

# Understanding Blood Donation Practices in Pakistan

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## ABSTRACT

Blood is widely recognised as an essential bodily fluid crucial for sustaining life, and blood donation plays a critical role in saving lives. Ensuring access to a safe and sufficient supply of blood and its derivatives and reliable blood transfusion services is indispensable for a strong healthcare system. It is important to note that voluntary non-remunerated blood donors are the most reliable source of a safe blood supply. In Pakistan, 70% of donated blood comes from replacement or paid donations, while only 10% comes from voluntary donations. In Gilgit, voluntary blood donation is scarce, and most blood comes from replacements. The respondents display limited understanding of blood transfusion, while they exhibit a positive attitude toward voluntary blood donation despite low participation. This discrepancy is attributed to inadequate awareness and campaigns, as well as prevalent myths and negative perceptions associated with blood and blood donation. Furthermore, sectarian-based segregation, the symbolic relationships between the donor and recipient and the exclusion of female blood donors exacerbate the gap between blood supply and demand. The research emphasises culturally suited solutions and strategies that can help enhance voluntary blood donation in Gilgit.

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## INTRODUCTION

Blood is considered a vital body fluid crucial for sustaining life – it is life itself (Mumtaz, 2009). Blood donation is a life-saving act for those in need. Every second, people of all ages worldwide require blood transfusions to survive. Access to a safe and abundant supply of blood and its derivatives, along with secure blood transfusion services, is indispensable for a robust healthcare system. While blood can save lives, it can also serve as a vector for hazardous infectious diseases like HIV and hepatitis (WHO, 2017) (WHO, 2017a). A well-established voluntary, non-remunerated blood donation program can significantly reduce the risk of infectious diseases. Therefore, the World Health Organization (WHO) emphasises and encourages the practice of voluntary, non-remunerated blood donation, with the goal of ensuring that 100% of blood

donations are from voluntary, anonymous donors by 2020 (WHO, 2011).

In 2017, the World Health Organization (WHO) estimated that 112.5 million blood donations were made across 180 countries. Out of these, 100.6 million were whole blood donations and 11.9 million were apheresis donations. High-income countries, comprising 19% of the world's population, accounted for 47% of the global donations. In contrast, low-income and lower-middle-income countries, with population burdens of 42% and 39%, respectively, collected only 2% and 22% of global blood donations. The South-East Asia Region, representing 26% of the global population, collected 15% of the global blood donations, while the European Region, representing 11% of the world population, contributed 30% of the global blood donations (WHO, 2017b).

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In the domain of voluntary anonymous non-remunerated blood donations, the Western Pacific region led with a donation rate of 98.7%, followed by the European region at 95.5%, Southeast Asian countries at 79.1%, the African region at 70.5%, the American region at 67.6%, and the Eastern Mediterranean region at 49.4% (WHO, 2022). Notably, within the Eastern Mediterranean region, Iran, Qatar, Oman, and Bahrain collected 100% of the blood from voluntary non-remunerated donations, while Lebanon collected only 4.1%, Pakistan 10.5%, and Afghanistan 40.5% through voluntary non-remunerated donations (WHO, 2017b). In India, approximately seventy per cent of the blood is obtained from volunteer donations (Patidar, et al., 2023). In Iran, the blood donation rate is approximately 22 units per 1000 population, which is considered satisfactory for meeting the demand for blood and its components (Shooshtari & Pourfathollah, 2006). In Saudi Arabia, there has been a notable transformation in the blood supply, transitioning from imported blood and paid donors to reliance on the native population. Currently, voluntary donors account for 71% of the blood supply, with the remaining 29% coming from non-voluntary donors

