Voluntary and Non-Voluntary Blood Donations Employees at Sentosa Mother and Child Hospital Makassar

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Abstract

The goal of this study is to determine whether or not the staff of Sentosa Mother and Child Hospital in Makassar voluntarily donate blood. Sentosa Mother and Child Hospital in Makassar hosted this study. This study used a number of different research strategies. 53 participants make up the sample size for this study. According to the results of this research, According to the data, a total of 48 respondents rated their level of awareness as excellent, while 50 respondents rated their level of knowledge as excellent, and 51 respondents rated their level of understanding of the reasons why people do not donate as excellent. Research The majority of adults are well-informed, have positive views about blood donation, and regularly give blood on their own will. Lack of nursing during pregnancy, advanced age, sickness, and lack of free time are among reasons why people do not give blood. There is also a statistically significant relationship between gender and attitude level and blood donation behavior in this research. Local, national, and transfusion organizations need to implement measures to improve the education of individuals and inspire them to voluntarily provide blood. The study's findings on what makes people more or less likely to give blood are timely in light of the current epidemic. We need to address them to increase blood donations in this scenario.

Keywords: Blood Donor, Voluntary, Hospital, Employee

Received : July 17, 2023
Received in Revised: August 5, 2023
Accepted: August 29, 2023

Introduction

When severe blood loss occurs, during major surgery, or due to a haematological disorder, a blood transfusion is an essential intervention. There is a critical public health need in the field of transfusion medicine to both increase donor recruitment and ensure a steady supply of safe blood products. Surrogate donors (those who give blood on behalf of a family member or acquaintance as a requirement) are one non-voluntary source of blood donations. before voting) and legal contributors (those who donate for statutory reasons, such getting a driver's license). Additionally, commercial blood donation is possible thanks to the efforts of compensated donors (Kleinman, 2012). Other hospitals in Saudi Arabia, such as those not affiliated with the MOH, provide their own blood transfusion services. Non-voluntary blood donations are the norm in impoverished countries and this is also true in Saudi Arabia (Wake, 1998). Non-voluntary blood donations accounted for 85.2% of the donor pool between 1992 and 1998, and 81% between 1996 and 2000, according to the AlKhobar research (Ankra-Badu, 2001). Most hospitals have a "No Blood, No operation Policy," which requires patients to make arrangements for blood donations from friends and family in advance of any elective operation (Alfouzan, 2014). Depending on the source, estimates place the percentage of non-voluntary gifts made by Saudi contributors anywhere from 15% to 64%.Due to contributors' fickleness and lack of long-term commitment, monetary gifts are less than optimal (Sanchez, 2001).There might be moral issues with mandating surrogate contributions, as well.Those close to the

DOI: https://doi.org/10.47667/ijpasr.v4i2.224

sufferer may feel pressured to provide blood, yet they may not want to risk social ostracism by disclosing potential health problems.The potential for contaminated blood products may rise as a result.Voluntary sourcing is related with the safest product quality, according to the available research. infected10 and thus the WHO and the Saudi Arabian Ministry of Health are working toward a system of voluntary blood donation (Thomson, 1998).

Several research in Saudi Arabia have investigated what influences people to give blood, and their findings are generally in line with those from other nations (Gillespie, 2002). Donors are more likely to be male, middle-aged (30-50), middle-income, married, and college-educated than the general population (Alam, 2004). Not asking people to give is the most prevalent reason they don't. Half of 316 non-donors in a study said they had been requested to donate blood; among the reasons they gave for not doing so were reluctance, health concerns, and a lack of free time, among others (Abdel, 2011). Other stated obstacles to giving blood include inaccessible places, the fear of catching illnesses, and the fear of having to give to family members in the future (Alfouzan, 2014).

