

Original Research

'My blood is now old and exhausted': A Qualitative Study of Adults' Behavioural Beliefs About Donating Blood in Harare, Zimbabwe

«Mon sang est maintenant vieux et épuisé»: Une étude Qualitative des Croyances Comportementales des Adultes Concernant le Don de Sang à Harare, Zimbabwe



Nyambiya TE¹, Muromo T¹, Muchena K¹

¹University of Zimbabwe, Department of Psychology, Zimbabwe.

Corresponding Author:

Tendai E Nyambiya
tenyambiya@gmail.com

Conflict of interest:

The authors report no conflict of interest.

Cite as: Nyambiya TE, *et. al.* 'My blood is now old and exhausted': A Qualitative Study of Adults' Behavioural Beliefs About Donating Blood in Harare, Zimbabwe. *Africa Sanguine*. 2020;22(1):14-22.

<https://dx.doi.org/10.4314/asan.v22i1.3>

Key Words: Adult blood donor, beliefs, motivation, donor recruitment, Integrated Behavioural Model.

ABSTRACT

Introduction: In Zimbabwe, though adults consume 80% of donated blood, their contribution to the national blood bank remains low. Considering that blood is an essential but scarce national resource it is important to gain insight into the beliefs that influence adults' decisions to donate blood or refrain from doing so.

Aims and objectives: We sought to identify and describe the behavioural beliefs underlying adults' blood donation intentions in Harare.

Materials and methods: We used a qualitative study design based on the Integrated Behavioural Model. We interviewed 32 participants using a semi-structured questionnaire. The responses were audio-recorded and transcribed verbatim. We analysed data thematically.

Results: Concerning positive behavioural beliefs, our analysis yielded four positive latent themes: 'donating saves lives', 'it is a social and religious responsibility', 'enhances blood accessibility' and 'enhances the donor's health'. Regarding negative behavioural beliefs, we also found four latent themes namely, 'donated blood can negatively affect the donor's health', 'donated blood can negatively affect the recipient's health', 'some cultural and religious beliefs discourage donating blood' and 'charging for donated blood is demotivating'.

Discussion: Contemporary behavioural beliefs indicate that adults attach multiple and complex meanings to blood donation. The identified beliefs can enable National Blood Service Zimbabwe to develop context-specific donor education and motivation strategies.

Conclusion: Comprehensive knowledge about adults' behavioural beliefs concerning blood donation is critical in shaping promotional messages that resonate with the target population.

RÉSUMÉ

Introduction: Au Zimbabwe, bien que les adultes consomment 80% du sang donné, leur contribution à la banque nationale de sang reste faible. Étant donné que le sang est une ressource nationale essentielle mais rare, il est important de mieux comprendre les croyances qui influencent les décisions des adultes de donner du sang ou de s'abstenir de le faire.

Buts et objectifs: Nous avons cherché à identifier et à décrire les croyances comportementales qui sous-tendent les intentions de don de sang

<https://dx.doi.org/10.4314/asan.v22i1.3>

des adultes à Harare.

Matériaux et méthodes: Nous avons conçu une étude qualitative basée sur le modèle comportemental intégré. Nous avons interviewé 32 participants à l'aide d'un questionnaire semi-structuré. Les réponses ont été enregistrées et transcrites textuellement. Nous avons analysé les données par thème.

Résultats: Concernant les croyances comportementales positives, notre analyse a dégagé quatre thèmes latents positifs: «le don sauve des vies», «c'est une responsabilité sociale et religieuse», «améliore l'accessibilité au sang» et «améliore la santé du donneur». En ce qui concerne les croyances comportementales négatives, nous avons également trouvé quatre thèmes latents, à savoir: «le don de sang peut nuire à la santé du donneur», «le don de sang peut nuire à la santé du destinataire», «certaines croyances culturelles et religieuses découragent le don de sang» et «facturer le sang donné est démotivant».

Discussion: Les croyances comportementales contemporaines indiquent que les adultes attachent des significations multiples et complexes au don de sang. Les croyances identifiées peuvent permettre au National Blood Service Zimbabwe de développer des stratégies d'éducation et de motivation des donateurs spécifiques au contexte.

Conclusion: Une connaissance approfondie des croyances comportementales des adultes concernant le don de sang est essentielle pour façonner des messages promotionnels qui résonnent avec la population cible.

