

# Factors Influencing Nursing Students' Motivation to Engage in Volunteering Activities in Indonesia

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## ABSTRACT

**Background:** Nursing students, equipped with specialised knowledge and skills, have historically played a pivotal role in disaster and outbreak response efforts through their volunteer contributions to the healthcare system. **Objectives:** This study sought to elucidate the factors influencing nursing students' motivation and preparedness for volunteer engagement in Indonesia. **Methods:** A cross-sectional study was conducted in the East Java region. A total of 76 students, meeting specific criteria such as being nursing students and having volunteered, were invited to complete an online survey via Google Forms. A questionnaire was used as an instrument for data collection, and data analysis was performed using descriptive statistics and bivariate analysis. **Results:** The results showed that academic level ( $p = 0.043$ ), family income ( $p = 0.007$ ), and motivation to volunteer ( $p = 0.025$ ) were significantly related to students' decisions to participate as volunteers. While ethical considerations and professional responsibility ( $G = 0.96, p = 0.381$ ) were the primary reasons for students' willingness to volunteer, concerns about health and safety ( $G = 0.607, p = 0.015$ ) were the most significant barriers. Despite high motivation among students, certain factors influenced their final decision to volunteer. **Conclusion:** The study reveals that nursing students in Indonesia are motivated to volunteer in disaster response but are hindered by health and safety concerns.

**Keywords:** Motivation; Nursing Students; Outbreak; Volunteer

## INTRODUCTION

In response to the healthcare challenges that arise during outbreaks and disasters, governments worldwide have had to rapidly scale up healthcare facilities and infrastructure to safeguard public health (Chawłowska *et al.*, 2021). A key component of these efforts has been the recruitment and deployment of volunteers, whose contributions are instrumental in bolstering overstretched health systems. Volunteering is an integral aspect of public healthcare, as volunteers provide critical services to their communities without expecting any form of tangible compensation. By collaborating with volunteers and voluntary organisations, governments can ensure that essential community services are maintained, thereby alleviating the strain on formal healthcare providers during times of crisis, such as the COVID-19 pandemic. Among these volunteer forces, nursing students stand out due to their unique skill set. For instance, in 2016, Indonesia alone had a substantial pool of 258,102 nursing students, whose knowledge and practical training make them well-positioned to assist both the community and government in times of public health emergencies.

The research underscores the significant contributions of volunteer efforts in mitigating the adverse impacts of communicable diseases. Activities such as caring for COVID-19 patients, disseminating health promotion messages during the pandemic, and developing innovative personal protective equipment (PPE) initiatives have been shown to reduce the burden on health systems in several countries (Miao, Schwarz & Schwarz, 2021; Adejumo *et al.*, 2021). Beyond their immediate benefit to the healthcare system, volunteer work offers nursing students invaluable real-world experience. It allows them to apply theoretical knowledge in practical settings, thereby honing essential clinical skills. This hands-on experience promotes critical

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thinking and problem-solving abilities, both of which are crucial for nursing professionals. Furthermore, by engaging in volunteer work, students enhance their readiness for future healthcare roles, gaining confidence and competence in patient care (Li *et al.*, 2020; Putri & Andriyani, 2018).

Despite the evident benefits, student participation in volunteer activities is not without significant challenges. Economic constraints, physical demands, and psychological fears, particularly the fear of contracting infectious diseases, often act as barriers to volunteer engagement. The existing literature highlights the toll that pandemics take on healthcare workers, including volunteers, who frequently experience heightened exposure to health risks. These risks are not limited to physical health; mental health issues such as stress, fatigue, and burnout have been commonly reported due to the overwhelming workloads associated with pandemic response efforts (Heyerdahl *et al.*, 2021; Mo *et al.*, 2021). This underscores the dual burden faced by healthcare volunteers—balancing the physical demands of their roles with the psychological strain that can result from prolonged exposure to high-risk environments.

Studies examining the behaviour and experiences of healthcare workers during the COVID-19 outbreak have consistently revealed widespread anxiety. Healthcare professionals, including nurses, often express deep concerns about their safety and the safety of their patients and families. Such fears have been documented across various countries, including Indonesia, Saudi Arabia, and Nigeria, where the risk of infection and the availability of protective equipment were major sources of stress (Huda, 2020; Adejumo *et al.*, 2021). In light of these challenges, it is crucial to gain a deeper understanding of the motivations and barriers that influence individuals' decisions to volunteer, particularly in times of crisis when the demand for healthcare volunteers is critical. A study stated that insight into how volunteer activity gives a comfortable space for nursing students within other fields, including pedagogy, physiotherapy and occupational therapy, to develop and practice their competencies (Nissen *et al.*, 2023).

