



AMERICAN JOURNAL OF LIFE SCIENCE AND INNOVATION (AJLSI)

ISSN: 2833-1397 (ONLINE)

VOLUME 2 ISSUE 3 (2023)



PUBLISHED BY
E-PALLI PUBLISHERS, DELAWARE, USA

Enhancing Public Health: Exploring the Awareness of Students in Mindoro State University on Blood Donation

Jovie Rose D. Masongsong¹

Article Information

Received: November 15, 2023

Accepted: December 11, 2023

Published: December 14, 2023

Keywords

Blood Donation, Level of Awareness, Student Donors, Blood Recipients

ABSTRACT

Blood donation plays a significant role in modern healthcare, especially because it contributes to charitable tasks and lessens shortages in the global demand for blood. Problems encountered were due to the insufficiency of infrastructure, donor education, and resources which led to challenges in recruiting blood donors. Studies have found that countries handle blood donation systems, but their status varies widely. This research study aims to determine students' awareness level in Mindoro State University-Calapan City Campus on blood donation. This research study utilized descriptive research design, which aims to systematically gather information and describe a phenomenon or situation through survey questionnaires. Moreover, the 100 respondents were chosen through stratified random sampling and were tasked to answer the self-made questionnaire, which was divided into two parts: the demographic profile of the respondents in terms of age, gender, and weight and the respondents' awareness of blood donation through the use of Likert Scale. The study results revealed that the students of the MinSU-Calapan City Campus are aware of the crucial role of blood donations in saving lives and promoting a sense of community and unity in an environment. However, the study presented that the students are not knowledgeable of the process performed in blood donation.

INTRODUCTION

Blood donation is a vital and life-saving act that forms the cornerstone of modern healthcare. It is indispensable in addressing emergencies, treating various medical conditions, and ensuring a stable supply of blood products for those in need. At the heart of this essential humanitarian endeavor is the active involvement of the community, including university students, who represent a significant segment of the potential donor pool.

While there is a global demand for blood and blood products, many regions face chronic shortages. Low- and middle-income countries often struggle to meet their blood supply needs due to insufficient infrastructure, lack of donor education, and limited resources.

International organizations like the World Health Organization (WHO) and the International Federation of Red Cross and Red Crescent Societies (IFRC) work to improve access to safe blood and advocate for voluntary, non-remunerated blood donation. The goal is to ensure all countries have sufficient supplies of safe blood.

Each country manages its blood donation system. Some countries have centralized, government-run systems, while others rely on non-profit organizations, such as the Red Cross, to collect and distribute blood. National campaigns aim to raise awareness about the importance of blood donation and encourage voluntary, regular donors. Strategies may include mobile blood drives, outreach to schools and universities, and social media campaigns.

The status of blood donation at the local level can vary widely. Some communities may have a strong culture of donation, while others may face challenges in recruiting and retaining donors. Barriers such as fear, lack of

awareness, and misconceptions may need to be addressed locally. Mindoro State University stands as an institution with a diverse and dynamic student population. These students are not only the nation's future leaders but also the potential torchbearers of the noble act of blood donation. Their awareness, attitudes, and willingness to participate in this charitable act hold immense significance in contributing to the overall blood supply, ultimately impacting public health in the region. This study was conducted to determine the awareness of students in Mindoro State University on blood donation.

Objectives of the Study

This study determined the demographic profile of the respondents in terms of age, weight, and gender. It assessed the level of awareness on blood donation of students in Mindoro State University, Calapan City Campus. Moreover, this study also determined the relationship between the variables.

METHODOLOGY

Research Design

This study employed a descriptive method of research in determining the level of awareness on blood donation among students in Mindoro State University, Calapan City Campus. The researcher employed a total of 100 respondents who were chosen through a stratified random sampling technique. The researcher decided to accept them as respondents with the belief that the role of these students in instilling and reinforcing awareness on blood donation among students is vital.

¹ Mindoro State University, Calapan City Campus, Philippines

* Corresponding author's e-mail: jrdmasongsong@gmail.com

Instrumentation

To elicit the needed information for this study, a self-made questionnaire was used to gather data. It was composed of two parts; the first part determined the demographic profile of the respondents in terms of age, gender, and weight, while the second part determined the respondent's awareness on blood donation by using the Likert Scale which includes 10-item statements. The interpretation of the computed mean for the level of awareness on blood donation has the following mean ranges with their corresponding interpretations: 3.26 - 4.00: Strongly Agree/Highly Aware; 2.51-3.25: Agree/Aware; 1.76-2.50: Slightly Agree/Moderately Aware; 1.00-1.70: Disagree/Not Aware.