In Pakistan, approximately 3.5 million units of blood are collected annually (SBTP, 2011a). The ratio of blood donors to the population stands at a mere 28 donors per 10000 individuals. Notably, a significant portion of the blood supply comes from replacement and paid donations, which significantly increases the risk of infectious blood. An alarming 70% of donations in 2012 were either replacement/family or paid blood donations, while 50% of cases involved unscreened blood transfusions (Saleem, et al., 2014). Pakistan's high rate of unscreened blood transfusions has contributed to the spread of numerous infectious diseases (WHO, 2010; 2023). In Pakistan, blood donation and transfusion services are still underdeveloped compared to global standards due to limited government intervention. In 2008, the Government of Pakistan launched the blood safety systems reform programme to ensure an adequate and affordable supply of safe blood (Zaheer H. A., 2012), and the first nationally coordinated blood transfusion program started in 2010 and is extended to the federal and provincial levels (Zaheer & Waheed, 2015) (Zaheer, 2012; Zaheer & Waheed, 2015). This German-supported program aims to provide safe, efficient, and quality-assured blood to the citizens of Pakistan to improve blood transfusion services by strengthening organisational and physical structures in line with WHO blood safety recommendations (SBTP, 2011b).

The demand for blood can be satisfied through voluntary unpaid donations. However, attitudes, beliefs, and levels of knowledge concerning blood donation and transfusion can influence blood transfusion services (Al-Drees, 2008). The availability of blood in blood banks and transfusion facilities is tied to the rate of voluntary unpaid blood donations. This calls for the adoption of modern technology and techniques to process blood safely, alongside people's willingness to voluntarily donate blood. In Pakistan, the establishment of safe blood transfusion services is still in its early stages and faces challenges in achieving full coverage nationwide. Moreover, the country is grappling with a significant shortage of voluntary unpaid blood donations, posing a major concern for ensuring an adequate and sustainable blood supply for medical needs.

A small body of literature is available that focuses on understanding the low blood donation rates in Pakistan. The existing studies primarily focused on the knowledge and attitudes of the public regarding blood donation, which suggests a prevalent low rate of voluntary, non-remunerated blood donation in the country. However, these studies do not offer an in-depth understanding of the underlying reasons behind these low rates. Therefore, it is important for a comprehensive study to thoroughly investigate and shed light on the factors contributing to the low rate of voluntary unpaid blood donation in Pakistan. The research commenced by identifying the disparity between the blood supply and demand in Gilgit and delved into the diverse perceptions and practices surrounding blood donation in the region. It specifically focused on dissecting the attitudes and behaviours related to blood donation and unravelling the underlying motivations driving these trends. Additionally, the study meticulously examined the barriers and facilitators influencing voluntary blood donation, with the aim of formulating culturally tailored strategies to boost voluntary blood donation in the area.

## **Anthropology and Blood Donation**

Anthropological studies have traditionally focused on the characteristics of different races, and the belief that blood carries distinguishing features has strongly influenced medical and other researchers. However, many researchers in emerging fields have not yet realized that blood groups are simply additional anthropological characteristics that should be considered alongside other known criteria when studying racial relationships. In essence, the debate

proposes that blood groups may predate present races. Rather than being discouraging, this should be seen as encouraging (Wyman & Boyd, 1935). Blood groups may still hold significant anthropological value, possibly as much as any other criterion. By studying them, we may gain insights into human migration that occurred before the differentiation of present races.

Until 1990, anthropological examination of blood primarily centred on its significance as a representation of kinship, race, and nationalism and its role in various rituals. However, after 2000, the growing influence of medical anthropology led to a broader focus on the study of blood outside the body. This encompassed social practices relating to blood, such as transfusions, donations, tests, and its use in artistic and political contexts. Rather than replacing earlier approaches, this shift emphasised the importance of understanding how practical interactions with blood and its metaphorical significance interplayed and affected one another (Copeman, 2017). From the discussions of race and kinship to blood groups, anthropological debates further argue about the forms of blood donations and their appropriateness in relation to modern transfusion services.

“The Gift Relationship” by Titmuss (1997) is a classical work in social policy that compares the blood donation systems in the UK and the USA. The book delves into the political, economic, and philosophical disparities between both countries’ prevailing blood donation practices. Titmuss asserts that the US transfusion services relied predominantly on commercial and paid blood donations, while the UK’s services were predominantly based on voluntary blood donations. He contends that voluntary, unpaid blood donations motivated by altruism are the most effective form of donation. Moreover, Titmuss stresses that financial gains take precedence over altruism when blood is privatised and commercialised. The book’s central argument, that ‘altruism is both morally sound and economically efficient,’ has significantly impacted blood donation policies in Britain.

