

Based on the research results, the level of respondent compliance in implementing OHS indicates that the majority of respondents are in the compliant category. Of the 145 people who completed the survey, 78 people (or 53.8% of the total) followed all regulations related to occupational safety. This indicates that more than 50% of participants were quite or very careful in implementing OHS procedures in accordance with applicable regulations. However, the research results also showed that there were still 67 respondents (46.2%) who were included in the non-compliant category regarding the implementation of OHS. This proportion indicates that almost half of the respondents have not fully implemented OHS principles optimally. The low level of compliance in this group can be influenced by various factors, such as limited understanding, lack of experience or training related to OHS, and obstacles in implementation in the field. Further assessment and intervention efforts in the context of OHS are essential to improve the level of respondent compliance overall. Several studies confirm that systematic OHS education and training can improve respondents' understanding and safety behavior, as seen from the increase in participants' understanding scores before and after OHS training according to standard operating procedures (Keselamatan et al., 2024). Additionally, other research has found that strategies that combine training, supervision, and the use of ergonomic personal protective equipment significantly encourage safe work behaviors, thereby strengthening compliance with applicable OHS procedures. (Kerja, 2025)

Bivariate Analysis

The analysis results show a correlation between students' knowledge levels and compliance with occupational safety and health (OHS) implementation. Of the 145 students who participated in the survey, 51.7% had excellent knowledge of OHS, while 2.0% had adequate knowledge and 1.0% had very poor understanding. Compared to the compliant group, non-compliant students had knowledge gaps of 31, 18, and 18, respectively. Overall, 106 students had excellent knowledge, 20 had adequate knowledge, and 19 had inadequate knowledge, consistent with the distribution of student knowledge levels. The results indicate that students with more knowledge are more likely to comply with OHS regulations. This is supported by the finding that respondents' compliance can be influenced by less-than-ideal information. The results indicate that individuals with more knowledge are more likely to comply with occupational safety and health regulations. However, the presence of non-compliant respondents despite having good knowledge indicates that in addition to knowledge, there are other factors that influence compliance, such as attitude, motivation, experience, and supervision in OHS implementation.

The correlation coefficient value of 0.558 was obtained from the study using the Spearman rank correlation test, which indicates a positive relationship with a moderate strength of relationship between the level of knowledge and compliance with the implementation of occupational safety and health. This coefficient value means that the higher the level of knowledge possessed by the respondents, the tendency to comply with compliance with occupational safety and health also increases, although this relationship is moderate (not weak or very strong). The results of the significance test show a Sig. (2-tailed) value of 0.000, which is smaller than the specified significance limit of 0.05. This indicates that the relationship between the variables of the level of knowledge and compliance is statistically significant, so it can be concluded that the relationship found does not occur by chance, but reflects a real relationship between the two research variables. Thus, "the alternative hypothesis (Ha) in this study is accepted, which states that there is a relationship between the level of knowledge and compliance in the implementation of occupational safety and health".

An individual's knowledge is influenced by their level of education, as education is a key source of information and broadening their horizons. Review research shows that knowledge is closely related to education, with educated individuals tending to have a broader range of knowledge than those with less education (Info, 2019). Furthermore, a person's level of knowledge, which in turn reflects their behavior, is influenced by their educational background. When someone has extensive knowledge, they are better equipped to react to situations with the right mindset. Consequently, nurses who are proficient in their field are more likely to follow standard operating procedures (Milkhatun, 2020). Based on the data collected, 106 respondents scored in the good knowledge category. Meanwhile, 19 individuals

had insufficient knowledge, while 20 individuals had sufficient knowledge. Overall, 145 individuals completed the survey, representing 100% of the total sample size.

Previous research entitled "The Relationship between Knowledge and Efforts to Implement Occupational Safety and Health (K3) among PT Sambas Wijaya Employees showed a significant relationship between the level of knowledge about K3 and the implementation of safety practices in the workplace". In research at PT Sambas Wijaya, chi-square analysis showed a p-value of 0.002, which indicates a significant relationship between K3 knowledge and efforts to implement occupational safety (Prasetya & Ramdani, 2022). Another study entitled "Analysis of Factors Influencing Compliance with the Implementation of Occupational Health and Safety in Nurses at Dr. Ak Gani Hospital Palembang in 2024 showed a significant relationship between the level of knowledge about occupational safety and health and compliance (or implementation) of K3, evidenced by a p value <0.05, which indicates that the higher the knowledge, the tendency for compliance also increases" (Maharani et al., 2025)