Data Collection Procedure

The consent form was prepared and given to the respondents so that the research objectives are clearly understood and the respondent is willing to participate. They were oriented on the study's requirements and the confidentiality of the information to be collected among them as respondents of the study. A communication letter was also prepared to seek approval from higher authorities to distribute the instrument. Upon approval, the researcher appropriately consulted the Colleges' Program Chairperson for the administration of the questionnaire. The gathered data were checked, tallied, scored, and treated through weighted mean.

RESULTS AND DISCUSSION

Demographic Profile of the Respondents

Table 1: Frequency and Percentage Distribution of the Respondents in terms of Age

Verbal Description	Frequency	Percent	Rank
27 - above	1	1	4
24 - 26	5	5	3
21 - 23	49	49	1
18 - 20	45	45	2
Total	100	100	

Table 1 provides a clear overview of the age distribution among the 100 respondents. The majority of respondents, 49 out of 100, fall within the age range of 21-23, making it the most common age group in the survey. The second-largest group consists of individuals aged 18-20, with 45 respondents. Age groups 24-26 and 27 and above represent smaller portions of the sample, with 5 and 1 respondents, respectively. These findings highlight the concentration of respondents in the younger age brackets and the relatively limited representation of older age groups in the survey.

Table 2 presents the gender distribution among the 100 respondents in the study. The data reveals that a majority of the respondents, accounting for 70% of the total sample, are male, while the remaining 30% are female. This gender distribution highlights a significant gender

imbalance within the sample, with males being the predominant group.

Table 2: Frequency and Percentage Distribution of the Respondents in terms of Gender

Respondents	Frequency	Percent
Male	70	70
Female	30	30
Total	100	100
18 - 20	45	45
Total	100	100

Table 3: Frequency Distribution of the Respondents in terms of Weight

Kilograms	Frequency	Percent	Rank
71 – above	9	9	3
61 - 70	45	45	1
51 - 60	44	44	2
Below 50 kgs	2	2	4
Total	100	100	

Table 3 provides an overview of the weight distribution among the 100 respondents in the study, along with their corresponding genders. The data reveals that the majority of respondents, 45 out of 100, fall within the weight range of 61-70 kilograms. The second most common weight range is 51-60 kilograms, with 44 respondents falling into this category. A smaller number of respondents, 9 in total, weigh 71 kilograms or more, while just 2 respondents weigh below 50 kilograms.

Level of Awareness on Blood Donation

Table 4 illustrates the mean perception of the respondents on their level of awareness on blood donation having an overall mean of 3.04 described as aware.

Item number 3, emphasizing the crucial role of blood donation in saving lives, received the highest mean score, indicating a high level of awareness among the participants. This suggests that respondents recognize the life-saving potential of blood donation and its importance in providing essential medical treatments and surgeries. Consequently, item number 4 got the second rank having an overall mean of 3.54 described as strongly agree. This implies that the awareness that blood donation is a selfless act with the power to make a significant difference in the lives of those in need is a powerful motivator for potential donors. It not only encourages participation but also contributes to the development of a compassionate and supportive society, fosters a sense of personal fulfillment, and ensures readiness in times of crisis. This awareness is the cornerstone of a thriving blood donation culture that benefits both individuals and the community as a whole. In addition, item number 8 also got a description of strongly agree which implies that the recognition that blood donation promotes a sense of community and unity as people come together to support one another is

Table 4: Mean Perception of the Respondents in the Level of Awareness on Blood Donation

Items	Mean	Rank	Description
1. I am aware that blood donation has beneficial effects to the donor.	3.43	5	Strongly Agree
2. I understand that regular blood donation can help reduce the risk of certain cardiovascular diseases in the donor.	3.25	6	Agree
3. I recognize that blood donation plays a crucial role in saving lives by providing essential medical treatments and surgeries.	3.60	1	Strongly Agree
4. I am aware that blood donation is a selfless act that can make a significant difference in the lives of those in need.	3.54	2	Strongly Agree
5. I acknowledge that donating blood can help maintain adequate blood supplies for emergency situations and medical procedures.	3.20	7	Agree
6. I appreciate the fact that blood donation is a simple and relatively painless process that can have a profound impact on someone's life.	1.60	10	Disagree
7. I understand that blood donors are screened for various health conditions, contributing to a healthier and more informed donor population.	1.70	9	Disagree
8. I recognize that blood donation promotes a sense of community and unity as people come together to support one another.	3.49	3	Strongly Agree
9. I am aware that donating blood allows the body to regenerate new blood cells, which can have positive effects on one's overall health.	3.48	4	Strongly Agree
10. I acknowledge that blood donation centers follow strict safety and hygiene protocols to ensure the well-being of both donors and recipients.	3.11	8	Agree
Overall Mean	3.04		Aware

a powerful testament to the profound impact of this act on individuals and society as a whole. The implications of this awareness extend far beyond the act of blood donation itself and highlight the importance of fostering a culture of care and interconnectedness.