For groups of donors with unusual blood types or low-risk status for infection, donor retention is a topic for additional investigation when developing a blood procurement plan. The average age and education level of repeat donors tend to be greater than those of first-time donors. Donors are more likely to give blood again if they had a positive donation experience and felt better about themselves afterwards (Ownby, 1999). Donors' perspectives on the effectiveness of incentives such free health screenings, blood credits, paid time off, and monetary recompense have been the subject of several studies. hope to give again in the future. The extent to which this incentive works seems to depend on the traits of the giver. When compared to younger donors, older donors and former donors are more likely to report feeling the effects of compensatory treatments (Sanchez, 2001).

Because of their line of work, doctors should know firsthand how vital blood donations are and how little the dangers are throughout the donation procedure. As a result, they should be a good supply of blood donors, however observational evidence indicates such is not the case. Only 3.1% of research participants were medical professionals, according to recruitment at university hospitals (Kanner, 2009). In a study of regional universities, students majoring in medicine and science were no more likely to give blood than those majoring in any other field. However, among medical professions, physicians stand out as the most probable donors (Gilani, 2007). Research on the factors that discourage doctors from giving blood has mostly focused on third-world countries. Not being asked, aversion to needles or pain during the operation, inability to donate, and reluctance to reveal one's medical history are cited as the most common reasons for why people do not give blood. This description has piqued the researcher's interest in studying the subject of blood donation among the staff of Sentosa Mother and Child Hospital in Makassar, Indonesia, both voluntarily and involuntarily.

Methods

The study was carried out the Sentosa Mother and Child Hospital in Makassar. The research conducted in this study used a mixed methods approach, including both quantitative and qualitative methodologies. The quantitative aspect utilized an observational study using a Cross Sectional Study technique, while the qualitative component employed a phenomenological study. The participants in this research consist of individuals who are employed. The study sample size consists of 53 individuals. The sample methodology used in this research is known as Total sample. The data gathering process included the use of questionnaires and in-depth interview protocols as the primary tools. A quantitative research approach using univariate analysis was used to get a comprehensive understanding of the research topic. This included

DOI: https://doi.org/10.47667/ijpasr.v4i2.224

describing each variable utilized in the study as well as the characteristics of the respondents. The univariate analysis included the examination of the respondents' characteristics and the study variables using descriptive analysis. The present study employs a quantitative research approach that incorporates triangulation of sources and procedures.

Results and Discussion

Quantitative Analysis

Table 1. Characteristics of Research Respondents at the Sentosa Mother and Child Hospital, Makassar in 2023

Characteristics	Research Sample	
	N	%
Age		
20-30	10	18.9
31-40	8	15.1
41-50	16	30.2
>51	19	35.8
Total	53	100.0
Gender		
Man	20	37.7
Women	33	62.3
Total	53	100.0
Last education		
Bachelor	14	26.4
Master	39	73.6
Total	53	100.0
Donation History		
<3 Times	15	28.3
Infinity	38	71.7
Total	53	100.0
Donation Total in Hospital		
<3 Times	27	50.9
Infinity	26	49.1
Total	53	100.0

Source: Primary Data

Table 1 shows that the majority of respondents are at the age level > 51 years, namely 19 respondents (35.8%). In terms of gender, the majority of respondents were female, namely 33 respondents (73.6%). Judging from their recent education, most of the respondents had master's degrees, namely 43 respondents (52.4%). Judging from the history of donors, some of the respondents were infinite, namely 38 respondents (71.7%) and seen from the number of donors at the Sentosa Makassar Mother and Child Hospital, namely Infinite, as many as 26 respondents (49.1%).

Table 2. Donation History by Gender at the Sentosa Mother and Child Hospital in Makassar in 2023

Gender	Donation History	Total

DOI: https://doi.org/10.47667/ijpasr.v4i2.224

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ISSN: 2709-0248

	Donation		Not Donation			
	n	%	n	%	N	%
Man	13	65.0%	7	35.0%	20	100.0
Women	16	48.5%	17	51.5%	33	100.0
Total	29	54.7%	24	45.3%	53	100.0

Source: Primary Data

Table 2 shows that out of a total of 53 respondents, there were 13 men (65.0%) who donated blood for men and 16 women (48.5%) who did not donate blood, 7 men (35.0%) and women who did not donate as many as 17 people (51.5%).