Other research shows that, "the level of knowledge regarding Occupational Safety and Health (OHS) is related to OHS awareness and behavior. Students who have better OHS knowledge tend to demonstrate more positive occupational safety behavior." This finding supports the view that the higher the level of knowledge, the more likely an individual is to comply with occupational safety procedures (Yana, 2019). OHS in hospitals is a system designed to provide protection to healthcare workers from various potential occupational risks that arise during the healthcare process. The OHS system includes activities to identify and assess potential hazards, control occupational risks, report and evaluate workplace accident incidents, and implement corrective actions to prevent the recurrence of similar incidents. The comprehensive implementation of OHS aims to create a safe, healthy work environment and support the quality of healthcare services. (Nengcy et al., 2025)

One component contributing to the successful implementation of occupational health and safety measures is individual knowledge. Although most students who demonstrated compliance came from groups with a good level of knowledge, the results of this study also indicate that good knowledge does not always guarantee compliance in the implementation of occupational safety and health. In other words, there are still students who have a good level of knowledge but show less than optimal compliance. In this study, it was found that students with good, sufficient, or insufficient knowledge levels cannot be completely guaranteed to have compliant behavior in the implementation of occupational safety and health. This study found that students with good or sufficient knowledge do not guarantee that they comply with the implementation of occupational safety and health. Students who have good knowledge and comply with the implementation of occupational safety and health were 75 students out of 106 students with good knowledge, while in the category of sufficient knowledge, 2 students out of 20 students with sufficient knowledge were compliant and 1 student out of 19 students with insufficient knowledge were compliant. Previous research has shown that a good level of knowledge does not always guarantee compliance in the implementation of occupational safety and health. Non-compliance can be influenced by internal individual factors, such as low awareness, a less than positive attitude toward OHS, and a lack of commitment to consistently implementing work procedures (Milkhatun, 2020). In addition to individual factors, external factors such as weak supervision, lack of enforcement of regulations, and a suboptimal occupational safety culture also contribute to low OHS compliance. A work environment that does not support consistent OHS implementation can cause healthcare workers to ignore safety procedures even if they have good knowledge. (Nengcyetal., 2025)

In addition to knowledge, compliance with occupational safety and health is also influenced by other factors, such as motivation, attitude, and perception. These three factors have been examined in various studies by different researchers, but using the same dependent variable, namely compliance with occupational safety and health implementation. According to this study, the level of individual compliance with workplace safety and health regulations is influenced by their level of motivation, attitude, and perception. Research published in the Journal of Safety, Health and Environment Education (JSHEE) analyzed the relationship between personal factors and occupational safety compliance. The variables studied included work motivation towards OHS, attitude towards safety, and compliance behavior (safety compliance). The results of the statistical analysis showed that work motivation has a significant relationship with compliance with OHS implementation, with a p value = 0.000 ($p < 0.05$). This finding indicates that individuals with high work motivation tend to be more compliant in implementing occupational safety and health procedures than individuals with

low motivation (Urzais & Handoko, 2024). In the same study, the variable attitude towards occupational safety was also analyzed for its relationship with OHS compliance. The results of statistical tests show that attitudes have a significant relationship with compliance behavior, with a p value = 0.013 ($p < 0.05$). This shows that individuals who have a positive attitude towards occupational safety, such as considering K3 as important and beneficial, tend to show compliant behavior in carrying out work safety procedures (Urzais & Handoko, 2024). In addition, other studies found a significant positive relationship between perceptions of K3 and work morale ($r = 0.470$, $p = 0.000$), indicating that the better employees' perceptions of K3, the better their work behavior. (Fahmi udin hidayatullah, 2019)

Based on the analysis results, it can be assumed that the level of student knowledge plays a role in influencing compliance with the implementation of occupational safety and health. The analysis results show a positive relationship between knowledge and compliance, with a correlation coefficient value of 0.558, which is included in the moderate relationship category. The results show that students who have more knowledge tend to be more compliant with regulations related to occupational safety and health. In addition, the Sig. (2-tailed) value of 0.000, as shown in the results of the significance test, is lower than the 0.05 significance level. This indicates that the relationship between knowledge and compliance is statistically significant, so the relationship found does not occur by chance. Thus, it can be concluded that student knowledge plays an important role in increasing compliance with the implementation of occupational safety and health. Although the findings of this study support the idea that knowledge plays a role in influencing compliance behavior, this study also suggests that other variables may have an influence.