INTRODUCTION

A safe and efficient supply of blood is essential for the operation of any modern health service.¹ However, blood collection agencies worldwide are increasingly faced with the challenge of recruiting and retaining adequate numbers of blood donors.² According to Ferguson as cited by Evans et al.,³ only around 5% of the eligible population donates blood at any one time - hence blood is usually in short supply in many countries including Zimbabwe.⁴ In Zimbabwe, adults consume 80% of donated blood and yet historically their contribution does not meet national blood service requirements.⁵⁻⁷ According to National Blood Service Zimbabwe (NBSZ), there is now over-dependence on youth donors because of adult blood donor apathy in the country.⁸ The donation gap on the part of adults becomes more apparent during school holidays because the pool of young donors from schools and colleges will not be readily available.

Considering that blood is an essential but scarce national resource, and also that demand for safe blood continues to exceed supply, it is compellingly necessary to gain insight into the beliefs underlying adult voluntary, non-remunerated blood donor behaviour.^{5,9,10} Socio-cultural beliefs play an important role in health care because they influence perceptions of health and illness.¹¹ Theory-based behavioural research is essential as it will lead to the identification and thorough understanding of such beliefs.¹²⁻¹⁶ Perhaps the most critical determinant of whether a person does or does not perform a given behaviour is the person's beliefs about performing that behaviour.¹⁶ In relation to blood donation, it has been noted that culture-specific beliefs may be the ultimate driving force dictating donor behaviour.¹⁷ Beliefs are pre-existing notions that typically involve strong personal endorsement for a proposition considered true and beyond further enquiry.¹⁸ They are considered important

because they provide the interpretive lens that shapes our experience of the world.¹⁹ More specifically, factors that motivate or deter blood donors tend to vary according to beliefs hence the need to identify such beliefs.

This study focuses on one category of beliefs called behavioural beliefs, that is, beliefs about positive or negative consequences or attributes of performing a particular behaviour.²⁰ Since behaviour change can be mediated by belief change,¹⁶ the identification of beliefs is an important step towards promoting pro-donation attitudes and behaviours among adults in Harare. Such beliefs may be important for understanding blood donor recruitment and retention, as well as for developing interventions to increase blood donation.²¹ The objective of this qualitative research was to identify and describe the behavioural beliefs underlying adults' blood donation intentions. This investigation was part of a broader study on socio-cognitive factors affecting adults' motivation to donate blood in Harare.

METHODOLOGY

We employed the qualitative approach because it is well-suited for developing initial understandings in a less explored area,²² enabling the capturing of multiple perspectives about the phenomenon of interest directly from members of the study population.²³ The nuanced insights gained will then form the basis for more targeted and effective adult blood donor motivation interventions. The qualitative study design was based on the Integrated Behavioural Model (IBM).^{20,24} The IBM postulates that the strongest determinant of behaviour is one's motivation or intention to engage in that behaviour. The model primarily focuses on three constructs that determine intention, namely, attitude, social influence and personal agency. These constructs are all functions of beliefs, namely behavioural, normative and control/efficacy beliefs, respectively.

According to Montano et al.,^{20(p2)} the IBM is ‘useful not only as a framework to identify issues on which to focus messaging strategies but also as a strategy to change behaviour’. Therefore, once the key beliefs that best explain behavioural motivation are identified, these critical beliefs can be targeted by communications campaigns to change behaviour. The IBM has been applied in public health studies within the Zimbabwean settings several times, hence its cross-cultural application has been well validated.²⁴ We used a semi-structured interview schedule to elicit participants’ beliefs about donating blood. Since the elicitation phase involved going to members of the target population to interview them, the qualitative data generated is rich in that it gives programmers terminology in the language of the population of interest,¹² hence the theoretical account generated was empirically grounded.²⁵ We obtained ethical approval for the study from the Medical Research Council of Zimbabwe (MRCZ, number B/1395).

Sample size

Considering that community norms and prior research can establish useful rules of thumb for estimating sample sizes in qualitative research,²⁶ we determined that 32 participants would be adequate, in line with Morse’s²⁷ approximate number of interviews required for one to expect to have obtained adequately rich data when using a semi-structured interview approach.