However, the statement about the perception of blood donation as a simple and relatively painless process received the lowest mean score, indicating a lack of agreement among the respondents. This suggests that there may be misconceptions or lack of information

regarding the ease and painlessness of the blood donation process.

Moreover, statement number 7 also got a disagree description which implies that the rigorous health screening process may inadvertently lead to the exclusion of potential donors who have certain health conditions or engage in higher-risk behaviors. This exclusion can lead to feelings of stigma and discrimination among individuals who are eager to contribute but are deemed ineligible.

Table 5: Summary table of the Mean Perception of the Respondents

Dependent variable	Independent Variable	r value	p value	Relationship
Level of Awareness on Blood Donation	Age	0.009933	0.491063	Not Significant
	Gender	0.004212	0.654331	Not Significant
	Weight	0.076880	0.051244	Not Significant

Relationship of Age and Level of Awareness on Blood Donation

Since the computed r value of 0.009933 is lower, considering that the health has a critical p -value of 0.491063, it, therefore, means that there is no significant relationship between the variables. The null hypothesis is therefore accepted/not rejected.

Relationship of Gender and Level of Awareness on Blood Donation

Since the computed r value of 0.004212 is lower, considering that the behavior has a critical p -value of 0.654331, it, therefore, means that there is no significant relationship between the variables. The null hypothesis is therefore accepted/not rejected.

Relationship of Weight and Level of Awareness on Blood Donation

Since the computed r value of 0.076880 is lower, considering that the study habits have a critical p -value of 0.051244, it, therefore, means that there is no significant relationship between the variables. The null hypothesis is therefore accepted/not rejected.

CONCLUSION

The findings of this study provide valuable insights into respondents' awareness regarding blood donation. The majority of the blood donor belongs to persons weighing 61-70 kilograms and the majority of the respondents are male. The gender of the respondents is not related to their level of awareness on blood donation. Generally, the

finding suggests a foundational level of awareness about blood donation among the surveyed individuals. This awareness can be used as a starting point to build upon. The respondent's awareness about the benefits they could get in donating blood encouraged them to donate blood. On the other hand, being unaware of the process and purpose of blood donation activity could lead to misinterpretations and as a result, could discourage them from being a donor even if they are legible. It is evident that, on average, the respondents are moderately aware of the significance of blood donation.

RECOMMENDATION

Blood donation organizations, healthcare providers, and educational institutions can continue to develop and strengthen awareness campaigns to ensure that this baseline awareness evolves into a more informed and active understanding of blood donation. To enhance public awareness and trust in blood donation centers, consider implementing a comprehensive and accessible information campaign that highlights the specific safety and hygiene protocols in blood donation centers and utilizing various social media channels to disseminate information about blood donation, highlighting the benefits that it provides to both the donor and recipients. Consider having educational materials and workshops that clearly outline how the screening process identifies potential health risks, contributing to a healthier donor population and ultimately safeguarding the well-being of both donors and recipients.

REFERENCES

- Charbonneau, J., & Smith, A. (2016). Giving blood: The institutional making of altruism. Routledge, Taylor & Francis Group.
- Crisostomo, S. (2012). WHO urges people to get involved in voluntary blood donations to save lives. *Philippine Star*.
- Dela Cruz, J. E. R. G., Dulin, M. A. R., Guarin, C. J. C., Marquez, M. A. U., & Romero, C. M. N. G. (2018). Factors associated with participation of university students in Metro Manila in voluntary blood donation. *College of Public Health, University of the Philippines Manila*.
- Devio, L. (2021). Red Cross to hold massive blood donation drive. *Manila Times*.
- Fernández de la Iglesia, Josefa del Carmen; Martínez-Santos, Alba-Elena; Rodríguez-González, Raquel; Cebreiro, Beatriz; Fernández-Morante, Carmen; Casal-Otero, Lorena. (2020). Service-Learning to Improve Attitudes towards Blood Donation among University Students. *Health Education Journal*, 79(7), 812-825. <https://doi.org/10.1177/0017896920927313>
- Luci, C. M. (2021). PH Red Cross calls for blood donation on World Blood Donor Day. *Manila Bulletin*.
- Majdabadi, H. A., Kahouei, M., Taslimi, S., & Langari, M. (2018). Awareness of and attitude towards blood donation in students at the Semnan University of Medical Sciences. *Electron Physician*, 10(5), 6821-6828. <https://doi.org/10.19082/6821>
- Waggiallah, H. A. (n.d.). Blood Donation Knowledge, Perceptions, and Practices during COVID-19 Pandemic: Questionnaire-Based Study in Saudi Arabia.