According to Dewi and Wawan (2010), a person's level of education is directly proportional to their knowledge. People have more opportunities to learn and develop intellectually when they pursue higher education. However, it should not be assumed that those with less formal education have less general knowledge. According to Dewi and Wawan, there are two components to a person's understanding of something. These two factors contribute to a person's feelings. Attitudes tend to be more optimistic when the better qualities of something are understood. Furthermore, having access to more information makes learning new things much easier, so the more one knows, the more one can do (Siti Khoiroh Muflihatin, 2021).

Students with a high level of knowledge tend to be better able to understand the urgency of occupational safety and health and demonstrate greater consistency in following established procedures. This understanding improves both the quantity and quality of health services, which helps reduce the likelihood of errors. Students' compliance levels are influenced not only by their knowledge but also by other internal factors, including attitudes, motivation, and perceptions. A high level of awareness of adherence to appropriate safety measures can be fostered by maintaining a positive attitude toward occupational safety and health. High motivation, both internal and supported by the surrounding environment, plays a role in strengthening students' commitment to continuously implementing safety standards. Furthermore, a positive perception of the importance of occupational safety and health will strengthen students' confidence in prioritizing occupational safety and health as a professional responsibility. Student compliance with occupational safety and health procedures is also influenced by external factors. A conducive learning environment, the availability of adequate educational facilities and infrastructure, and continuous supervision and guidance from educational institutions are supporting factors that can increase student compliance with occupational safety and health practices. Conversely, limited facilities, lack of guidance, and weak supervision can hinder optimal compliance. Therefore, creating a supportive learning environment is crucial for effectively implementing occupational safety and health.

In this study, the researchers observed that the relationship between knowledge and compliance is not always absolute. Students with high levels of knowledge do not necessarily fully comply with OSH implementation, as compliance behavior can also be influenced by other factors, such as fatigue, academic load and pressure, low individual awareness, and overconfidence. This suggests that knowledge is an important component, but not the sole factor, that shapes student compliance behavior. However, the researchers still believe that knowledge is highly correlated with protected student attendance, based on the study's findings. The high levels of knowledge and compliance reported by many respondents provide strong evidence for this. These findings provide further evidence that knowledge is a crucial component in driving compliance behavior, but knowledge alone is not sufficient to achieve ideal compliance. These results align with other studies that have linked knowledge to compliance with occupational health and safety regulations.

6. Conclusion

Based on the research conducted with the title "The Relationship between Knowledge Level and Compliance with the Implementation of Occupational Safety and Health in Nursing Professional Students", the following are the conclusions obtained. The alternative hypothesis (Ha) is accepted, indicating that there is a significant relationship between the level of knowledge and compliance with the implementation of occupational safety and health in Nursing Professional Students.

a. Respondent Characteristics

The respondents of this study consisted of 145 2nd semester Nursing Profession students. The majority of respondents were women (82.1) aged 20-24 years (91.0%).

b. Level of Knowledge and Compliance
   a) Knowledge Level: 106 people (73.1%) have good knowledge, and 20 people (13.8%) have sufficient knowledge, while 19 people (13.1%) have insufficient knowledge.
   b) Compliance Level: Student compliance with patient safety implementation is divided into two categories based on a median value of 131. Compliant students reached 53.8% of the total respondents.

c. Relationship between Knowledge and Compliance

The results of the analysis indicate a moderate positive relationship between the level of knowledge and student compliance in implementing OHS. This is indicated by the Spearman correlation coefficient value of $r = 0.558$ with a significance value of $p = 0.000$ ($p < 0.05$), which indicates that the relationship is statistically significant. This finding indicates that knowledge has an important role in shaping the compliance of nursing professional students at the Muhammadiyah University of East Kalimantan towards the implementation of OHS procedures. Compliance with the application of occupational safety and health principles is more likely to be noticed by students with a higher level of understanding. However, compliance is not only influenced by the knowledge aspect alone, but also has the potential to be influenced by other factors such as attitudes, individual motivation, clinical practice environment, institutional support, and student experience during the professional education process.

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