Sampling strategy

We used a multi-stage sampling strategy to draw a household-based sample. From the list of residential suburbs for Harare City, we randomly selected four suburbs from which to recruit participants. Random selection of participants from several suburbs was a strategy to optimise response variability by reaching out to a diverse population. From each suburb, we selected housing units through systematic random sampling. Since most housing units accommodated several households, we randomly selected one household per housing unit and one participant per household to minimise clustering which may occur due to eliciting data from individuals who may share a very similar socio-cultural background. We used the card-picking procedure to randomly select households and participants. For instance, to sample from a housing unit with three households, heads of households interested in participating in the research were asked to draw from a ‘mixture’ of three cards deposited in a box: one card was labelled “Yes” while two cards were labelled “No” in that case. The individual who would pick the card labelled “Yes” was the one to be interviewed. In instances where a selected household had more than one eligible adult, i.e. aged 30 – 65 years, the card picking procedure would be repeated to determine the eligible candidate. To reach the sample size of 32, we randomly selected eight participants from each of the four suburbs.

Inclusion and exclusion criteria

Men and women resident in the selected suburbs of Harare, aged between 30–65 years were eligible to participate in the study.

Data collection procedure

Using our recruitment script, we explained the objectives of the study to the prospective participants. Once an individual indicated that he was interested in participating, we administered a written consent in the language that the participant preferred, i.e. English or Shona. After obtaining written consent, we proceeded with interviewing participants using a semi-structured interview schedule based on the IBM constructs. The key questions that were asked to elicit behavioural beliefs were, (i) ‘What are the advantages/good things, if any, that would result from your donating blood voluntarily when a mobile blood collection team visits your neighbourhood in the next four months?’ and (ii) ‘What are the disadvantages/bad things, if any, that would result from your donating blood when a mobile blood collection team visits your neighbourhood in the next four months?’ Where necessary, we augmented the primary questions with gentle probes so that participants would elaborate on their responses. All responses were audio-recorded with the permission of the participants. We took an average of 12 minutes to complete a single interview. We started and completed collecting data on 21 December 2017 and 3 January 2018 respectively.

Data Analysis

We used thematic analysis within the framework of the IBM to identify and describe adults’ positive and negative behavioural beliefs regarding donating blood. In this study, we used Braun and Clarke’s six-phase guide to doing thematic analysis.²⁸ The analytic steps followed were familiarising oneself with data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and finally, producing the report. We chose this approach because it is a flexible, transparent, rigorous and systematic way of analysing qualitative data, enabling one to draw both (i) semantic (or explicit) themes that closely reflect participants’ actual belief statements and (ii) latent (or interpretative) themes that tie semantic themes into distinct ‘families’ or clusters, thus allowing thematic patterns to be presented in a succinct, holistic and visual form. In drawing semantic and latent themes from the data, this method allows the researcher to interpret the data. Thus, this approach to thematic analysis is consistent with social constructionism, the epistemological position of this study.

RESULTS

Participant Demographic characteristics

Of the 32 participants interviewed, half of them were male (n=16). Most of the participants were of the Shona ethnic group (n=26) while very few of them (n=2 and n=4) were of the Ndebele or other ethnic groups, respectively. Most of the participants were married (n=26) and a few of them were either separated/divorced (n=2) or widowed (n=3). Study participants were predominantly of the Christian religion (n=30) while the other two participants reported belonging to Traditionalism and Islam respectively. Seven participants reported that the highest level of education they attained was primary school, while two attained Junior Certificate, 13 attained Ordinary level and nine completed Tertiary level education. Fifteen of our participants reported that they had donated blood at some point while 17 of them had never donated blood. The study participants' mean age was 42 years.

Positive Behavioural Beliefs

When participants were asked to state what they believed to be the advantages or the good things that would result from their act of donating blood, i.e. positive behavioural beliefs, their responses yielded a total of 11 semantic themes and these were clustered into four positive latent themes in accordance with the aforementioned thematic content analytic approach.²⁸ We give a brief description of semantic themes under their respective 'umbrella' of latent themes. Illustrative quotes are provided.

Donating blood saves lives.

Most of the participants (n=29) believed that donating blood saves the lives of accident victims and anaemics.

'Well, I think the benefits would be to help, to help those who are in need, for example those involved in an accident... or someone is anaemic and desperately needs that blood.' (P30, Male, 35 years).

Some respondents (n=3) specified that this humanitarian act also saves the lives of women who would have lost blood during delivery.

'If there is no blood, people will lose lives...such as those who lose blood during delivery.' (P04, Female, 39 years).

Donating blood is a religious and social responsibility.

Several participants (n=8) said they were motivated to donate blood because they believed that the act enables them to fulfil a religious and social responsibility.

'My religion-based motivation encourages me to consider what constitutes true religion. True religion has love, kindness, helpfulness.' (P19, Female, 55 years).

Some participants specifically believed that donating is a worthwhile social responsibility.

