



**Ministry of Health
and Social Services**



**World Health
Organization**

**STUDY ON THE KNOWLEDGE, BELIEFS,
PERCEPTIONS, ATTITUDES AND PRACTICES ON
VOLUNTARY NON-REMUNERATED
BLOOD DONATIONS IN NAMIBIA**

Conducted by:

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in Collaboration with Blood Transfusion Service of Namibia,
Ministry of Health and Social Services and the
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**Blood Transfusion
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STUDY ON THE KNOWLEDGE, BELIEFS, PERCEPTIONS, ATTITUDES AND PRACTICES ON VOLUNTARY NON-REMUNERATED BLOOD DONATIONS IN NAMIBIA

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ACRONYMS

1)	AIDS	-	Acquired Immune Deficiency Syndrome
2)	HIV	-	Human Immune Deficiency Virus
3)	HIS	-	Health Information System
4)	KAP	-	Knowledge, Attitude and Practice
5)	MOHSS	-	Ministry of Health and Social Services
6)	MRCC	-	Multi-Disciplinary Research Centre
7)	NAMBTS	-	Blood Transfusion Service of Namibia
8)	NGO	-	Non-Governmental Organization
9)	PAHO	-	Pan American Health Organisation
10)	SPSS	-	Scientific Package for Social Sciences
11)	TTIs	-	Transfusion Transmissible Infections
12)	UNAM	-	University of Namibia
13)	WHA	-	World Health Assembly
14)	WHO	-	World Health Organization

EXECUTIVE SUMMARY

The study assessed the knowledge, beliefs, perceptions, attitudes and experiences regarding voluntary non-remunerated blood donations among the youth and adults in Walvis Bay and Swakopmund (coastal towns), Windhoek (Capital city) and Oshakati and Ongwediva (Northern rural towns).

The main purpose of the research was to identify strategies and factors that influence recruitment and retention of voluntary non-remunerated blood donors in Namibia with the view to improving blood donation practices. It is hoped the results will be utilized in developing appropriate strategies and communication materials to strengthen the recruitment and retention of blood donors.

The methodology used was explorative, quantitative and qualitative in nature. Structured interviews, questionnaires and focus group discussions were used to collect data. The topics addressed included blood donation practices, knowledge and attitudes toward blood donation and blood transfusion services.

The public, health personnel at the Blood Transfusion Service of Namibia (NAMBTS), health workers and scholars/students formed the sample. Interviews were conducted in English and interpretation done where necessary. Two focus group interviews were conducted at each site. The nature of the study necessitated carrying out comparisons among the three research sites.

The research revealed the following:

1. Knowledge

About 95% of the scholars/students knew the functions of the blood, but did not know their blood groups. Health workers within all the three sites demonstrated knowledge on aspects such as blood donation, blood transfusion, donor risk behaviour and the window period.

The majority of the Blood Transfusion Service of Namibia personnel knew that blood donor selection was done.

2. Beliefs

Over 70% of the respondents at all sites stated that they were not aware of any cultural taboos or traits regarding blood donation.

It was also found that regular blood donors were motivated by the desire to save the lives of those who needed blood.

3. Attitudes

The respondents (the public, the health workers and the scholars/students) mentioned several reasons for not donating blood. The reasons cited included: lack of information on blood donation and importance of blood donations, fear of infection and of test results.

4. Practice

The study revealed that 42% of the NAMBTS personnel stated that donors were not supervised after donating blood. In addition they did not know what supervision of the blood donors entailed.

It was also found that there was a need for improvements in the areas of quality control, training, privacy and confidentiality, sharing of information and advertisement regarding blood donation.

5. Communication/media

Seventy percent of the respondents cited radio and television as the main sources of information with regards to blood donation.

6. Factors affecting/influencing blood donation in Namibia

Psychological barriers mentioned by the majority of the public included: fear of blood test results, lack of information prior to donation and the possibility of being infected during donation. The above seem to show a lack of knowledge of the procedures involved in blood donation.