Titmuss categorised different forms of blood donations and viewed voluntary blood donation as the closest representation in social reality to the concept of a free human gift. Such donations are widely practised in the UK. This system is effective in nations with established institutions, but in countries like Pakistan, where diverse cultural practices influence government institutions, policies must align with local norms and traditions. To understand Pakistan’s situation, it is crucial to consider its neighbouring countries, particularly India. Jacob Copeman’s

extensive anthropological research on blood donation in India can provide valuable insights into Pakistan’s case (Copeman, 2008; 2009). In India, a remarkable initiative took place where religious and political leaders collaborated to inspire their followers to engage in voluntary blood donation. The efforts bore fruit in 2005 when India set a record for the highest number of blood units collected in a single day, amounting to 12002450 millilitres, which is equivalent to 67 bathtubs of blood. The Guinness Book of World Records duly acknowledged this extraordinary achievement. The act of donating blood is deeply revered as a form of sacrifice, symbolising the preciousness of life itself. Remarkably, despite the persistent presence of a strong caste system, the people of India have shown tremendous generosity by contributing to a significant number of blood donations (Copeman, 2009, pp. 1-28).

Copeman conducted research in India and discussed details about the caste system. When talking about blood donation services in India, he argued that despite the strong caste system and religious differences in India, the blood is the same for all. The caste system is strictly followed in Indian societies, with a hierarchy in place. Many people consider those of lower caste as untouchable and inferior. However, when it comes to voluntary non-remunerated blood donation, the caste system is neglected (Copeman, 2008). This demonstrates that voluntary blood donation can help eradicate casteism, as blood from individuals of lower castes and religions can be transfused to patients of higher castes and vice versa. By incorporating cultural and religious values that emphasise aiding those in need, we can potentially boost voluntary blood donation rates in Pakistan. This approach has the potential to encourage greater participation in voluntary blood donation, leading to more lives being saved and addressing the urgent shortages in blood supply.

## **METHODOLOGY**

This anthropological research was conducted in Gilgit, located in Northern Pakistan, from September 2017 to June 2018 and revisited in 2023. Ethnographic data were collected from blood donors, patients (blood recipients), blood transfusion professionals (doctors, medical lab technologists, and phlebotomists), blood bank managers, and several officials associated with hospitals and health services throughout the region. The fieldwork also involved observing the blood transfusion process, including the collection, processing, and distribution of blood and its components. The recorded data is transcribed and

analysed thematically. The Gilgit-Baltistan region is mountainous, surrounded by the Karakoram, Hindukush, and Himalayas Mountain ranges. Situated to the north of Pakistan and bordering China, this region is inhabited by people from diverse cultural backgrounds. This study focuses on the healthcare services available in the Gilgit region, which, although relatively limited compared to other cities in Pakistan, are primarily concentrated in two government hospitals – the Provincial Headquarters Hospital (PHQ) and the District Headquarters Hospital (DHQ) Gilgit – where most surgeries are performed, and patients seek treatment. In recent years, the establishment of the Regional Blood Centre (RBC) Gilgit, supported by Germany, has brought a new dimension to transfusion services. Equipped with modern technologies, RBC aims to collect, process, store, and distribute blood supplies to hospitals throughout the Gilgit region.

## RESULTS & FINDINGS

### Cultural Value of Blood

The local word for blood is “*lail*” in Shina and “*multen*” in Brushaski. Members of the same tribe, caste, and biradari are said to share a common blood (*Aik Khoon*), and any relative from the patrilineal side is considered to have the same blood. Some respondents consider first cousins from both the matrilineal and patrilineal sides as having the same blood or as their own blood (*toom lail*). The communities in Gilgit have deeply ingrained blood-related practices in their culture. They celebrate cultural festivals and traditions with great enthusiasm, and blood holds significant importance in almost every major activity. From religious ceremonies to traditional healing practices, animal sacrifice is performed to ensure the well-being of individuals and the community. Animals are not only sacrificed during Eid ul Azha but also on various other occasions, such as during illness, house construction, natural disasters, and shamanistic practices. They believe that the blood of the animal can replace the life force of a sick person and can also help prevent natural disasters like floods.