'One shouldn't die when I can also donate blood. Yah, because there are certain cases where it's very critical for one to get blood.' (P01, Male, 46 years).

'I would feel free to do it because I will be giving life to my fellows within the community, regardless of where they are stationed.' (P26, Male, 30 years).

Donating blood enhances the accessibility of blood.

Some participants (n=4) reported that they were motivated to donate blood because it ensures that blood is always available - hence health institutions will be able to assist patients who need blood in emergency cases.

'Even if people get involved in an accident, it will not be difficult for them to get blood because it will already be available.' (P20, Female, 35 years).

Several participants (n=7) believed that the blood that one donates could act as a deposit that one can draw from in future.

'One day, no one knows, perhaps I am the one who will encounter a problem about which nurses and doctors will recommend blood transfusion.' (P26, Male, 30 years).

'I the donor may also lose blood in future. If I lose blood and then get it through transfusion, if it then comes back to me, I will feel relieved... that I have been given back the life that I had lost.' (P04, Female, 39 years).

Donating blood enhances the donor's health.

Several accounts revealed that some participants believe that donation procedures are helpful in improving or maintaining the donor's health.

Some participants (n=2) believed that donating will result in them adopting more positive health behaviours because of the valuable health education rendered.

'You will be benefitting in the process because when you will be eating fruits and liquids and lots of fluids, you will be restoring your blood so that it becomes healthier, more than what it was...Sometimes it's a blessing in disguise.' (P11, Female, 30 years).

Others (n=5) believed that they benefit from getting tested for some infections.

‘One’s blood will get tested in the process to see whether it is good or bad.’ (P13, Female, 41 years).

One participant believed that donating is good in that it enables donors to know their blood groups.

‘It helps people to know their respective blood groups.’ (P11, Female, 30 years).

One participant expressed the belief that donating is safe.

‘You don’t simply lose anything in your body because you have donated blood...No complications, nothing, nothing.’ (P09, Male, 64 years).

One participant also believed that blood is recoverable.

‘I can still recover my blood after donating it as long as I am healthy.’ (P14, Female, 30 years).

Negative Behavioural Beliefs

When participants were asked to state what they believed to be the disadvantages or bad things that would result from their act of donating blood, i.e. negative behavioural beliefs, their responses yielded a total of 15 semantic themes. These were grouped into four latent themes.

Donated blood can negatively affect the donor’s health

Some participants (n=4) believed that donors might experience adverse reactions as a result of donating blood.

‘That child could faint or face certain problems because of that blood that he/she donated.’ (P29, Female, 64 years).

‘Sometimes the process can induce even a cramp.’ (P10, Female, 31 years).

Some participants (n=3) believed that they might experience difficulties in regaining their blood if they donate.

‘It will maybe also affect my health as an individual if I lose blood. Maybe it will take time to replace it.’ (P30, Male, 35 years).

‘I might donate lots of blood but then the food that I will be taking might not be good enough to enable quick restoration of blood.’ (P08, Male, 38 years).

One participant believed that there is ‘inadequate screening’ of blood on the part of NBSZ (National Blood Service Zimbabwe).

‘They will ask about diseases and so on. Sometimes they don’t. Sometimes they ask you whether you have an allergy, a heart disease, and sugar, and other conditions. Sometimes they don’t ask.’ (P11, Female, 30 years).

Some participants (n=2) believed that blood could not be shared as it constitutes personal life.

‘I just believe in God that, ‘God, what you gave me on the first day when you created me in my mother’s womb, let me just stay with that.’ Yes, I would not want to be given and I would not want to donate to others when in the first place what I have has simply been given to me.’ (P27, Female, 54 years).

‘I will be depleting my very life by drawing the life that I have and giving it to someone else.’ (P05, Female, 46 years).

Donated blood can negatively affect the recipient’s health.

Some participants (n=4) were of the belief that ‘use’ of contaminated instruments can transmit infections.

‘Maybe someone might prick him/herself, then the same needle is used on you... They say a needle prick can transmit diseases.’ (P03, Female, 36 years).

On the other hand, some participants (n=2) believed that blood tests might yield false results, leading to infected blood being transfused.

‘I saw some of them being given blood but at the end they [health personnel] said, ‘We made a mistake. We gave you blood that was unclean because we did not examine well.’” (P05, Female, 46 years).

Some participants (n=2) believed that blood recipients might experience adverse reactions.

‘There are those who say, ‘Oh, I got a blood transfusion and as a result, my body is starting to develop rash and is itching.’” (P27, Female, 54 years).

