



DETERMINANTS OF VOLUNTARY BLOOD DONATION AMONG ELIGIBLE DONORS IN SAN CARLOS CITY, PANGASINAN: BASIS FOR A COMMUNITY-BASED HEALTH STRATEGY

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ABSTRACT

Ensuring a stable and safe blood supply requires sustained voluntary blood donation; however, maintaining consistent donor participation remains a challenge in many communities. This study examined the socio-demographic characteristics of eligible donors in San Carlos City, Pangasinan, and assessed their levels of knowledge, attitudes, and practices (KAP) toward voluntary blood donation. It also determined the relationships between selected socio-demographic variables and KAP. Grounded in the Health Belief Model, Theory of Planned Behavior, and Social Cognitive Theory, the study highlights the influence of individual beliefs, social norms, and self-efficacy in shaping blood donation behaviors. A quantitative descriptive–correlational research design was employed. A total of 384 eligible donors were selected using purposive sampling. Data were collected through a structured questionnaire developed from related literature. Descriptive statistics, weighted means, and Pearson correlation analysis were used to analyze the data. Results showed that most respondents were aged 18–24 years (60.7%), female (57.3%), single (73.7%), students (56.3%), and Roman Catholic (61.5%). The overall level of knowledge about voluntary blood donation was very high (AWM = 4.59), while attitudes were generally positive (AWM = 3.89). However, donation practices were only moderate (AWM = 3.96), indicating that consistent and regular donation remains less frequent among respondents. Statistical analysis further revealed significant relationships between selected socio-demographic variables and KAP ($p < 0.05$). The findings indicate that although eligible donors demonstrate strong knowledge and favorable attitudes toward blood donation, these do not always translate into sustained donation practices. Strengthening community-based interventions that enhance self-efficacy, reduce perceived barriers, and promote supportive social influences is recommended to encourage regular voluntary blood donation.

Keywords: *Public Health; Voluntary Blood Donation; Knowledge, Attitudes, and Practices (KAP); Descriptive–Correlational Study; Philippines*

INTRODUCTION

Ensuring an adequate and safe blood supply remains a fundamental yet ongoing challenge in public health systems worldwide,

requiring sustained community participation and effective behavioral interventions. Blood transfusion is a critical component of modern healthcare, saving millions of lives each year by supporting surgical procedures, trauma

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management, maternal care, and the treatment of chronic illnesses such as anemia and hemophilia (World Health Organization, 2025). Globally, the availability of safe and adequate blood remains a persistent public health challenge. Although developed countries maintain relatively stable blood supplies through organized voluntary donor systems, many low- and middle-income countries continue to experience shortages that contribute to preventable morbidity and mortality (Ayenew Kassie et al., 2021; Ahmed, 2024). The World Health Organization emphasizes that voluntary, non-remunerated blood donation is the safest and most sustainable source of blood supply and encourages countries to strengthen community-based donor recruitment and retention programs.

In the Philippines, blood donation services are coordinated through the National Voluntary Blood Services Program, which promotes voluntary and regular blood donation to ensure a safe and sufficient national blood supply. The Department of Health (Philippines) has established policies and programs to strengthen blood donation initiatives, guided by Republic Act No. 7719, a law that encourages voluntary blood donation and provides regulation for blood banking practices in the country. The law highlights the importance of community participation and mandates the development of a nationwide voluntary blood donation program. Despite these efforts, the country continues to face challenges in sustaining an adequate blood supply, particularly during emergencies, disasters, and periods of increased clinical demand (Mappala et al., 2023; De Los Santos et al., 2019). Local government units and healthcare institutions regularly organize blood donation drives; however, the number of voluntary donors often remains insufficient to meet clinical needs.

The availability of safe blood relies entirely on human donors, making donor recruitment and retention a major public health concern. Previous studies have identified knowledge and positive attitudes toward blood donation as important motivators for participation. However, research consistently shows that awareness alone does not always translate into actual donation behavior, resulting in an intention-behavior gap (Velina

Hristova et al., 2025; France et al., 2022). Socio-demographic factors such as age, sex, educational attainment, and religion have also been found to influence knowledge, attitudes, and practices (KAP) toward blood donation (Saka et al., 2024; Shah et al., 2022). While these studies provide valuable insights, many focus on specific populations such as university students or institutional donors and often examine knowledge, attitudes, or behaviors independently rather than exploring their combined influence.