In mountainous communities, blood holds great significance as it is considered a vital force for life, almost synonymous with life itself (known as “*lail zindagi han*”). It is viewed as the source of strength and life, with the quantity of blood determining a person’s strength and health. One respondent described blood as a crucial fluid for life, stating that its presence signifies life, while its absence leads to death. According to local beliefs, a person with more blood has more strength, while those with less blood are considered weak. A

healthy individual is thought to have a greater amount of blood, while a physically weak person is believed to have less blood in their body. People believe that those with good moral character have “*mishto lail*” or good blood in their bodies. On the other hand, those who are not socially good, have a bad character or do bad deeds are said to have “*Khacho lail*” or bad blood in their bodies.

### Knowledge, Attitudes and Practices

The knowledge, attitudes, and practices of the respondents were analysed by posing specific questions about the prerequisites for blood donation. Participants were asked about their blood group, the minimum weight and age requirements, safe transfusion procedures, timing and duration of donation, blood components, and the pros and cons of donating blood. The field research clearly indicates that most people in the region lack necessary information and knowledge about blood and its transfusion. Although most respondents knew their blood groups, only a few had additional information about blood transfusion. There was a prevalent misconception regarding the time interval for blood donation, with many respondents unaware that it should be done every three months. Some participants incorrectly believed that the interval was six months, one year, and so on. Moreover, there was a general lack of awareness about weight and safe procedures involved in blood transfusion. It was evident that less educated individuals and females had less knowledge and information compared to their educated and male counterparts.

The respondents’ attitudes were evaluated by inquiring about their willingness to make voluntary blood donations. Overall, most people expressed positive attitudes towards donating blood, regardless of their caste, class, sect, or religion. However, some respondents voiced hesitancy about donating blood to individuals of other sects, which was attributed to ongoing sectarian conflicts between Shias and Sunnis in the region over the past two to three decades. A 21-year-old male with primary education respondent expressed reluctance, stating, “If I donate to save the life of a person from the opposite sect, they will, in turn, harm people from my sect, so I choose not to donate to the opposite sect. However, I am willing to donate blood to patients from a third sect, as we do not have any conflicts with them.” Conversely, most people demonstrated a willingness to donate blood voluntarily, irrespective of sect, caste, class, or region. For instance, a 25-year-old male graduate stated, “We donate blood to save lives, and saving a life is equivalent

to saving all of humanity. Our religion and culture teach us to help others in times of need, regardless of their religion.”

The research revealed that although respondents displayed positive attitudes towards blood donation and expressed willingness to donate regardless of race, class, caste, or sect, their actual practices did not consistently align with these attitudes. When asked if they had donated blood to patients of other sects, the majority had no record of doing so, with a few exceptions. Conversely, individuals who did donate to patients of different sects expressed satisfaction with their actions. One respondent who donated blood to patients of other sects stated, “I donated blood to save someone’s life, and there is no need to investigate their sect, caste, or class. I donated for my own satisfaction and to serve humanity.” On the other hand, those who had never donated to other sects and castes claimed that they didn’t have the opportunity or that nobody from other sects had approached them for blood donation.

A 32-year-old respondent, who identifies as Shia and is employed at a private bank, has generously donated blood on numerous occasions to Sunni patients. He has cultivated a diverse social circle, encompassing individuals from various castes, sects, classes, and professions. He expressed his perspective by stating, “I have an extensive social network and strong friendships across different spheres. When someone or their family requires blood, they reach out to me. If my blood type (AB+) matches and I’m available, I donate blood. If not, I encourage my friends and relatives who are available to go to the hospital and donate blood. I’ve contributed blood to many Sunni patients and have since established positive relationships with them. I have four Sunni uncles (relations through blood donation), and they are akin to my own brothers and sisters.”