Some cultural and religious beliefs discourage donating blood

Some participants (n=2) believed that when blood from an old person is transfused into a young person, there will be incompatibility due to the age difference.

‘In my opinion, if my blood is donated to a twelve or thirteen-year-old child... it may not be compatible.’ (P19, Female, 55 years).

One participant believed that blood donated by an old person is so ‘old and exhausted’ that it will not be useful for transfusion.

‘The fact is my blood is now ‘old’ and ‘exhausted’. I just think that my blood maybe is now exhausted just like my body.’ (P19, Female, 55 years).

One participant expressed the belief that donated blood can transmit bad behaviours and evil spirits.

‘If it’s a thief or blood with avenging spirits (Ngozi), they will say, ‘Be careful that you will be given blood which has avenging spirits and then you will cause avenging spirits to come and affect the clan.’” (P11, Female, 30 years).

One participant believed that blood donated by a stranger could cause problems.

‘It depends on my kinship: my kids are the ones who can donate blood to me but nowadays we observe that they say that anyone can do so ... that causes problems.’ (P29, Female, 64 years).

Some participants (n=5) believed that donated blood could be used to conduct traditional rituals and Satanism.

‘It was said that some are looking for blood to use for the upkeep of their creatures which they keep in their homes. So that is what is frightening now.’ (P16, Male, 43 years).

‘People talk about Satanic practices. We do not know whether it is really the case that after they collect the blood from us, they use it in an inappropriate manner resulting in us probably becoming sick.’ (P23, Male, 31 years).

One participant believed that donating blood is against God’s commandment.

‘He (God) wants me to keep my life in its fullness. For me to give someone else, Jehovah is not pleased....Acts 15:29

says, ‘Do not eat or receive into your bodies any kind of blood.’ (P05, Female, 46 years).

Charging for donated blood is demotivating

Some participants (n=2) believe that the requirement for donors to pay for blood when they need it is demotivating.

‘It’s one of those issues that demotivate but now I discover that when I am through with donating, if I then encounter a problem in the future... you will be told to pay USD 100 for that blood.’ (P02, Male, 32 years).

Some participants (n=3) believe that the requirement for donors’ relatives to pay for blood when they need it is demotivating.

‘The price is what somehow makes people back-track... my uncle ended up passing away as I could not raise the money to buy him blood.’ (P25, Female, 31 years).

DISCUSSION

This study sought to identify and describe behavioural beliefs underlying adults’ motivation to donate blood in Harare. Empirical evidence from our study concerning behavioural beliefs clearly indicates that adults attach multiple and complex meanings to blood. The identification of such beliefs is a step in the right direction because it will enable NBSZ to develop context-specific donor education and motivation strategies based on a contemporary evidence-base of beliefs.

Discerning the ‘flesh’ or substantive content of the identified beliefs can be regarded as one of the current study’s most important contributions. When the specific content of identified beliefs is made explicit, it becomes possible for blood service agencies to craft messages that precisely address the pertinent issues raised. For instance, one negative behavioural belief captured is that ‘blood from an old person being transfused to a young person may cause health problems’: the explicit descriptive elements within the belief makes it possible to design a targeted message to address the misconception. Merely stating that ‘old age is a barrier to donating blood’ would therefore be too abstract and too ambiguous to inform age-related motivational messages. In the same vein, providing direct quotes to illustrate the belief statement strengthens the content validity of behavioural beliefs as a construct.

We also found that most participants believe that donating blood is important as it saves people’s lives. Reported awareness of the importance of donating blood to save lives suggests that blood service agencies’ awareness campaign messages have been well grasped.

Such a positive belief could be used as a starting point when motivating prospective donors to adopt blood donation. However, as noted in the Zimbabwe National Blood Transfusion Services survey, emphasising on this message may be less beneficial as that could be tantamount to ‘preaching to the converted’.²⁹ Thus, there is a need for messages that build on the positive belief that donating blood saves people’s lives.

The fact that several participants believe that donating blood helps them to fulfil a social and religious responsibility suggests that social and religious norms and values can influence adults’ decision to donate blood. Bandura asserts that, ‘Human functioning is rooted in social systems. Therefore, personal agency operates within a broad network of socio-structural influences.’^{30(p 14)} For instance, within the Shona socio-cultural milieu, a virtuous person is ‘expected to give without being asked if the situation should demand it. Kinsmen in distress should be helped without being approached directly’.^{31(p 77)} Such beliefs could be validated and strengthened through actively involving cultural and religious leaders in recruiting and educating prospective adult blood donors. It is therefore critical for blood service personnel to acquire cultural capacity so that they can in turn, deliver culturally adapted messages.³² Culture-sensitive messages are potentially more acceptable and effective because they resonate with the values and belief systems of members of the target population.