During crises such as the COVID-19 pandemic, some nursing students did participate in volunteer programs, although for many, this marked their first experience in a high-pressure health emergency setting (Zhang, Peng & Chen, 2024; Zhang *et al.*, 2021). Given the unprecedented nature of the pandemic, these students likely faced significant fears and uncertainties, both in terms of personal safety and professional competence. However, despite the growing involvement of student volunteers, limited research has been conducted on the specific motivations and preparedness of Indonesian nursing students to engage in such efforts. Understanding these factors is essential not only for assessing their readiness to participate in pandemic response initiatives but also for informing the design of nursing curricula that will better equip students for future public health emergencies. Therefore, this study aimed to explore the key factors influencing the motivation and preparedness of nursing students to volunteer, contributing to the broader discourse on how to foster a more resilient and responsive healthcare workforce in times of crisis.

### **Study Objective**

The primary objective of the study was to explore the motivations and barriers that influence nursing students' participation in volunteer activities.

## **METHODOLOGY**

### **Sampling Technique**

A purposive and snowball sampling technique was employed to recruit participants, focusing specifically on nursing students with prior volunteer experience. After completing the questionnaire, respondents were encouraged to disseminate the survey link to other eligible participants. In total, 76 respondents from various universities and nursing programmes across Java were included in the study.

### **Research Instrument**

The research instrument was adapted from prior studies on volunteerism, with modifications to better suit the specific characteristics of the target population (Lazarus *et al.*, 2021).

### **Questionnaire Design**

The questionnaire is divided into three sections. The first section gathers demographic information. The second section includes 5 questions on volunteer motivation, 8 questions on readiness for volunteer activities, 8

questions on factors that increase willingness to volunteer, and 4 questions on obstacles encountered in volunteering, all measured using a Likert scale ranging from strongly disagree to strongly agree.

### Validation Process

The validation questionnaire was based on the previous research by two independent experts.

### Statistical Analysis

Data were analysed using descriptive statistics and bivariate analysis, including chi-square tests, Pearson correlation coefficients, and Goodman and Kruskal's gamma (G) statistics. A significance level of 5% was employed to determine the factors significantly associated with respondents' willingness to engage in volunteer work.

### Ethical Consideration

The study received ethical approval from the Research and Community Service Office at Universitas Pendidikan Indonesia, Indonesia with reference number 835/UN40/PT on 1<sup>st</sup> February, 2022.

## RESULTS

General information about the respondents is presented in Table 1, including their age, gender, academic level, experience in volunteering, family income, and reason for volunteering. Seventy-six students participated in the study. Students' ages ranged between 18 and 24 years old, with a mean of 20.39 years. The majority were female (94.7%). Of 76 students, 65.8% had Bachelor of Nursing degrees, 71.1% had no experience in volunteering, and 60.5% came from lower-income families. More than half of the students had good motivation to volunteer (64 respondents), while 12 students did not.

Furthermore, table 1 illustrates the demographic data that were tested regarding the contribution to a willingness to volunteer. Some characteristics are more willingness to volunteer, including women ( $p=0.098$ ), diploma level ( $p=0.043$ ), family income ( $p=0.007$ ), and motivation ( $p=0.025$ ). Further information on respondents' characteristics can be seen in Table 1.

**Table 1: Characteristics of the Respondents**

Characteristics	Frequency/Mean (min-max)	Willingness to volunteer		P-value (CI 95%)
		Agree	Disagree	
Age, mean(min-max)	20.39 (18-24)	-	-	
Sex				
Male	4 (5.30)	2 (2.60)	2 (2.60)	0.098 (0.034-1.539)
Female	72 (94.70)	62 (81.60)	10 (13.20)	
Academic Level				
Diploma in Nursing	50 (65.8)	46 (60.50)	4 (6.80)	0.043 (-0.670-0.531)
Bachelor in Nursing	26 (34.20)	18 (23.70)	8 (13.70)	
Experienced Volunteered in Health				
Yes	22 (28.90)	18 (81.20)	4 (19.80)	0.629 (-0.222-0.574)
No	54(71.10)	46 (85.20)	8 (14.80)	
Family Income (Rupiah)				
< 3.500.000	46 (60.50)	40 (86.90)	6 (13.10)	0.007 (0.035-0.134)
3.500.000-5.000-000	20 (26.30)	16 (80)	4 (20)	
>5.000.000	10 (13.2)	8 (80)	2 (20)	
Had been a Survivor's				
Yes	8 (10.50)	6 (75)	2 (25)	0.064 (-0.753-0.264)
No	68 (89.50)	58(85.30)	10(14.70)	
Motivated to be a Volunteer				
Good	64	60 (93.8)	4(6.30)	0.025 (0.012-0.097)
Not good	12	4 (0.05)	8(13.70)	

The reason for the willingness to volunteer activity is shown in Table 2. The findings indicated that Ethical consideration, professional responsibility, and altruism were the main drivers in considering involvement in volunteer activity ( $G=0.96$  and  $G=0.76$ , respectively). In addition, obligation as a nursing student also significantly determines willingness. Astoundingly, remuneration, shortage of medical staff, institution policy, and sanctions did not affect nursing student decisions (Table 2).