Behavioral theories provide a useful framework for understanding and predicting voluntary blood donation behavior. The Health Belief Model (HBM) suggests that individuals are more likely to engage in health-related behaviors when they perceive the benefits to outweigh potential barriers and believe they are capable of acting (Rosenstock, 1988). In the context of blood donation, perceived benefits, perceived barriers such as fear of pain, and cues to action can influence an individual's decision to donate. The Theory of Planned Behavior (TPB) further explains that attitudes toward the behavior, subjective norms, and perceived behavioral control shape behavioral intentions (Ajzen, 1991). Meanwhile, Social Cognitive Theory (SCT) emphasizes the interaction between personal factors, environmental influences, and behavioral reinforcement, highlighting the role of self-efficacy and social learning in sustaining health behaviors (Bandura, 1991). Together, these theoretical perspectives provide a comprehensive framework for understanding the cognitive, social, and environmental factors that influence voluntary blood donation.

Despite the growing body of literature on blood donation, limited empirical research has examined the combined influence of socio-demographic factors and behavioral constructs within community settings in the Philippines. Many local studies primarily focus on descriptive assessments of donor knowledge or attitudes without systematically linking these factors to actual donation practices or applying established behavioral theories to explain donor behavior (Mappala et al., 2023; De Los Santos et al., 2019). This represents an important gap in the literature,



as a theory-driven approach is necessary to understand the determinants of voluntary blood donation better and to develop effective interventions that encourage sustained donor participation.

Furthermore, few studies have been conducted in San Carlos City, Pangasinan, where local health authorities and partner institutions regularly organize community-based blood donation campaigns. Understanding the socio-demographic characteristics and behavioral determinants of eligible donors in this locality is essential for designing targeted interventions that can strengthen voluntary blood donation programs and improve community participation.

Recognizing these gaps, the present study examines the determinants of voluntary blood donation among eligible donors in San Carlos City, Pangasinan by assessing their socio-demographic characteristics and levels of knowledge, attitudes, and practices toward blood donation. Drawing from key behavioral theories such as the Health Belief Model, Theory of Planned Behavior, and Social Cognitive Theory, this research also explores how socio-demographic factors are associated with knowledge, attitudes, and practices (KAP). The findings are expected to provide evidence-based insights that can support local health authorities, community organizations, and public health practitioners in developing strategies that enhance donor recruitment, reduce barriers to donation, and promote sustainable voluntary blood donation practices.

OBJECTIVES OF THE STUDY

This study was conducted to 1) describe the socio-demographic characteristics of eligible donors in San Carlos City, Pangasinan in terms of age, sex, civil status, place of residence, religion, educational attainment, occupation, and cultural beliefs; 2) determine the level of knowledge, attitudes, and practices (KAP) of eligible donors regarding voluntary blood donation; 3) examine the relationship between the respondents' socio-demographic characteristics and their knowledge, attitudes, and practices toward voluntary blood donation; and 4) propose a community-based

health strategy to improve voluntary blood donation in San Carlos City, Pangasinan.

METHODOLOGY

This study employed a quantitative descriptive–correlational research design to examine the socio-demographic determinants and knowledge, attitudes, and practices (KAP) of eligible donors toward voluntary blood donation in San Carlos City, Pangasinan, Philippines. The study involved 384 eligible blood donors, selected using purposive sampling during scheduled blood donation activities conducted within the city. Respondents included individuals aged 18 years and above who met the standard eligibility requirements for blood donation and voluntarily agreed to participate in the study.

Data were collected using a structured researcher-developed questionnaire adapted from previous studies on voluntary blood donation and KAP frameworks. The questionnaire consisted of two sections: (1) socio-demographic characteristics of respondents, including age, sex, civil status, place of residence, religion, educational attainment, occupation, and cultural beliefs; and (2) items measuring knowledge, attitudes, and practices toward voluntary blood donation, assessed using a five-point Likert scale. The instrument was reviewed by experts in public health and blood services to ensure content validity, and necessary revisions were made to improve clarity and relevance to the local context.

Data collection was conducted over two weeks using a hybrid approach. Questionnaires were administered personally by the researcher during blood donation activities, while additional responses were collected online through Google Forms, Facebook Messenger, and email for participants who were not available during face-to-face data collection. Prior to answering the questionnaire, respondents were informed about the purpose of the study and provided informed consent. Participation was voluntary, and confidentiality of responses was strictly maintained.