Considering that some participants believe that donating blood enhances their health, it is discernible that non-altruistic factors also play a role in adults’ motivation to donate blood. This finding is consonant with other studies.^{21,33} For instance, Ferguson et al.²¹ demonstrated that benevolence, i.e. both the donor and the recipient benefiting is pivotal in motivating individuals to donate blood. In line with this finding, crafting promotional messages that reflect benevolence may enhance donor recruitment and retention especially among those who have made a commitment to donate blood.^{21,33} More specifically, some health benefits that one can get from donating blood, e.g. nutrition information, knowing one’s blood group etc. should be apparent in promotional messages, notwithstanding the need to retain the idea that donating blood is primarily about helping others.

The most prominent negative belief that the current study reveals is that donating blood may cause several health problems for the donor and recipient. If not effectively addressed, such beliefs may sustain adult blood donor apathy. Such beliefs also suggest that some adults do not have adequate information about the process and outcomes related to donating blood.

Considering that some adults are sceptical about whether safety is guaranteed, we recommend that blood service personnel should emphasise and practically demonstrate the sterility and safety of blood collecting practices, showing how they ensure protection for both the donor and the recipient in the process.²⁹ While mass media is important in that it gives general awareness on the subject of donating blood, engaging prospective donors at a personal level will give people ample room to directly interrogate, probe and get immediate responses so that they get adequate information about donating blood. In addition, recruiting, training and deploying community-based adult mobilisers may go a long way in dispelling myths and misconceptions that may affect adults’ motivation to donate blood.

The fact that some participants maintain that cultural and religious beliefs do not support donating blood suggests that the act of donating blood is complex, often shaped by cultural and religious influences. For instance, the belief that blood may be used in rituals or satanic practices indicates that there is a degree of mistrust on the part of adult prospective donors with respect to the process of blood collection and utilisation. In the same vein, the constituency of adults that believe that donating blood can transmit bad behaviours and evil spirits from the donor to the recipient is likely to exhibit a negative attitude towards donating blood. Such a belief is also apparent in communities of other countries.^{2,34-37} For instance, in a study about meanings of blood, bleeding and blood donations in Pakistan, Mumtaz et al.³⁴ found that some community members believed that the blood donor’s moral values, personality and behavioural characteristics are transmitted to the recipient. A study about moral contagion attitudes towards potential organ transplants in British and Japanese adults revealed that adults fear that they might assimilate some of the behavioural characteristics of the donor.³⁵ Results of the aforementioned study suggest that magical beliefs are not confined to the domain of blood donation. From a socio-cultural perspective, objects that are perceived as being capable of transmitting bad behaviours and evil spirits are automatically shunned and highly stigmatised. Therefore, motivating adults to adopt a partly stigmatised behaviour requires a generous and sustained investment in attitude and normative change interventions. The implementation of such interventions requires a multi-sectoral approach.

The meaningful involvement of cultural and religious leaders in advocacy work and in dispelling cultural and religious misconceptions around blood donation is key. Toni-Uebari et al.³⁸ conducted a review which indicated that the involvement of religious leaders and faith organisations in haemoglobinopathies could improve the level of acceptance, participation and positive health outcomes within the faith communities.

This study revealed that some adults are reluctant to donate blood because they believe that donating when one is old is inappropriate. Though such sentiments were expressed by a few participants, we believe that in terms of qualitative research the 'keyness' of a theme is not necessarily dependent on quantifiable measures – but in terms of whether it captures something important in relation to the overall research question.²⁸ The belief that blood becomes too 'exhausted' to be useful for transfusion should be addressed through messages and channels tailored to the adult population segment. Such a belief is consistent with a finding presented by Polonsky et al.,³⁷ showing that blood from young people was believed by African migrants and refugees in Australia to be 'stronger' compared to blood from older people. Addressing such negative beliefs effectively requires great thought and effort because according to recent studies on negativity bias,^{39,40} humans tend to remember and act upon negative information disproportionately as opposed to positive information. Platforms such as church gatherings and sports functions can be used to engage and disseminate information to adults.