An individual aged 30, who is part of the Sunni sect and works in an NGO, has donated blood to numerous Shia patients. Here’s what he shared about his experience: “I live near a hospital, and after work, I often spend time with friends at a hotel near the hospital. Many times, I’ve encountered relatives of patients, particularly those from distant areas, who do not have anyone in the city to help them with blood donations. My friends and I frequently donate blood to these patients, who often lack friends and relatives in the city. Most of the patients in DHQ hospital come from Shia backgrounds, so I make it a point to donate blood specifically to those who are in need, regardless of their religious background. To me, helping those in

need is a responsibility. Blood donation is a form of charity, and I see it as my contribution to humanity. Islam teaches us to assist the less fortunate, and by donating blood, I believe I am fulfilling this teaching. I’ve actually donated more blood to patients from the Shia sect than to those from my own sect. I firmly believe that blood donation transcends religious and sectarian differences and has the potential to foster better relationships among people of different backgrounds.”

### **Reasons Behind Knowledge, Attitudes and Practices**

As per the information provided by the respondents, it has been uncovered that people in the region have limited knowledge about blood and transfusion. Education and the media play a crucial role in disseminating this knowledge. Educational institutions are the primary source of knowledge, but relevant material about blood and transfusion is lacking in school and college textbooks. Even in this modern age, the media fails to provide information on blood transfusion. Despite the prevalence of televisions in every household surveyed, neither national nor local channels air any programs related to this topic. The lack of blood education in the curriculum and in the mass media is the main reason behind the limited understanding of blood and its transfusion. During the interviews with respondents and key informants, it became evident that the people of Gilgit did not participate in any seminars, lectures, or programs related to blood transfusion. Those who were knowledgeable about blood transfusion had gained their understanding from seminars and lectures organised by their respective universities and different organisations in other cities of the country but not in Gilgit. None of the respondents had attended any blood transfusion-related programs in Gilgit, nor were they aware of any relevant activities in the city. Every household included in the research had access to television, yet none of them or their family members had watched any programs related to blood transfusion on local or national media.

The health department of GB and the Regional Blood Centre is responsible for managing blood transfusions, including raising awareness about voluntary blood donation. A key stakeholder in the blood transfusion services mentioned that their department handles the entire process, from blood collection and processing to organising blood donation camps and awareness campaigns. However, due to limited resources and staff, they are only able to organize three to four blood camps per year. This shortage of resources leads to

a lack of blood education and awareness among the public.

### **Voluntary Non-Remunerated Blood Donation**

The practice of voluntary, unpaid blood donation in Gilgit is extremely low. The relevant departments do not have data on voluntary blood donation. However, when asked, authorities estimated that only two to three percent of the blood comes from voluntary unpaid donations. In contrast, replacement blood donation, where a family member or friend donates blood for the patient, is widely practiced in the region. Additionally, paid blood donation is discouraged and no cases have been reported thus far. The prevalent practice of replacement blood donation in our society is attributed to the tightly-knit community. There have been no reported cases of deaths caused by blood unavailability, as people in the region have strong social and familial ties, enabling them to easily procure blood when necessary. Although individuals with limited social networks may encounter difficulties in obtaining blood for their loved ones, they are still able to arrange for blood donations, either through replacement or voluntary means, albeit infrequently.