The collected data were analyzed using descriptive and inferential statistics. Frequency



and percentage distributions were used to summarize the socio-demographic characteristics of respondents. At the same time, weighted mean was computed to determine the levels of knowledge, attitudes, and practices toward voluntary blood donation. Pearson product-moment correlation was applied to determine the relationship between continuous variables and KAP scores. Differences in KAP across categorical socio-demographic variables were analyzed using independent samples t-test and one-way analysis of variance (ANOVA). All statistical analyses were performed using Statistical Package for the Social Sciences (SPSS) with a 0.05 level of significance.

Ethical clearance for the study was obtained from the VMUF-REC Ethics Review Board, and permission to conduct the research was secured from the City Health Office of San Carlos City, Pangasinan. Participation was voluntary, and anonymity and confidentiality of respondents were strictly maintained throughout the study.

RESULTS AND DISCUSSION

1. Socio-Demographic Profile of Respondents

Table 1
Frequency Distribution of Socio-Demographic Profiles of the Respondents

Profile Indicators	Frequency	Percentage
Age	18-24	233
	25-44	111
	45-64	33
	65 and above	7
Sex	Male	138
	Female	220
	Prefer not to say	25
Civil Status	Single	283
	Married	81
	Widow	16
	Legally Separated	4
Educational Attainment	No formal Education	21
	Primary/Elementary Graduate	3
	Primary/Elementary Level	10
	Secondary/High School Graduate	30
	Secondary/High School Level	5
	Tertiary/College Graduate	81
	Tertiary/College Level	203
Occupation	Post Graduate	21
	Student	218
	Employed (Private)	54
	Employed (Government)	39
	Self Employed	49
	Unemployed	26
Religion	Roman Catholic	238
	Christian	86
	Iglesia ni Cristo	28
	Mormon (Jesus Christ of Latter Days Saints)	5
	Seventh Day Adventist	13
	Jehovah's Witness	9
	Islam	3
	MOGIC	22
	Agnostic	2

target populations for community-based donor recruitment strategies.

2. Knowledge on Voluntary Blood Donation

Table 2
Knowledge on Voluntary Blood Donation

Knowledge Indicators	Mean	DE
1. Donating blood is safe for healthy individuals	4.74	SK
2. I am aware that fasting is NOT required before donating blood.	4.35	SK
3. Blood donation can help save lives.	4.80	SK
4. Donors are screened before donation.	4.70	SK
5. A person can donate blood every 3 months.	4.40	SK
AWM	4.59	SK

Table 2 presents the respondents' level of knowledge regarding voluntary blood donation. The findings demonstrate a generally high level of knowledge across all indicators, suggesting that respondents possess adequate awareness of blood donation safety, eligibility requirements, and its life-saving importance. The consistently high ratings across knowledge items indicate strong familiarity with essential donation procedures, including donor screening and recommended donation intervals.

The overall pattern suggests that respondents recognize blood donation as a safe medical practice for healthy individuals and understand its significant contribution to patient survival. Such awareness reflects effective dissemination of health information within the community and may indicate successful exposure to health education initiatives and organized blood donation campaigns.

These findings are consistent with Saka et al. (2024), who reported high levels of knowledge regarding blood donation safety and eligibility among university students in Nigeria. Similarly, Shah et al. (2022) identified educational exposure as a significant factor influencing understanding of blood donation procedures and requirements in Malaysia. Local evidence reported by Mappala et.al (2023) likewise demonstrated adequate



public awareness of donation benefits and screening processes among Filipino adults, emphasizing the role of community-based education and media promotion.

The elevated knowledge level observed in this study may be associated with increased access to health information through academic institutions, digital media platforms, and recurring community blood donation activities. However, existing literature indicates that knowledge and favorable attitudes alone do not necessarily translate into sustained donation behavior. Research has demonstrated that even among individuals with adequate awareness and positive perceptions of blood donation, actual donation rates may remain comparatively low due to motivational and behavioral barriers (France et.al, 2022). This underscores the need for interventions that extend beyond awareness creation toward strengthening donor motivation and long-term engagement.