From the results of this study it seems that a lack of appropriate information, advocacy, ignorance of the uses and benefits of donated blood to the Namibian people and lack of incentives for those donating blood contributed to the low recruitment, retention and regular blood donation in Namibia. Indeed the long distances to blood donation sites and the inaccessibility of these sites to the general public all appear to adversely affect the blood donation process.

INTRODUCTION

Since 1963 the Blood Transfusion Service of Namibia (NAMBTS) has been a vital partner in the Health Delivery system and this is still the case today. Over time consistent improvements have also been observed in this service. New strategies and structures have been put in place, human capacity building has been undertaken, with the aim of making NAMBTS services more effective and efficient.

NAMBTS as an NGO provides blood and blood products and services on a non-profit basis and is the sole provider of this service in Namibia. In order to strengthen the capacity of the existing national programme to supply more blood and blood products to meet national demands, the National Blood Policy was developed (still in Draft form) to ensure and improve blood safety and its safe supply in Namibia (Republic of Namibia, 2005).

Although blood collection is the sole responsibility of an NGO in the country, it is the responsibility of the Government in collaboration with NAMBTS to ensure that, safe and adequate blood products are supplied to the Namibian society.

Blood shortages are experienced in Namibia during the malaria season (February to May), during the school breaks and the year end holiday season when most Namibians travel to malaria endemic areas. Malaria is endemic mostly in the northern and eastern parts of the country and seasonal malaria is the main cause of death during the rainy season. According to the Health Information System Report (2001), there were 36 000 malaria inpatients and 700 deaths in Namibia. All ages are affected and pregnant mothers are at high risk of contracting severe malaria. The demand for more blood is due to the fact that malaria patients usually suffer from anaemia which requires blood transfusion in most cases.

There is a need to increase the number of regular voluntary non-remunerated blood donors through the creation of new avenues and to establish mechanisms and strategies to ensure effective retention of new and present donors. Regular donors are the mainstay of an adequate and safe blood supply. Current blood collections are about 19 000 units per year (Republic of Namibia, 2001).

AIM

The research sought to identify the strategies and factors that promote the recruitment and retention of voluntary non-remunerated blood donors in Namibia and thus improving blood donation practices.

OBJECTIVES OF THE STUDY

The objectives of the study were:

1. To assess participants' knowledge and beliefs regarding voluntary, non-remunerated blood donation.
2. To assess perceptions, experiences and attitudes of the participants regarding voluntary, non-remunerated blood donations.
3. To identify physical barriers to blood donation in the local settings.
4. To determine underlying psychological barriers which influence the desired behaviours.
5. To identify factors which motivate people to donate blood regularly.
6. To recommend feasible social communication methods to recruit and retain more donors.

LITERATURE REVIEW

Although blood transfusion saves lives, it also poses a risk of passing on Transfusion Transmissible Infections (TTIs), such as the Human Immunodeficiency Virus (HIV) and Syphilis. Globally, unprotected sexual intercourse is the predominant mode of transmission of these diseases. Transfusion of especially unscreened blood is also a known route of transmission of diseases.

Blood transfusion is an important clinical intervention in the health delivery system. Severe anaemia due to malaria, haemorrhagic complications in child bearing and road traffic accidents are some of the few examples of cases often in need of blood transfusion therapy.

Africa remains the region that carries the greatest burden of malaria cases and death in the world. Malaria is also related to maternal anaemia in pregnancy, in which case blood transfusion would be needed (WHO, 2005).

The World Health Organization (2005) recommends blood donations of 2 to 5% of the population figure of a country. A target of 22 000 units per year for Namibia in the short term and 36 000 units (2% of the population figure) in the long term would improve the blood supplies from the current position (WHO, 2005). Nonetheless, in the case of Namibia this target may not be feasible given its hospital infrastructure and the demand for blood and its products.

Voluntary, non-remunerated blood donors are the mainstay for adequate and safe blood supplies. Sufficient numbers of such donors are needed to donate blood regularly because the blood products also have a limited shelf life, i.e., six weeks for the packed red blood cells. A decentralized blood donor base to cover the whole country on a principle of communities donating as if for their own needs reduces the risk of collecting from a few to supply the many. However, blood stocks should be moved to wherever they are needed in the country. This affords optimum utilization of the national resource.