Certain limitations of this study deserve mention. It is conceivable that some participants may have concealed some of their beliefs on the subject, responding affirmatively to conform to what they perceive as being socially desirable.⁴ This research was conducted in an urban area i.e., Harare and therefore the findings may not be generalised to adults living in rural settings: empirical evidence shows that rural individuals tend to be more prosocial and more

generous to others than urban individuals, possibly because of differences in dominant culture, production mode and lifestyle.⁴¹ Despite these limitations, collecting rich, theory-based qualitative data allowed us to identify and describe a comprehensive set of beliefs that adults held about donating blood and these can be used as a basis for more representative nationwide surveys on adult blood donor motivation.

We conclude that comprehensive knowledge about adults' behavioural beliefs concerning donating blood is critical in shaping promotional messages that resonate with the target population. The identified beliefs can be used as a basis for conducting culturally adaptive blood drives. Social marketing personnel in blood service institutions should leverage on positive beliefs, validating such in order to boost the self-efficacy of adults who hold those beliefs. On the other hand, knowledge of negative behavioural beliefs will enable duty-bearers to accurately dispel myths and misconceptions, thus removing the anxiety that often contributes towards adults avoiding blood donation.

REFERENCES

- Ferguson E, Bibby PA. Predicting Future Blood Donor Returns: Past Behaviour, Intentions, and Observer Effects. *Health Psychology*. 2002; 25(5):513-518.
- Asamoah-Akouko L, Hassal OW, Bates I, Ullum H. Blood Donors' perceptions, motivators, and deterrents in Sub-Saharan Africa – a scoping review of evidence. *British Journal of Haematology*. 2017; 177:864-877.
- Evans R, Ferguson E. Defining and measuring blood donor altruism: a theoretical approach from biology, economics and psychology. *Vox Sanguinis*. 2014; 106:118-126.
- Timire C, Neave PE. Sexual Behaviour and Practices Among Adolescent Blood Donors in Zimbabwe. *Africa Sanguine*. 2017; 19(1):1-6.
- Ministry of Health and Child Welfare. National Blood Policy of The Republic of Zimbabwe. Harare:2010.
- National Blood Service Zimbabwe. Annual Report: Every Blood Donor is a Hero. Republic of Zimbabwe. Harare:2011.
- National Blood Service Zimbabwe. Annual Report. Republic of Zimbabwe. Harare:2012.
- National Blood Service Zimbabwe. Annual Report. Republic of Zimbabwe. Harare:2018.
- National AIDS Council. Zimbabwe National HIV and AIDS Strategic Plan [ZNASP 11] 2011-2015. Republic of Zimbabwe. Harare:2011.
- Chitiyo ME. World Blood Donor Day: 14 June 2011. More Blood, More Life: Where We Have Come from: Where We are Going. *The Sunday Mail*; June 12-18, Harare, 2011.
- Nkomo TS. The Influence of Socio-Cultural Beliefs in Chris Hani Baragwanath Academic Hospital (Chbah): A Social Work Perspective. *Open Journal of Social Sciences*. 2017; 5:46-59.
- Middlestadt SE, Bhattacharyya K, Rosenbaum J, Fishbein M, Shepherd M. The Use of Theory based Semistructured Elicitation Questionnaires: Formative Research for CDC's Prevention Marketing Initiative. *Public Health Reports* 1996; 111:18-27.
- Brinol P, Petty RE. Fundamental Processes Leading to Attitude Change: Implications for Cancer Prevention Communications. *Journal of Communication*. 2006; 56(1):81-104.
- Fishbein M, Cappella JN. The Role of Theory in Developing Effective Health Communications. *Journal of Communication*. 2006; 56:S1-S17.
- Glanz K, Rimer BK, Viswanath K, editors. Health Behavior and Health Education: Theory, Research, and Practice. 4th Ed. San Francisco: Jossey-Bass Publishers Inc.; 2008.
- Institute of Medicine (U.S.). Committee on Communication for Behaviour Change in the 21st Century: Improving the Health of Diverse Populations. Speaking of Health: Assessing Health Communication Strategies for Diverse Populations. Washington D.C.: National Academies Press; 2002.
- Zanin TZ, Hersey DP, Cone DC, Agrawal P. Tapping into a vital resource: understanding the motivators and barriers to blood donation in Sub-Saharan Africa. *African Journal of Emergency Medicine*. 2016; 6:70-79.
- Halligan P. Belief and Illness. *The Psychologist*. 2007; 20(6):358-361.
- Connors MH, Halligan PW. A cognitive account of belief: a tentative road map. *Frontiers in Psychology*. 2015; 5:1-14.
- Montano DE, Kasprzyk D, Hamilton DT, Tshimanga M, Gorn G. Evidence-based Identification of Key Beliefs Explaining Adult Male Circumcision Motivation in Zimbabwe: Targets for Behaviour Change Messaging. *AIDS Behav*. 2014; 18:885-904.
- Ferguson E, Farrell K, Lawrence C. Blood donation is an act of benevolence rather than altruism. *Health Psychology*. 2008; 27(3):327-336.
- Wu YP, Thompson D, Aroian KJ, McQuaid EL, Deatrick JA. Commentary: Writing and Evaluating Qualitative Research Reports. *Journal of Pediatric Psychology*. 2016;41(5):493-505.
- Levitt HM, Creswell JW, Josselson R, Bamberg M, Frost DM, Suarez-Arozco C. Journal Article Reporting Standards for Qualitative Primary, Qualitative Meta-Analytic, and Mixed Methods Research in Psychology: The APA Publications and Communications Board Taskforce Report. *American Psychologist*. 2018;73(1):26-46.
- Montano DE, Kasprzyk D. Theory of Reasoned Action, Theory of Planned Behavior, and The Integrated Behavioral Model. In: Glanz K., Rimer BK, Viswanath K, editors. Health Behavior and Health Education: Theory, Research, and Practice. 4th Ed. San Francisco: Jossey-Bass Publishers Inc.;2008.
- Orford J. Community Psychology: Theory and Practice. West Sussex: John Wiley and Sons;1992.
- Vasilileiou K, Barnett J, Thorpe S, Young T. Characterising and justifying sample size sufficiency in interview-based studies: systematic analysis of qualitative health research over a 15-year period. *BMC Medical Research Methodology*; 2018; 18:148-165.
- Morse JM. Determining Sample Size. *Qualitative Health Research*. 2000;10(1):3-5.
- Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology*. 2006; 3(2):77-101.
- National Blood Transfusion Services Zimbabwe. Knowledge, Attitude and Practice Towards Blood Donation: A Nationwide Baseline Study. Republic of Zimbabwe: Harare 1995.
- Bandura A. Social Cognitive Theory: An Agentic Perspective. *Annual Review of Psychology*. 2001; 52:1-26.
- Gelfand M. The Genuine Shona: Survival values of an African culture. Gweru: Mambo Press; 1973.
- Polonsky MJ, Renzaho AMN, Brijnath B. Integrating socio-cultural paradigms in non-profit marketing – the case of blood donation among African communities in Australia. *Int Rev Public Nonprofit Mark*. 2010; 7:101-112.