The approach to voluntary blood donation in the research locale differs from that in many other parts of the world. While in developed cities, people donate blood voluntarily at blood banks, camps, or hospitals. In Gilgit, the practice of blood donation involves first contacting relatives and friends for replacement blood donation. If replacement blood is not available, individuals in need of blood seek donations from nearby shopkeepers and individuals, often finding an unknown donor from the surrounding area. This practice is primarily limited to people from remote areas with fewer relatives and a limited social network in the city. The approach to voluntary blood donation varies among different religious sects in Gilgit. The three major Muslim sects in the area are Shia, Sunni, and Ismaili. Within the Shia community, voluntary blood donation is primarily driven by specific events, with increased donations occurring during the holy month of Muharram. Previously, blood camps were conducted by various religious organisations in collaboration with the Regional Blood Centre Gilgit during Muharram, but this practice has ceased. It was found that a significant amount of blood collected in a single day was often wasted. Additionally, Shia youth organisations maintain a list of voluntary donors with their blood groups. When there is a need for blood donation, these voluntary donors are contacted to contribute.

The concept and practice of voluntarism varies within the Ismaili community. They have a group of well-organized young volunteers, known as the Ismaili Boy Scouts, who offer their services at religious and community events. A knowledgeable and experienced member of the community oversees these volunteers. In terms of voluntary blood donation, the head of the volunteers maintains a record of everyone, including their blood group and contact information. When a member of the community requires a specific blood type, they reach out to the focal person of the volunteers, who then contacts the appropriate volunteer with the matching blood group to donate blood. While voluntary blood donation is primarily carried out at the community level, these volunteers also step in to offer their services and donate blood during emergencies or disasters. The current scenario involves independent community and religious-based voluntary blood donation initiatives. To boost voluntary blood donations, it is crucial to enhance and integrate these community-led efforts. This can be achieved through improved coordination, collaboration, and communication among the involved organizations. By working together, these initiatives can make a more significant impact on promoting and facilitating voluntary blood donations.

### **Gender and Blood Donation**

Women can donate blood if they meet the minimum requirements set for blood donation by blood transfusion services. In Gilgit, the rate of blood donation by women is very low, almost zero. Women in the region rarely donate blood, with only a few exceptions. The perception of women as weak and having lower blood volume is one of the main reasons for the very low participation of women in blood donation. Research also revealed that women in Gilgit have less knowledge, attitudes, and practices compared to men. In the region, most blood donations come from family and friends. In this patriarchal society, women have limited roles and are not permitted to donate blood, even if they are willing. The belief that women are weak and have lower blood volume, along with a lack of knowledge among women, are significant factors contributing to the low rate of blood donation by females. Of all female participants, only one female participant had donated blood, while all others had never donated blood and had no plans to do so in the future.

One woman stated, "Our men are here to donate blood when needed for family and relatives, so we do not need to donate." Another woman argued, "We (females) are already weak and have less blood,

so we avoid donating blood.” Another respondent commented, “In case of any emergency and if no male members or relatives are present, then I will donate blood to save my family member (patient).” One housewife said, “No female has donated blood so far, so I think it is not allowed to donate blood.” Additionally, an educated student expressed the view that “our culture does not allow us to donate blood.” These perspectives suggest that females are perceived to have less blood and blood donation is considered taboo in the culture. Similar attitudes and practices were also found among women in Turkey (Dilsad et al., 2014).

During our fieldwork, I encountered significant challenges in identifying a suitable female blood donor. Eventually, I succeeded in finding a lone donor, a 23-year-old undergraduate student enrolled at a private university in Islamabad. She donated blood at a blood camp in her university and mentioned that while it’s uncommon for females in Gilgit to donate blood, female university students in Islamabad do so more frequently. Blood donation requires a healthy person irrespective of gender. The sole female donor expressed her views that “women can donate blood if they are healthy and meet the criteria for blood donation. There is discouragement for females to donate blood in our patriarchal society due to the lack of knowledge about blood donation and transfusion, leading to a lack of support for female blood donations. Greater awareness is needed to enhance blood education in society.” The exclusion of female donors from blood donation efforts in Gilgit is exacerbating the disparity between the demand for blood and its supply. Embracing and including female donors can significantly help bridge this gap and ensure an adequate supply of blood for those in need. This inclusivity is crucial for addressing the challenges associated with the availability of blood for medical treatments and emergencies in Gilgit.