Potential donors suffering from any of these diseases are prohibited from donating blood, to prevent the spread of these diseases to others through blood transfusion and also protecting the individual from undue ill health as a result of the blood donation. A well-informed, regular blood donor base is the mainstay of a safe blood supply for the nation and should be maintained (WHO, 2004). Appropriate information dissemination and public education is therefore essential to promote self-deferral of unsuitable donors, yet motivating all potentially suitable donors to donate blood.

According to Jackson (2002) in many African countries, some families seek a professional donor to provide blood for the sick relatives, a highly risky action if the blood is used without screening and one that is against National policies (Lloyd, 2001). Blood donation services need to carefully screen individual donors before they draw blood from them. It is essential to avoid a policy of paying donors to give blood. In some countries where donors are paid for donating blood, the outcome is to lie about their health status including denying that they were at risk for HIV transmission as commercial sex workers or as drug injecting individuals. This may put the recipient at risk.

The biggest challenge for blood transfusion services is to be able to employ appropriate public education and information materials to be able to motivate and recruit and most importantly, retain the safe donors from low risk populations/groups so recruited. Despite this, family replacement and paid donors that are associated with a significantly higher prevalence of Transfusion Transmissible Infections (TTIs) such as HIV, Chaga's disease, Hepatitis B and C, Syphilis, still make up 50% of blood donations in developing countries (Physicians Guide, 2004).

According to WHO (2004) an effective donor motivation and behaviour change strategy needs to be implemented to recruit new donors from the low risk population. Effective communication between the NAMBTS staff members and blood donors is imperative for the retention of the regular blood donors.

According to Potter and Perry (1993), autologous or auto transfusion is the best method to reduce dependency on homologous blood banks. This is due to the fact that the blood is re-infused from an active bleeding site during surgery to the donor at a later stage because the re-infused blood is the client's own. Another advantage of autologous transfusion is that the possible exposure to hepatitis, HIV and other blood borne infections are eliminated.

They further suggest that when an elective surgical procedure is anticipated and transfusions are required, some individuals choose to donate blood one or more units of their own blood in advance. However, not all patients qualify for the autologous blood transfusion procedure, only those that are healthy enough can do so.

There are various barriers to donating blood that influence the behaviour of people towards blood donation such as cultural beliefs in some ethnic groups, socio-economic factors, their knowledge or lack of it with regards to blood donation and other issues. Regular blood donation also has its own similar challenges that need to be explored to determine the best recruitment and retention strategies.

Studying the **K**nowledge, **A**ttitudes and **P**ractices (KAP) of blood donation in a given population is very useful in determining the appropriate donor recruitment information, materials and social communication channels for an effective blood donor recruitment and retention programme.

The public should be well informed of the precautions applied for the safety of blood donors while they are giving blood and the measures put in place to make the blood as safe as possible for patients. Such knowledge may motivate potential blood donors to donate blood.

Jackson (2002:169) notes that health workers and paramedical personnel might alleviate the need for blood transfusion by: preventing malaria and anaemia in pregnant and breast-feeding women, promoting community awareness and improving first aid techniques among health staff and the general public to reduce bleeding during accidents.

Continued safety of blood transfusion products and rational use of these are some of the outcomes stipulated in the Medium Term Plan III (MTP III) (Republic of Namibia, 2004:52).

The following are activities listed to achieve the outcomes.

- Train counsellors to counsel blood donors before and after donations.
- Advocate blood safety in high schools and centres of higher education by training school principals and educators on the importance and function of the Blood Transfusion Service of Namibia (NAMBTS), thus developing an interest in donation of safe blood.
- Strengthen the capacity of current and new personnel to render a quality and efficient service.
- Mobilize resources and apply for funds from development partners.

The above-mentioned are thus part of the prevention of the spread of HIV infections through blood transfusion and enhance safe blood transfusion and donations.