Table 3. Research Variables at the Sentosa Mother and Child Hospital in Makassar in 2023

Variable	**Research Sample**	
	N	**%**
Awareness		
Good	48	90.6
Not Good	5	9.4
Total	53	100.0
Knowledge		
Good	50	94.3
Not Good	3	5.7
Total	53	100.0
Reasons for Not Donating		
Good	51	96.2
Not Good	2	3.8
Total	53	100.0

Source: Primary Data

Table 3 shows that some respondents stated that the variable of awareness was in the good category of 90.6%, namely 48 respondents, the variable of knowledge was in the good category of 94.3%, namely 50 respondents and the variable of reasons for not donating was in the good category of 96.2%, namely 51 respondents.

Qualitative Analysis

Based on qualitative research with interviews with respondents obtained as follows:

> *"The reason I didn't donate my blood was because my weight did not meet the requirements and in my opinion it can cause weakness or anemia, with a process that is sometimes long or sometimes fast" (A, Employee).*
>
> *"The reason I don't donate my blood is because I'm older, so I can't donate anymore" (B,C, Employee).*
>
> *"The reason I don't donate my blood is because I don't have time or sometimes I'm in a rush because I have other important business to do" (D, Employee).*
>
> *"The reason I don't donate my blood is because I have the reaction type so it's not possible" (E, Employee).*

DOI: https://doi.org/10.47667/ijpasr.v4i2.224

"The reason I don't donate my blood is because I'm currently breastfeeding a baby, so I can't" (F, Employee).

"The reason I don't donate my blood is because I have low HB (Anemia), so I don't meet the requirements as a donor" (G, Employee).

Based on the results of the interview above regarding the reasons employees cannot donate blood, due to illness (Anemia, etc.), age which is not possible, not having time, type of reaction in the body, and breastfeeding mothers. Each Blood Transfusion Unit (UTD) has responsibility for the availability, quality and safety of blood and blood components drawn, as well as guaranteeing that there is no danger to blood donors during the blood collection process, recipients of blood and blood components taken Fulfillment of these criteria is assessed through a health questionnaire and limited physical examination.The aim is to ensure the donor's good health condition and identify any risk factors that may affect the safety and quality of donated blood (Republic of Indonesia's Minister of Health, 2015).

Some donor rejections due to not meeting the donor selection criteria can be temporary or permanent. It depends on the condition of the donor eg donors under the influence of alcohol are not allowed to donate blood until they recover, If the influence of illegal drugs is permanently denied, abnormal conditions identified during the interview and not covered by the donor selection criteria. The general selection criteria for donors include: age, weight, blood pressure, pulse, body temperature, hemoglobin, interval since the last donation, appearance of the donor, health history and lifestyle-related risks (Republic of Indonesia's Minister of Health, 2015).

Blood transfusions provide essential and life-saving assistance to millions of people annually (Loua, 2019). Patients with severe anemia due to trauma, accidents, pregnancy difficulties, major surgery, transplants, congenital hemoglobin abnormalities, or immune-deficiency illnesses should have regular blood transfusions (Dobson, 2015).

Donating blood involves the voluntary collection of a patient's blood for later use in transfusions (Daradjatun, 2019). Blood transfusions may include the transfer of either whole blood or individual blood components. Blood is collected from voluntary blood donors and replacement blood donors; the requirement for donors' desires begins in the late teens so that a habit is developed and a social spirit is fostered. Those who give blood anonymously for the benefit of those in need are considered "voluntary blood donors" (Elfazia, 2019). People that donate blood, plasma, or other blood components out of the goodness of their hearts and not for financial gain are considered voluntary donors (Depkes, 2001).