33. Costa-Font J, Jofre-Bonet M, Yen S. Not All Incentives wash Out the Warm Glow: The Case of Blood Donation Revisited. *Kykos*. 2013; 66(4):529-551.
34. Mumtaz Z, Bowen S, Mumtaz R. Meanings of blood, bleeding and blood donations in Pakistan: implications for national vs global safe blood supply policies. *Health Policy and Planning*. 2012; 27:147-155.
35. Hood BM, Gjersoe NI, Donnelly K, Byers A, Itajkura S. Moral Contagion Attitudes towards Potential Organ Transplants in British and Japanese Adults. *Journal of Cognition and Culture*. 2011; 11:269-286.
36. Joshi D, Meakin R. Views and attitudes towards blood donation: a qualitative investigation of Indian non-donors living in England. *BMJ Open*. 2017; 7:1-9.
37. Polonsky MJ, Renzaho A, Brijnath B. Understanding barriers to blood donations by Sub-Saharan African migrants and refugees: preliminary focus group results. In: ANZMAC 2010: Doing more with less: Proceedings of the 2010 Australian and New Zealand Marketing Academy Conference. Christchurch: New Zealand; 2010.
38. Toni-Uebari TK, Inusa BPD. The role of religious leaders and faith organisations in haemoglobinopathies: a review. *BMC Blood Disorders*. 2009; 9(6)
39. Kauschke C, Bahn D, Vesker M, Schwarzar G. The Role of Emotional Valence for the Processing of Facial and Verbal Stimuli – Positivity and Negativity Bias? *Frontiers in Psychology*. 2019; 10:1–15.
40. Soroka S, Fournier P, Nir L. Cross-national evidence of a negativity bias in psychophysiological reactions to news. *PNAS*. 2019; 116(38):18888-18892.
41. Ma Q, Pei G, Jin J. What Makes You Generous? The Influence of Rural and Urban Rearing on Social Discounting in China. *PLoS ONE*. 2015;10(7):1-11.