METHODOLOGY

The method of study included individual structured interviews, self-completed questionnaires and focus group discussions. The study was exploratory in nature, exploring the knowledge, beliefs, perceptions, attitudes, experiences and practices with regard to voluntary non-remunerated blood donation among the health personnel, NAMBTS staff and the public.

The three selected sites for the study were Windhoek (the Capital city of Namibia), Swakopmund/Walvis Bay, which are coastal towns, and Oshakati and Ongwediva in the north. About 70% of the Namibian population lives in the northern part of the country. These areas were chosen because of their perceived suitability for further development in donor recruitment and blood donation activities because of the high population densities in those areas.

The target population within the selected regions comprised individuals who had never donated blood, voluntary non-remunerated donors, lapsed donors, the general public, health professionals, health personnel (both clinic and laboratory staff) delivering services at the Blood Transfusion Services of Namibia, senior secondary schools and tertiary institutions. These groups included both males and females from the various economic strata.

Purposive, convenient, snowball sampling and focus group discussions were used to collect the data from the sample.

According to Brink (1999: 140 - 141), purposive sampling selects the sample based on the researcher's judgement of the "sample's knowledge about the question at issue", while "convenient sampling ... involves readily available people" and snowball sampling "involves the assistance of study subjects in obtaining other potential subjects". In this case the researcher identifies one person who in turn identifies others of similar characteristics necessary to provide the required information.

Purposive sampling was used to draw the sample from the public and current voluntary non-remunerated donors. Convenience sampling was used for the members of the public who visited shopping centres or malls, in their homes, and/or walking on the streets.

A minimum of 100 people per site were targeted from the public, 50 health professionals from each of the four area towns and 14 health personnel (both clinic and laboratory health workers) at the Blood Transfusion Services of Namibia. Not more than 20 scholars/students from secondary schools and tertiary institutions were included in the public population for the purpose of focus group discussions. A total of 434 individuals made up the sample (See Table 1).

Table 1. Sample for the study

Sample	Swakopmund/Walvis Bay	Windhoek	Oshakati	Total
Health personnel	49	50	50	149
NAMBTS staff	0	14	0	14
Public	100	94	77	271
Total	149	158	127	434

The participants interviewed were aged between 16 and 56 years.

The snowball (Rossouw, 2001:122), a non-probability sampling method was used to select the sample at Oshakati. The schools were closed during the data collection phase in the North (Oshakati/Ongwediva). It was therefore not possible to gain access to senior secondary schools during the spring break holidays. The snowball sampling method was therefore used to obtain participants. The field workers in Oshakati/Ongwediva identified few participants who had the required characteristics (i.e., school going and between 16 to 20 years) during the first stage.

These participants were questioned during the first stage and helped to identify more students/scholars from various schools who also had the same characteristics for the second stage. Three snowball sampling stages were used to collect data from this sample.

The snowball sampling method continued until the sample was saturated and a sufficient number of the respondents had been identified (Rossouw, 2001:122). In Windhoek the convenience sampling method was used. The sample was selected from respondents who were accessible and were within reach of the researchers at the time of the study.

Data collection tools

The instruments were specifically adopted from the Pan American Health Organisation (PAHO) and used to collect data among the public, health personnel, scholars and students, and health professionals who were employed at the NAMBTS.

The questionnaire for the public comprised 61 questions, the questionnaire for the NAMBTS staff had 60 questions and the one for the health personnel comprised 21 questions. These questions addressed aspects related to blood donation knowledge, attitudes, beliefs, perceptions and experiences, which formed the basis for the analysis of the results.

Piloting the research instruments

The questionnaires were piloted to ensure they were appropriate and would provide worthwhile information. There was no need for translation for most of the sites, except in Walvis Bay and Swakopmund; where the questionnaires were translated into Afrikaans, because the majority of the target group in these two towns spoke mostly Afrikaans.