Donation rates are an excellent measure of a country's overall blood supply. In 2018, the World Health Organization (WHO) estimated that more than 118.5 million units of blood were given worldwide, with donors from developed countries providing approximately 40% of the total. Although over 90% of blood supplies in 79 countries come from voluntary unpaid blood donors, 54 nations get more than half of their blood supply from family/replacement or paid donors (WHO, 2022). The World Health Organization found that sixty countries on average collected less than ten blood donations for every thousand people. Thirty-four of these countries are part of the Who is African Region. It is still a challenging worldwide problem, despite the fact that the volume of voluntary unpaid contributions has expanded over the previous several decades. Blood donation rates remain low in Ethiopia, according to a recent research (Alemayehu, 2020). So, if we can get more individuals to give blood on their own time, we can increase the supply of healthy blood at hospitals and clinics.

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The American Red Cross used the survey results to make the point that almost everyone has a personal connection to someone who has required blood transfusions. The Australian Red Cross estimates that 80% of the population will need a blood donation at some time in their lives, while only 3% of the population donates blood each year. 52% of Canadians, according to a poll (WHO, 2010), have either had a blood transfusion themselves or know someone who has. The Indonesian Red Cross is unable to meet the country's annual blood demand of 4.5–4.8 million blood bags due to its limited resources, but it is able to provide enough blood components—up to 3 million bags' worth—to meet 70% of the blood needs of the country's population in 520 cities and provinces.

Previous research has revealed that factors such as age, sex, education level, depth of knowledge, and attitude influence the frequency with which people voluntarily donate blood (Getie, 2021; Burzynski, 2016). Increasing national and local voluntary blood donation programs and properly managing donors is the only method to assure an adequate supply of blood (WHO, 2022). There seems to be a lack of data on the frequency of voluntary blood donations and associated variables for this particular research.

The majority of responders (n = 19; 35.8%) are middle-aged or older than 51, according to the study's findings. Out of the total number of responses, 33 (or 73.6%) were women. To ensure the survival of a species throughout time, sexual reproduction creates distinct genders within that species (Danang S, 2011). Women take more responsibility for their health and have better scores on a lifestyle measure for improving health (Muklas, 1997). Recent education levels indicate that the majority of responders (52.4%) have master's degrees. According to educational theorist Lawrence Green, education is any organized endeavor to persuade others to behave in ways desired by educational actors (whether these actors be individuals, organizations, or communities). The extent to which an individual comprehends a body of information is also related to his or her educational background (Green, L.W., 2000). According to Notoatmojo, one's education degree is a major factor in how well they grasp new information (Muhibbin, 2002). How quickly and easily someone learns new information depends on their educational background (Muklas, 1997).

As a result, those respondents aged 51 and over make up the largest age group (19/48 = 35.8%). Out of the total number of responses, 33 (or 73.6%) were women. Recent education levels indicate that the majority of responders (52.4%) have master's degrees. According to the number of donors at the Sentosa Makassar Mother and Child Hospital, as many as 26 respondents (49.1%), and the number of donors in the past, 38 respondents (71.7%). More men and women are donating blood, which is a big deal.

According to the number of donors at the Sentosa Makassar Mother and Child Hospital, as many as 26 respondents (49.1%), and the number of donors in the past, 38 respondents (71.7%). Regular blood donors typically give once every three months, with a minimum interval of eight weeks and a maximum of five times per year for male donors (Depkes, 2001). Regular voluntary blood donors will have their health checked automatically every three months; this is because serological examinations and blood screening tests are performed on every voluntary blood donor as though they were a new donor.

People are willing to donate blood if given the opportunity, hence the process of acquiring blood donors is separated into three categories: paid blood donors, replacement blood donors, and volunteer blood donors. Blood donations are for family members and should not result in financial gain (Sonia, 2021). The effect on paying donors is risky if someone in need of blood contacts paid donors who are unsure about the blood's quality. Transfusion-transmitted illnesses such as Hepatitis, malaria, syphilis, HIV/AIDS, etc. are present in the patient's blood.