On contrary, students who choose unwilling to volunteer activity concern about health and safety ( $G=0.607$ ), worry about endangering the patient ( $G=0.116$ ) and lack of knowledge ( $G=0.435$ ), detail of reasons presented in Table 3.

**Table 2: Reason for Involvement in Volunteer Activity**

Reasons for Willingness	Strength and Significance	
	Gamma	P-Value
Compensated if infected during a work	-0.166	0.140
Compensated if death during a work	0.048	0.629
Shortage of medical personnel	-0.106	0.361
Obligation as a nursing student	0.35	0.756
Purpose from Institution	-0.026	0.783
Ethical consideration and professional responsibility	0.96	0.381
Sanction if not involved as a volunteer	0.029	0.793
Altruism	0.76	0.486

**Table 3: Reason for Resistance Volunteering Activity**

Reasons for Resistance to Volunteering	Strength and Significance	
	Gamma	P-Value
Lack of knowledge about the procedure and treatment of a disaster or outbreak	0.435	0.756
Need extra energy and a lot of resources	0.096	0.381
Worry about own health and safety	0.607	0.015
Worry about the health of the family/people in the home	0.116	0.208
Worry about endangering the patient's health condition	0.005	0.957
Inadequate Protective Equipment	-0.072	0.434
Undiscovered COVID drugs	0.031	0.755

## DISCUSSION

The principal finding of this study is that motivation exerts a substantial positive influence on the willingness of individuals to engage in volunteer activities. A significant proportion of respondents (83.2%) indicated their readiness to participate in volunteer work, demonstrating the prevalence of this inclination among the sample population. This aligns with findings from other countries, such as Brunei and Nepal, where even higher rates of students have expressed a willingness to volunteer (Karki *et al.*, 2021; Roy & Ayalon, 2021). Such high levels of volunteerism may reflect a strong sense of civic responsibility, and the cultural importance placed on communal support in these regions.

This study analysis revealed several key factors driving nursing students to volunteer. Among these were professional responsibility and altruism, which emerged as the predominant motivating forces. These findings suggest that many students perceive volunteer work as an extension of their professional duties and an ethical obligation inherent in the healthcare profession. Conversely, concerns about health risks and personal safety were frequently cited as significant barriers to volunteering. This dichotomy highlights the complexity of students' decision-making processes, where moral imperatives often compete with pragmatic concerns about personal well-being (Setiawan *et al.*, 2021; Fadli *et al.*, 2020)

The study further identified three specific factors: academic level ( $p = 0.043$ ), family income ( $p = 0.007$ ), and intrinsic motivation to volunteer ( $p = 0.025$ ) that significantly influenced students' decisions to engage in volunteer activities. These results underscore the multifaceted nature of volunteerism, where both socio-economic background and internal motivations play a role. For example, students from higher-income families may feel more secure in their ability to volunteer, given that they face fewer financial pressures, while those further along in their academic careers may have greater confidence in their skills, thus reducing anxiety about volunteering.

Prior research has highlighted the positive impact of volunteerism during public health crises. Volunteer activities, such as caring for COVID-19 patients, promoting public health awareness, and developing personal protective equipment, have been instrumental in mitigating the spread of infectious diseases (Roy & Ayalon, 2021; Setiawan *et al.*, 2021; Tejatvaddhana *et al.*, 2020). These contributions underscore the vital role that volunteers, particularly those with healthcare training, play in supporting overstretched healthcare systems during times of crisis.

The motivating factors identified in this study resonate with findings from similar cross-sectional studies conducted in countries such as Vietnam, Nepal, Poland, and Brunei, where professional responsibility and altruism similarly emerged as primary motivators for volunteering (Abdul Aziz, Abdul-Mumin & Abdul Rahman, 2021; Domaradzki & Walkowiak, 2021; Karki *et al.*, 2021; Roy & Ayalon, 2021; Tran *et al.*, 2022). These shared findings across diverse cultural contexts suggest a universal ethical foundation in the healthcare professions, where service to others and professional integrity are highly valued. Furthermore, additional studies have shown that opportunities to enhance clinical skills, receive formal recognition, or obtain incentives further increase student motivation to volunteer. These extrinsic motivators, while secondary to professional ethics, nonetheless play a crucial role in fostering sustained engagement in volunteer work.