During the enumerators' training, field workers were given an opportunity to interview each other, because all groups were represented within the training field workers. The questionnaires were found "very long", especially those of the health personnel at the NAMBTS and some modifications were made. Those interviews took almost 20–30 minutes per interview. This was the actual time planned for interviews. The main purpose of the pilot study was to make some adjustments and modifications to the questionnaires where necessary.

Data was collected during September of 2005. Focus group discussions were carried out at secondary schools with learners, and students at the tertiary institutions. Data was also collected at popular shopping malls, e.g. Game (Oshakati and Fysal Complex), Katutura Shoprite, Soweto market and Katutura "Pick and Pay".

Focus group discussions (FGD's) were held among the youth who were considered as part of the public, to substantiate the obtained quantitative data. Each site had two focus group discussions. Boys and girls were mixed in the groups. Each group consisted of 12–20 members. The sites used for these focus group discussions were secondary schools and tertiary institutions.

DATA ANALYSIS

According to Roller, Mathes and Eckert as quoted by Mouton and Prozesky (2001: 490), the most general level of content analysis is “any technique for making inferences by objectively specified characteristic of messages”.

Decisions had, therefore, to be made on the following:

- On the level of analysis
- How many concepts to code and whether to code for the existence or frequency of concepts.

This necessitated data analysis to be done on an ongoing basis starting from the data collection.

The following principles were maintained:

1. Data triangulation, whereby data for the same study was collected from multiple sources (health personnel, NAMBTS personnel and scholars) to obtain diverse views of the same phenomena for the purpose of validation.
2. Credibility and trustworthiness, whereby during collection and after data-analysis the findings were discussed with the participants who confirmed that the research findings were their own experience and not the researcher’s own views.
3. Dependability was met through securing credibility of findings with participants. Participants were asked to review the findings.
4. Transferability of the research was not envisaged as the sample was only drawn from Windhoek, Walvis Bay, Swakopmund and Oshakati/Ongwediva.

Qualitative data was analysed manually and themes identified and described. The Computer (SPSS-programme) was used for analysis of quantitative data. Frequencies were run and described. Figures (bar charts and pie charts) were also generated.

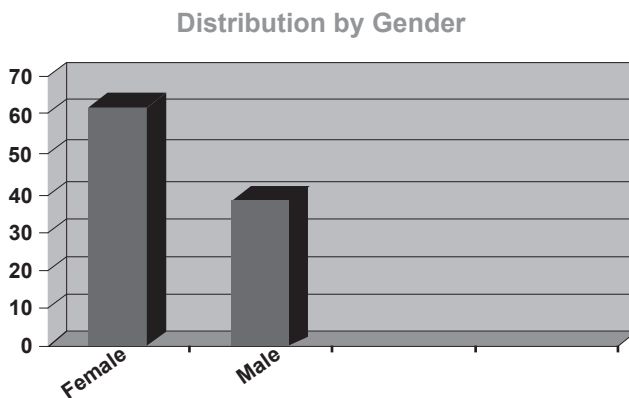
The evaluation of the quality of the data was done using the following methods. The qualitative data analysis which according to Streubert & Carpenter (1995: 24) is done to look for repetition of discovered information and confirmation of previously collected data, was used during data collection. Information obtained had to be constantly reviewed for careful discovery or meaning in terms of what is described and experienced.

Clustering of similar data was done to elicit themes. The themes helped the researchers to cluster information and discover the meanings intended in what is described in the open-ended questions. Substantive coding was done using codes that were taken from the language of the participants observed and interviewed (Streubert and Carpenter, 1995: 156).