DOI: https://doi.org/10.47667/ijpasr.v4i2.224

Many individuals are still unmotivated to become donors because they are unaware of the positive effects that donors might have on their health. Increase the values of solidarity and social care in the community and provide education on human values, morals, and ethics of life social groups that help each other and help each other (Daradjatun, 2008). However, not everyone is eligible to donate; donors must meet certain criteria before they can give blood, including being between the ages of 17 and 60, weighing at least 45 kilograms, having a blood pressure reading of 100 to 180 mm Hg on the systolic side and 60 to 80 mm Hg on the diastolic side, signing a registration form, and passing tests for weight, hemoglobin, blood type, and physical examination (PMI, 2008).

Worldwide, there is a severe shortage of blood for transfusions right now. When undergoing extensive medical or surgical operations, many patients might not have access to the safe blood transfusions they need. To increase the effectiveness of blood drives, education and awareness campaigns aimed towards adults are essential.

Blood is the most often given tissue in the medical field and may save lives when handled appropriately. The swift and astonishing conquest and success of modern medical research has not yet resulted in a perfect replacement. Only human people are capable of producing blood, therefore blood donation is the only option to acquire enough blood to fulfill emergency needs in situations such as car accidents, difficult pregnancies and deliveries, a wide range of anemic illnesses, and surgical crises. Donating blood is the process of providing blood for transfusion treatment. It is beneficial for the blood bank, the community, the health of the donor, and the health of the receiver.

Blood transfusions may spread infectious illnesses, thus it is important to get donations from healthy people. In order to ensure the quality of the blood supply, it is necessary to increase the number of regular, unpaid blood donors who give blood at least twice a year. It is no surprise that many countries are constantly evaluating their blood donor strategies in light of the current demand for blood and its products and, in some cases, the reduction in the available eligible donors due to the stringent criteria in place to ensure blood safety. [3] The National policy on blood advocates that blood donation should be solely voluntary and that donors should not be moribund.

According to the data, a total of 48 respondents rated their level of awareness as excellent, while 50 respondents rated their level of knowledge as excellent, and 51 respondents rated their level of understanding of the reasons why people do not donate as excellent.

Mussema's (2023) findings on the prevalence of insufficient blood donation knowledge among adult populations (51.7%; Cl: 46.8-56.5%) are consistent with those of similar community-based studies conducted in Harar (56.45%; Urgesa, 2017), Adama (52.9%; Mirutse et al, 2014), and Mekelle (51%). While this was lower than the results of studies conducted in Gondar town (64.6%; Enawgaw, 2019) and Jordan (71.4%; Abderrahman, 2014), it was greater than the results of studies conducted in Debre Markos town (43.5%; Jemberu, 2016). This distinction may have resulted from differences in the time frame, research environment, and size of the sample utilized to determine the participants' levels of knowledge. Two hundred thirteen (50.5%) (Cl: 45.6-55.3%) of the participants in the research felt negatively about giving blood. This finding is consistent with studies in Birbir and Adama, where 54.8% (Addisu, 2017) and 47.1% (Addisu, 2017) of the study participants had a negative attitude toward blood donation, which is higher than the result from a study in Gonder, where only 18% of participants have a negative attitude toward voluntary blood donation, but lower than the result from a study in Harar, where 67.1% had a negative attitude toward blood donation. This gap might have

DOI: https://doi.org/10.47667/ijpasr.v4i2.224

resulted from many factors, including but not limited to differences in measurement techniques, cultural context, chronological distance, and research setting.