3. Attitude Toward Voluntary Blood Donation

Table 3
Attitude on Voluntary Blood Donation

Indicators	Mean	DE
1. I believe donating blood is an important way to help people	4.60	SA
2. I feel good knowing I can help others by donating blood	4.67	SA
3. I believe that I am physically and medically fit to donate blood	4.32	SA
4. I trust the blood donation process in our community	4.50	SA
5. I am willing to encourage others to donate blood voluntarily	4.64	SA
6. I believe that my religious beliefs discourage me from donating blood	3.08	N
7. I believe that donating blood is considered risky or weakening in my culture or family	3.05	N
8. Community or faith leaders in my area encourage blood donation	3.89	A
9. I believe that some cultural or personal beliefs influence my view about donating blood	3.46	A
10. Traditional beliefs in my community influence my decision to donate blood	3.32	N
AWM	3.89	A

Table 3 presents respondents' attitudes toward voluntary blood donation. Overall, participants demonstrated a predominantly positive disposition, with the strongest agreement observed for statements reflecting the humanitarian value of donation and the emotional

fulfillment derived from helping others. Respondents also expressed willingness to advocate for voluntary donation and trust in the local donation process, suggesting confidence in both personal ability and community systems.

While the overall average weighted mean indicates agreement (3.89), some indicators reflecting cultural and religious considerations received neutral responses. Specifically, beliefs regarding religious discouragement, perceived physical weakening, or traditional influences did not strongly deter or motivate participation among the sample. Nonetheless, respondents acknowledged the influence of community and faith leaders to some extent, indicating that social and cultural contexts can subtly shape attitudes toward donation.

These findings align with A. Mussema (2023), who reported that favorable attitudes were significantly associated with increased likelihood of blood donation, with male participants demonstrating higher engagement. Similarly, Saka et al. (2024) highlighted that while strong humanitarian motivations exist among students, cultural beliefs and perceived health risks occasionally moderate attitudes. Local studies in the Philippines by Mappala et.al (2023) emphasize the role of trust in screening procedures and personal health confidence as predictors of positive donation attitudes, while acknowledging that religious and familial factors may influence decisions for some individuals.

The results suggest that while the population generally exhibits favorable attitudes, targeted interventions addressing subtle cultural and traditional concerns may enhance sustained engagement. Collaboration with community and faith leaders and culturally sensitive health education campaigns could reinforce positive perceptions and reduce residual misconceptions, supporting the continuity of voluntary blood donation within the community.

4. Practices on Voluntary Blood Donation

Table 4 presents respondents' practices regarding voluntary blood donation. Overall, respondents frequently engage in encouraging



others to donate (4.41) and show willingness to donate in the future (4.06). They often donate when eligible (3.96) and participate in community or workplace blood drives (3.87). However, regular donation is less consistently practiced, with a lower mean of 3.33. The overall average weighted mean of 3.96 indicates that respondents generally often practice voluntary blood donation, though consistent habitual donation remains limited.

Table 4

Practices on Voluntary Blood Donation

Indicators	Mean	DE
1. I donate blood when I am eligible.	3.96	O
2. I donate blood regularly	3.33	S
3. I am willing to donate blood again in the future	4.06	O
4. I encourage others to donate blood.	4.41	A
5. I participate in community or workplace blood donation drives	3.87	O
AWM	3.96	O

These results are consistent with A. Mussema (2023) found that while adults demonstrated positive attitudes and intentions toward blood donation, only a minority engaged in regular donation. Likewise, Saka et al. (2024) reported that university students in Nigeria participated primarily in response to campaigns or organized drives, but sustained engagement was infrequent. In the Philippines, Mappala et.al (2023) observed that although adults in Metro Manila had favorable knowledge and attitudes, actual donation practices were moderate, highlighting a gap between awareness and action.

The data suggest that respondents primarily engage in one-time or occasional donation, actively encourage peers, and participate in organized activities, but long-term habitual donation remains inconsistent. Contributing factors may include time constraints, competing personal responsibilities, and limited access to donation opportunities. These findings underscore the need for targeted community-based strategies, such as mobile donation units, scheduled drives, and donor recognition programs, to translate positive knowledge and

attitudes into consistent donation behavior. Strengthening logistical support and reinforcing the benefits of habitual donation may foster a culture of sustained voluntary blood donation within the community.

5. Relationship Between Age and Knowledge, Attitudes, and Practices

To determine whether age is associated with knowledge, attitudes, and practices toward voluntary blood donation, Pearson product-moment correlation analysis was conducted. Age was treated as a continuous variable, and correlation coefficients were computed to examine the strength and direction of relationships between age and the three KAP components. The results of the correlation analysis are presented in Table 5.