### **Relations Through Blood Donation**

The practice of replacement blood donation is common in this region, where people live harmoniously and have close ties with each other. In times of need, such as blood donation, the inhabitants are always supportive. Whenever a person or family needs blood for a patient, they can easily find a donor among their relatives and friends. There have been no reported deaths due to the unavailability of blood. This kind of blood donation not only meets the patients’ blood needs but also helps to develop new relationships. Culturally, the blood donor becomes a brother or sister to the blood recipient, and this relationship is called “uneelay” (symbolic relationship of brother/sister).

This established relation requires obligations from both sides to maintain. The blood donor is honoured with a higher moral status, and the blood recipient has greater social obligations. To maintain this new relationship, the blood recipient invites the donor to their home on various occasions. In return, the donor gives a gift to the recipient, and vice versa. It is a tradition in these communities to exchange gifts and visits to strengthen newly established relationships. In the case of blood donation, the recipient invites the donor for meals and offers support in times of need. The exchange of gifts, services, and support is reciprocated from time to time to maintain the relationship.

During my fieldwork in Gilgit, my first cousin underwent a serious operation during childbirth. Our bond became stronger after I donated blood. Before the donation, we occasionally visited each other, but after the donation, she invited me frequently to various occasions and checked on me more often. Not only she but my family members and relatives also expected more of me; I had to visit her whenever I visited Gilgit. The concept of blood donation is not Indigenous and has been practised for the last four decades. The roots of blood donation and the symbolic relationship after blood donation are linked with the traditional practice of breastfeeding. People in some parts of the region still practice traditional healthcare systems, where breast milk is used to cure eye or ear pain. The woman who donates breast milk becomes a symbolic mother to the patient. Both blood and milk are considered sacred and vital body fluids, and the donation of both is treated in the same way.

A 32-year-old male taxi driver from Gilgit city has generously donated blood multiple times, resulting in the establishment of symbolic relationships. He considers those he has aided through blood donations as part of his extended family. He actively maintains these connections by visiting them and hosting visits in return. He expressed that his blood donations not only saved lives, but also allowed him to form meaningful new relationships. He is pleased with these newly fostered connections and remains dedicated to nurturing them.

## **CONCLUSIONS**

The ethnographic findings of this study highlight the pressing need to address the deficiencies in voluntary blood donation practices in the culturally rich region of Gilgit, Pakistan. The research reveals that the community’s limited awareness of blood transfusions and associated misconceptions, particularly regarding the involvement of women, presents significant

obstacles to establishing a robust donor network. Overcoming these issues requires a comprehensive, multi-faceted strategy involving key stakeholders such as transfusion service providers, educational institutions, media outlets, religious leaders, and community groups, all of which are deeply intertwined with the social fabric of the region.

The research underlines the cultural and symbolic significance of blood donation practices in Gilgit. The observed strong willingness to donate blood, alongside the potential for increased voluntary donations, highlights the opportunity for impactful change through targeted awareness efforts. By addressing the knowledge gap surrounding voluntary donation and leveraging the existing positive attitudes towards blood donation, there is potential to foster a culture of voluntary donation, further strengthening the community's commitment to this life-saving practice. This shift could not only enhance the availability of blood for those in need but also deepen the symbolic relationships established through the act of donation, ultimately benefiting the entire region.

Efforts to encourage voluntary blood donation led by communities, including the Shia and Ismaili communities, should be enhanced and promoted more extensively. At present, these initiatives are operating independently and are confined to their specific communities. It is crucial to integrate them at a broader regional level. Religious and community leaders can have a significant impact by raising awareness and inspiring their followers to take part in voluntary blood donation. The notable disparity between the widespread reliance on replacement donations and the minimal participation in voluntary donations underscores the urgent need for culturally tailored interventions and comprehensive training for medical personnel. Implementing targeted awareness campaigns to address prevailing misconceptions could effectively narrow the divide between the availability and requirement of safe blood, ultimately making a significant impact on saving lives and fortifying the overall healthcare system.

### Competing Interest

The authors had no competing interests.