Eighty percent of students at Thailand's Chulalongkon University were aware of the importance of blood donation, but only eleven percent had actually given blood willingly (Wiwanitkit, 2002). While eighty percent of students in a comparable research at the University of Dhaka, Bangladesh, reported having a favorable view of blood donation, just sixteen percent of respondents had actually given blood on their own volition (Housain, 1997). 7.7% of those surveyed in an urban slum in Delhi acknowledged making a donation. Therefore, this study's results would seem to indicate that more information about blood donation does not automatically result in increased blood donation practice, perhaps as a result of the mythological ideas and erroneous impressions currently held about blood giving by the general public.

Most responders in this research gave blood because of an emergency scenario, and most of the beneficiaries were friends or family members (24.6% and 57.4%, respectively). Voluntary blood donations were low (2.8% of total donations), and around 65% of those donors gave during the organizations' peak activity periods. This is consistent with the results of Olaiya (Olaiya, 2003), who found that the highest rates of voluntary blood donation occurred during Religious Week and Club Activities. Therefore, it is important to investigate the unions and departmental activities of national tertiary institutions as a source of volunteer blood donations. Inadequate information about the benefits of voluntary blood donation to the donor, recipient, and community (24.1%); fear that the process is harmful to the health of the donor (10.3%); lack of opportunity (45.4%), due to tight lecture schedules and inaccessibility of blood bank facilities. Inadequate knowledge about the blood donation procedure, fear of exposure to HIV/Hepatitis infection (49.8%), and fear of fainting were among issues that would discourage people from donating blood. This exemplifies how many individuals still have an erroneous understanding of how HIV is spread. Donors in Mwanza, Tanzania, were also reluctant to provide money due to concerns that they would get HIV (Jacob, 1995). This discouraged people in Scotland from donating blood, which had a negative impact on the country's blood supply. Australian college students were reluctant to donate blood because of worries about becoming sick later and the hassle involved (Namgay, 2008). Researchers in Mexico also discovered that anxiety of feeling lightheaded after giving blood was a major factor in the country's low donation rates.

Incentives such as future blood credits and medical tests were shown to have the greatest response rate among donors in a research conducted in Baltimore (Sanchez, 2001). Researchers in Texas came to the same conclusion (Burnett, 1982): people give to help others and to build up blood credits for future use. Similarly, a survey of individuals in Tanzania's Mwanza Region found widespread support for the concept of voluntary blood donation, however the vast majority of respondents said they would only give blood in exchange for financial compensation. The Nigerian national blood transfusion service is working to keep its volunteer donors happy by providing perks like free blood tests (blood group, hemoglobin genotype, HIV/ hepatitis) and letting donors' immediate families receive blood transfusions without paying for a new supply, as well as other goodies like certificates, T-shirts, hematinics, refreshments, and badges. The research indicated that individuals often prioritize motivating tools above rewards when evaluating donor incentives and enablers. The shift from a replacement mentality to one of voluntarism in blood donation begins with this step (Okpara, 1989; Ottong, 1997).

DOI: https://doi.org/10.47667/ijpasr.v4i2.224

Conclusion

This study shows Research variable shows that some respondents stated that the variable of awareness was in the good category of 90.6%, namely 48 respondents, the variable of knowledge was in the good category of 94.3%, namely 50 respondents and the variable of reasons for not donating was in the good category of 96.2%, namely 51 respondents. Research That a large proportion of the adult population has adequate information, good attitudes, and good voluntary blood donation practices. Reasons for not donating blood include lack of breastfeeding for pregnant women, age, illness and busy (don't have free time). In addition, gender and attitude level are statistically significant variables that have an impact on blood donation practices in this study. To increase understanding and attitudes among adults and encourage voluntary blood donation, local, national and transfusion agencies must develop strategies that must be followed. The factors identified to be associated with willingness and reluctance to donate blood in this study are relevant in the context of this pandemic. These need to be addressed to improve blood donation in the setting. Measures for increasing knowledge regarding blood donation should be considered for hospital employee . The measures might vary from talks on blood donation, poster exhibition, pamphlet distribution, organizing blood donation campaign on a regular basis.

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DOI: https://doi.org/10.47667/ijpasr.v4i2.224

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