SECTION 1: PUBLIC PERCEPTIONS, ATTITUDES, BELIEFS, KNOWLEDGE AND PRACTISES OF BLOOD DONATION AND TRANSFUSION

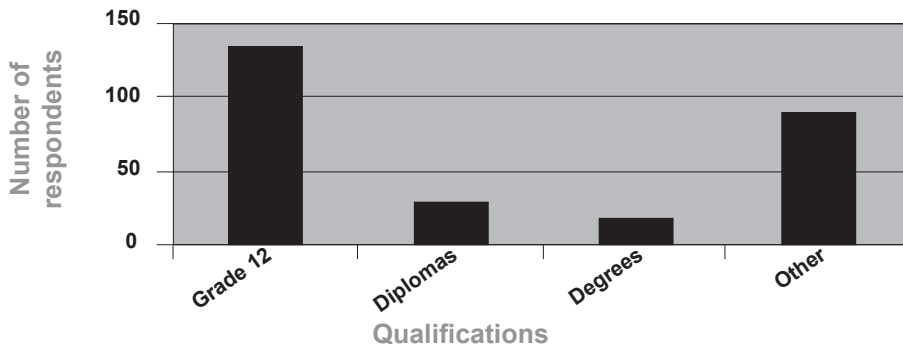
A structured questionnaire was used to obtain information from the public in Walvis Bay/ Swakopmund, Windhoek and Oshakati. The sample comprised of 271 respondents, of whom 62% were females and 38% males (see Table 1 and Figure 1). Their ages ranged from 16 to 59 years. It was also found that the lowest education level of one percent of the respondents was grade 7 and the highest education level of again, one percent of the respondents was a degree. But, 49.4% of the respondents were grade 12s and 10.6% had Diplomas (see Figure 2).

Figure 1. Distribution of public participants by gender (N = 271)



The distribution of the sample by education level is given in Figure 2.

Figure 2. Distribution by participants by education level (N = 271)



The “other” category includes all other qualifications not specified in the Figure above.

BLOOD DONATION PRACTICES

The questions stated below are questions posed to respondents during the survey.

Have you ever donated blood?

In reply to this question 68% of the respondents from Walvis Bay/Swakopmund, 61.7% from Windhoek and 72.7% from Oshakati had never donated blood. When the three sites are compared, Windhoek with 38.3% had the highest number of respondents who had donated blood (See Table 2).

Table 2. Have you ever donated blood?

Place	Frequency as percentage	
	Yes	No
Windhoek (N=94)	38.3	61.7
Walvis Bay/Swakopmund (N=100)	32	68
Oshakati/Ongwediva (N=77)	27.3	72.7

If “yes” why?

The majority (11% to 17%) of the respondents from all three sites stated that the reason why they donated blood was to “assist those in need”, “to save lives”.

If “no” why?

The answers were consistent in all three sites of Walvis Bay/Swakopmund, Oshakati/Ongwediva and Windhoek. Some of the commonly expressed reasons for not donating blood included: “I am afraid of needles”, “not interested”, “lack of information”, to name a few responses given.

If “yes” when last did you donate?

Between 8.5% and 20% of the respondents had donated blood as far back as 15 years ago. According to the participants the pool of the donors had steadily decreased over the years. Indeed this was borne out in this study by the few blood donors found among the respondents.

Why they stopped donating blood in the past 12 months?

In reply to this question 1% to 5.3% of the respondents in the three sites who had stopped donating blood indicated that they were “too busy” to donate blood. Nonetheless, the reasons for not donating blood were connected to the possibility of being infected by a disease such as HIV/AIDS and others, aspects related to the management of the services such as “... We do not know where these people are”, lack of information regarding where and when the blood donation clinics would be held since many had “changed their place of residence”. The majority of respondents in the three sites, i.e. 70% from Walvis Bay/Swakopmund, 70% from Windhoek and 77% from Oshakati/Ongwediva stated that the question did not apply to them since they had not donated blood before.

How often do you donate blood?

There were also variations in the response to this question. The number of respondents choosing “sometimes” ranged from 5% to 25.5% and from 3.2% to 10% for “always” from all three areas. Looking closely at these results, there is clearly a need for concern.

Where did you last donate blood?

The majority (11.7%) of the respondents mentioned the hospital as the place where they had last donated the blood. There were indications by a few individuals (4.3%) that the blood bank was rarely visited. One of the important observations here (indicated by 5.2% of the respondents in all sites) was that the schools were visited by the NAMBTS. The blood was also collected through “street collection” and “colleges”. The majority of the respondents from Oshakati/Ongwediva (71%) said the question was not applicable.

Did some one ask you to donate?