## REFERENCES

- [1] Al-Drees, A. M. (2008). Attitude, belief and knowledge about blood donation and transfusion in Saudi population. *Pakistan Journal of Medical Sciences*, 24(1), 74-79.
- [2] Copeman, J. (2008). Violence, Non-violence, and Blood donation in India. *Journal of the Royal Anthropological Institute*, 14(2), 278-296. <https://doi.org/10.1111/j.1467-9655.2008.00501.x>
- [3] Copeman, J. (2009). Introduction: Blood donation, bioeconomy, culture. *Body & Society*, 15(2), 1-28. <https://doi.org/10.1177/1357034X09103435>
- [4] Dilsad, S., Tanriover, O., Hidiröglu, S., Gurbuz, Y., & Karavus, M. (2014). Knowledge, attitudes and beliefs of Turkish women towards blood donation. *JPMA. The Journal of the Pakistan Medical Association*, 64(8), 869-873.
- [5] Gader, A. G. M. A., Osman, A. M. A., Al Gahtani, F. H., Farghali, M. N., Ramadan, A. H., & Al-Momen, A. K. M. (2011). Attitude to blood donation in Saudi Arabia. *Asian Journal of Transfusion Science*, 5(2), 121-126. <https://doi.org/10.4103/0973-6247.83235>
- [6] Mumtaz, Z. (2009). Promoting voluntary blood donations in Pakistan; meaning of blood, bleeding an blood donation. *Sept 27th*.
- [7] Patidar, G. K., Chaurasia, R., & Pandey, H. C. (2023). Blood banking: The situation in India. *Transfusion and Apheresis Science*, 62(5), 103802. <https://doi.org/10.1016/j.transci.2023.103802>
- [8] Saleem, S., Wasim, A., Sabih, S., Khan, A. F., Rizvi, M. H., Jillani, U. A., ... & Kazi, A. N. (2014). Assessing acceptability of short message service based interventions towards becoming future voluntary blood donors. *Journal of Blood Transfusion*, 2014(1), 567697. <https://doi.org/10.1155/2014/567697>
- [9] SBTP. (2011a). *National Blood Donor Policy*. Islamabad: Safe Blood Transfusion Programme: Ministry of Health Government of Pakistan.
- [10] SBTP. (2016b). *Annual Report 2016*. Islamabad: Safe Blood Transfusion Programme: Government of Pakistan.
- [11] Shooshtari, M. M., & Pourfathollah, A. (2006). An overview analysis of blood donation in the Islamic Republic

of Iran. *Archives of Iranian Medicine*, 9(3), 200-203.

- [12] Titmuss, R. M. (1997). *The Gift Relationship: From Human Blood to Social Policy*. London: Allen and Unwin.
- [13] WHO. (2010). *Towards 100% voluntary blood donation: A global framework for action*. Geneva: World Health Organization.
- [14] WHO. (2011). *Blood Safety: Key Global Facts and Figures in 2011*. Geneva: World Health Organization.
- [15] WHO. (2017a). *Global status report on blood safety and availability 2016*. Geneva: World Health Organization.
- [16] WHO. (2017b). *Regional status report on blood safety and availability 2016*. Cairo: World Health Organization Regional Office for the Eastern Mediterranean.
- [17] WHO. (2022). *Global status report on blood safety and availability 2021*. Geneva: World Health Organization.
- [18] WHO. (2023). *Voluntary non-remunerated blood donations to ensure blood safety in the WHO*. New Delhi: World Health Organization Regional Office for South East Asia.
- [19] Wyman, L. C., & Boyd, W. C. (1935). Human blood groups and anthropology. *American Anthropologist*, 37(2), 181-200. <https://www.jstor.org/stable/662256>
- [20] Zaheer, H. A. (2012). Blood management in disaster situations in Pakistan. *ISBT Science Series*, 7(1), 1-5. <https://doi.org/10.1111/j.1751-2824.2012.01550.x>
- [21] Zaheer, H. A., & Waheed, U. (2015). National baseline survey on monitoring and evaluation of blood screening systems in Pakistan. *Blood Disorders & Transfusion*, 6(2), 1-5.