In this study, moral values closely associated with the nursing profession, such as altruism, ethical conduct, and a sense of professional duty, were the key drivers behind students' willingness to volunteer during the pandemic. These findings align with Lazarus's research, which posits that volunteering not only enhances personal values but also broadens volunteers' knowledge, skills, and social connections (Lazarus *et al.*, 2021). Through volunteerism, students develop new competencies, deepen their understanding of public health, and cultivate stronger interpersonal relationships, all while contributing to society (Mouloudj & Bouarar, 2023; Pring & Roco, 2012). Moreover, students have great experiences understanding healthcare systems in response to outbreaks or crisis conditions. The outcomes of volunteer programmes have proven to encourage humanitarianism intention among students (Chen *et al.*, 2023; Mouloudj & Bouarar, 2023).

Despite the many benefits of volunteering, participants frequently reported encountering significant obstacles. Among the most common concerns were physical and psychological challenges, particularly fear of harming patients or lacking the necessary knowledge to perform their duties safely (Setiawan *et al.*, 2021). This apprehension is consistent with findings from broader research, which indicates that health students are often hesitant to work with patients suffering from infectious diseases (Lazarus *et al.*, 2021; Müller *et al.*, 2020). In such instances, it has been recommended that student volunteers be assigned roles that limit their exposure to health risks, such as health education, contact tracing, and providing peer support to patients in isolation. Such roles allow students to contribute meaningfully while minimising personal danger.

Another critical barrier identified was students' feelings of inadequacy in responding to crises. Many studies have noted that healthcare students and even professionals often feel unprepared for emergency or disaster situations. This lack of preparedness is exacerbated by inadequate training and insufficient access to personal protective equipment (PPE), which can undermine confidence and contribute to negative attitudes toward volunteering during health emergencies (Fadli *et al.*, 2020). Educational and training programmes are essential for all student volunteers to enhance their knowledge and behaviour as health volunteers, thereby contributing to the improvement of community quality of life (Asgharian, Vizesfar & Keshtkar, 2025; Roshanravan, Moslehi & Seyedin, 2025).

To overcome these challenges and maximise the efficacy of student volunteer programmes, it is essential to implement structured support systems. Key recommendations include offering accommodations, financial and academic incentives, and psychosocial support during transitional periods. In addition, fostering a positive,



collaborative environment between healthcare staff and student volunteers is crucial to maintaining morale and ensuring program success. The establishment of a dedicated volunteer management team would provide the necessary oversight to streamline these efforts, ensuring that volunteer initiatives are organised and executed effectively (Lazarus *et al.*, 2021; Seah *et al.*, 2021). Qualitative research from Roshanravan, Moslehi and Seyedin (2025) highlights the critical role of effective management, infrastructure, knowledge management, and policymaking, including legal affairs, to enhance volunteer empowerment.

Moreover, nursing institutions must adapt their curricula to better prepare students for future public health crises. One viable approach is the creation of a permanent Student Volunteers Committee. This body could be tasked with developing protocols for mobilising and managing volunteer efforts during emergencies. Outside of crises, the committee could coordinate community service projects to keep students actively engaged in volunteerism. In the event of a health emergency, such a framework would allow for the rapid deployment of volunteers, providing much-needed support to understaffed healthcare facilities. Additionally, this committee could act as an intermediary between academic institutions and healthcare providers, ensuring that student volunteer efforts align with both educational goals and healthcare needs (Chawłowska *et al.*, 2021).

By addressing the challenges and enhancing the structure of volunteer programmes, healthcare institutions can create an environment in which students are both motivated and adequately prepared to contribute during times of crisis. In doing so, they can help ensure that future generations of healthcare workers are not only clinically proficient but also deeply committed to serving their communities.

### **Limitation**

This research has not covered more respondents from various regions in Indonesia, which may not represent all nursing students because of limited human resources. Although the sample size is small, the findings provide valuable preliminary insights into the volunteering topic.

### **CONCLUSION**

The findings indicate that a majority of students possess a positive inclination toward volunteerism. However, to optimise student safety and efficacy in volunteer roles, it is imperative to provide adequate personal protective equipment and comprehensive pre-training. Healthcare managers, faculty and policymakers can use this study's results to create promotive legislation and programmes to enhance motivation of volunteer nursing. To address potential emergency or outbreak scenarios, future research should prioritise the development of specialised training programmes tailored to the needs of health volunteers. As well as that, further research in mixed methods is encouraged to gain more insightful meaning of how volunteer activity could contribute to student competencies.

### **Conflict of Interest**

The authors declare that they have no competing interests.

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