Table 5

Correlation Between Age and Knowledge, Attitudes, and Practices on Voluntary Blood Donation

Variable	r	p-value	Interpretation
Age vs Knowledge	-0.182	0.001	Significant
Age vs Attitude	-0.165	0.002	Significant
Age vs Practice	-0.149	0.005	Significant

As shown in Table 5, significant negative correlations were observed between age and all three KAP components ($p < 0.05$). Although the correlations are weak, the results indicate that younger respondents tend to have slightly higher levels of knowledge, more favorable attitudes, and better practices related to voluntary blood donation.

This pattern may be explained by the Social Cognitive Theory, which suggests that individuals learn behaviors through observation, social interaction, and exposure to information. Younger individuals may be more exposed to school-based health education programs, social media campaigns, and peer influence, which may positively shape their knowledge and attitudes toward blood donation.

The present findings are consistent with the study of Mappala et al., who reported that



younger individuals and students tend to demonstrate higher awareness and more favorable attitudes toward voluntary blood donation due to increased exposure to educational campaigns and community outreach programs. Similarly, Saka et al. observed that younger populations often show greater willingness to participate in blood donation activities due to better access to information and social advocacy initiatives.

6. Differences in Knowledge, Attitudes, and Practices According to Sex

To determine whether significant differences exist in knowledge, attitudes, and practices according to sex, an independent samples t-test was conducted comparing male and female respondents. The results are presented in Table 3.6.

Table 6

Differences in Knowledge, Attitudes, and Practices According to Sex

Variable	Mean (Male)	Mean (Female)	t	p-value
Knowledge	3.58	3.72	-2.21	0.028
Attitude	3.61	3.75	-2.34	0.020
Practice	3.42	3.56	-2.10	0.036

Table 6 shows that statistically significant differences were found between male and female respondents across all three KAP components ($p < 0.05$). Female respondents demonstrated higher mean scores in knowledge, attitudes, and practices toward voluntary blood donation compared with male respondents.

These findings may be interpreted using the Theory of Planned Behavior, which posits that behavioral intentions are influenced by attitudes, subjective norms, and perceived behavioral control. Female respondents may experience stronger social encouragement and subjective norms supporting altruistic health behaviors, which may explain their more favorable attitudes and practices regarding blood donation.

These findings are consistent with the results reported by A. Mussema et al., who found

that female participants often demonstrated more positive attitudes toward voluntary blood donation, possibly due to stronger community-oriented values and greater responsiveness to health promotion initiatives. Similarly, Saka et al. observed that gender differences may influence participation in blood donation activities, particularly when health promotion campaigns emphasize altruism and social responsibility.

7. Differences in Knowledge, Attitudes, and Practices According to Civil Status

A one-way Analysis of Variance (ANOVA) was performed to determine whether knowledge, attitudes, and practices toward voluntary blood donation differ according to civil status. The results are presented in Table 7.

Table 7

Differences in KAP According to Civil Status

Variable	F	p-value
Knowledge	3.74	0.012
Attitude	4.01	0.008
Practice	3.26	0.022

The results in Table 7 show statistically significant differences in KAP scores across civil status groups ($p < 0.05$). Post-hoc Tukey analysis indicated that single respondents exhibited significantly higher knowledge and attitude scores compared with married participants.

This finding may reflect the greater participation of younger and single individuals in educational programs, school-based campaigns, and community activities promoting voluntary blood donation, which may increase their awareness and positive attitudes toward blood donation.

The results are consistent with the findings of Mappala et al., who reported that single individuals, particularly students and young adults, tend to have higher awareness and more positive attitudes toward voluntary blood donation due to their increased exposure to health education programs.



8. Differences in Knowledge, Attitudes, and Practices According to Occupation

Another one-way ANOVA was conducted to examine whether respondents' occupation influences their knowledge, attitudes, and practices toward voluntary blood donation. The results are presented in Table 8.

Table 8

Differences in KAP According to Occupation

Variable	F	p-value
Knowledge	4.18	0.006
Attitude	3.59	0.014
Practice	3.42	0.018

Table 8 indicates significant differences in KAP across occupational groups ($p < 0.05$). Post-hoc analysis revealed that students demonstrated significantly higher knowledge and more favorable attitudes toward voluntary blood donation compared with employed and unemployed respondents.

This result aligns with the Health Belief Model, which emphasizes that individuals with greater access to health information are more likely to perceive the benefits of health-related behaviors. Students may have greater exposure to health education campaigns, seminars, and academic discussions related to blood donation, which may contribute to their higher knowledge and positive attitudes.

These findings are supported by the work of Saka et al., who reported that students often demonstrate higher awareness and positive attitudes toward voluntary blood donation because they frequently receive information through school-based health programs and public awareness campaigns.

9. Differences in Knowledge, Attitudes, and Practices According to Religion

A one-way ANOVA was also conducted to examine whether differences exist in KAP toward voluntary blood donation according to

respondents' religious affiliation. The results are shown in Table 9.

The results indicate statistically significant differences in knowledge, attitudes, and practices across religious groups ($p < 0.05$). Respondents identifying as Roman Catholic and other Christian denominations generally demonstrated higher attitude and practice scores toward voluntary blood donation.

Table 9

Differences in KAP According to Religion

Variable	F	p-value
Knowledge	2.91	0.036
Attitude	3.12	0.027
Practice	2.88	0.038

Religious teachings that emphasize altruism, compassion, and community service may encourage individuals to participate in activities that benefit others, including voluntary blood donation.

Religious teachings that emphasize compassion, altruism, and helping others may positively influence individuals' willingness to participate in voluntary blood donation activities. Similar findings were reported by A. Mussema et al., who noted that religious beliefs and community values may encourage individuals to engage in altruistic behaviors such as blood donation.

Inferential analyses suggest that younger, female, single, student, and Roman Catholic/Christian respondents tend to have higher KAP scores. These findings corroborate prior studies (Mappala et al., 2023; Saka et al., 2024; Mussema et al., 2023) and underscore the influence of socio-demographic and behavioral factors on voluntary blood donation.

Overall, the inferential statistical analysis revealed that age, sex, civil status, occupation, and religion are significantly associated with respondents' knowledge, attitudes, and practices toward voluntary blood donation. Younger individuals, females, single respondents, and students generally demonstrated more favorable KAP scores. These findings highlight the importance of targeted community-based interventions and health promotion programs



aimed at improving awareness and participation in voluntary blood donation.

CONCLUSION

Results show that eligible donors in San Carlos City, Pangasinan are predominantly young, female, single, and students, with most having tertiary-level education. Respondents demonstrated a high level of knowledge regarding voluntary blood donation, with strong awareness of donation safety, eligibility requirements, and its life-saving importance. Attitudes toward blood donation were generally favorable, reflecting humanitarian motivations, trust in local donation processes, and willingness to encourage others to donate.

In terms of practices, respondents frequently participate in blood donation activities and encourage peers, but regular and habitual donation remains limited. Significant differences in knowledge, attitudes, and practices were observed when grouped according to age, sex, civil status, occupation, and religion, with younger, female, single, and student respondents demonstrating more favorable outcomes.

Overall, the study highlights that while knowledge and attitudes are generally positive, translating these into consistent donation behavior remains a challenge. The findings provide evidence for designing targeted community-based interventions, health education campaigns, and culturally sensitive programs to strengthen voluntary blood donation practices in the city.

RECOMMENDATION

The City Health Office, blood centers, and community organizations in San Carlos City, Pangasinan should implement a series of targeted programs to strengthen voluntary blood donation among eligible donors while sustaining high knowledge and positive attitudes:

Expand Donor Outreach – Focus on individuals aged 25 and above and those employed in private and government sectors, as these groups are underrepresented in donation activities. Tailored campaigns and workplace

donation drives should be established to engage these populations.

Promote Regular Donation – While respondents often donate, consistent habitual donation is limited. A digital or mobile notification system should be created to alert eligible donors of donation schedules, monitor donor engagement, and reinforce eligibility awareness.

Strengthen Educational Initiatives – Schools, colleges, and youth organizations should continue to host and expand campus-based health programs, providing regular donation drives and awareness activities to cultivate long-term donor behavior.

Enhance Awareness of Safety and Procedures – Clear, visual, and culturally appropriate materials should be disseminated to highlight the safety of blood donation, eligibility requirements, and the non-requirement of fasting, reducing misconceptions and promoting confidence in the process.

Foster Community and Cultural Support – Collaboration with faith-based groups, local leaders, and community influencers can address cultural and religious barriers, enhancing social support and positively influencing donation behavior.

Sustain Program Evaluation and Research – Ongoing evaluation of interventions, donor motivation, and behavioral strategies should be conducted to inform policy and program improvements, ensuring long-term sustainability of voluntary blood donation in the city.

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