Responses to this question also varied. Thirty five percent of the respondents from Windhoek said “no”, while 7% said “yes” while 57% said not applicable. For Walvis Bay/Swakopmund 12% said “yes”, 25% said “no”, while 63% choose not applicable. For Oshakati/Ongwediva, 10% said “yes”, 30% said “no” and 60% said not applicable.

If “yes” who asked you?

Amongst those who said “yes”, 11% indicated that friends, teachers, workers at the blood bank and others encouraged them. This gives a picture of the influence that “significant others” may have on encouraging others to donate blood.

If “no” how did you find out about the need to donate blood?

The majority of the respondents mentioned various ways that triggered them to donate blood. The important sources of information indicated by all sites were advertisements (given by 12% from Windhoek, 15% from Oshakati/Ongwediva and 11% from Walvis Bay/Swakopmund). Above 60% of the respondents chose “not applicable”. The pattern across all three sites seems to be the same. The results were consistently observed in all the research sites (Walvis Bay/Swakopmund, Windhoek and Oshakati) and seem to suggest that the majority of the respondents were not donating blood.

Did you know what the blood was going to be used for?

The majority (45.7%) who knew the correct answers to which the blood would be put (to save lives) were from Windhoek. Thirty four percent of respondents from Swakopmund/Walvis Bay knew the correct answer (i.e., to save lives) and 41.6% from Oshakati. The number of those who did not know the use to which the donated blood would be put to was almost the same at all three sites. A total of 18% in Swakopmund/Walvis Bay, 19.1% in Windhoek and 15% in Oshakati did not know as to what purposes the donated blood would be put (See Table 3).

Table 3: Knowledge of the usage of the blood

Place	Number	Don't know	Knows the purpose	Not applicable
Windhoek	94	19.1%	45.7%	35.2%
Swakopmund/Walvis Bay	100	18%	34%	48%
Oshakati/Ongwediva	77	15%	41.6	43.4%

If “yes” what was it going to be used for?

Various responses were given. The majority (53%) in Oshakati/Ongwediva chose “not applicable”, while 47% said “to save life and to help the needy people”. The same picture was observed in Windhoek where 55% of the respondents chose “not applicable” while the remainder said to “save lives of the needy people” also. Seventy two percent of the respondents from Walvis Bay/Swakopmund chose “not applicable” while 22% said to “save lives”.

Are there cultural taboos regarding blood donation and transfusion?

The respondents at the different sites had different opinions on this question. The majority (64%) of the respondents from Walvis Bay/Swakopmund said no, 12% said yes, while 24% said not applicable. Seventy seven percent from Windhoek said no, 15% said yes while 15% said not applicable. From Oshakati, 77% stated that there were no cultural taboos regarding blood donation, 7% said there were while 17% said the question was not applicable to them. There appears to be consistency in the pattern of responses given by these respondents.

If yes, explain the taboos.

The majority of the respondents from Oshakati/Ongwediva (95%) stated that this item was not applicable to them. The other responses included the following, each given by 1% of the respondents: many believe “to donate blood is sin”, “blood can't be shared, unclean to donate blood, blood can't be given to some one” and one “religious” taboo given. In Windhoek, the same picture emerged. Eighty four percent stated that the question was not applicable and 16% provided various responses, similar to those mentioned by the respondents from Oshakati/Ongwediva. Other responses from these respondents included, “scared, I will be sick”, other's “blood causes AIDS”. In Walvis Bay/Swakopmund, 80% of the respondents chose “not applicable”, 2% stated that some churches prohibited their members to donate or receive blood while 16% indicated that there was nothing to explain while the remaining 2% mentioned Jehovah's Witnesses and Moslems as religious groups that did not permit their members to donate or receive blood.

What did you think about NAMBTS when you donated blood the last time?

The respondents rated the NAMBTS differently. Nonetheless, the majority choose “not applicable” for this question (See Table 4 below).

Table 4. Impressions of NAMBTS the last time you donated blood

	Impressions of NAMBTS in percent					
	Excellent	Very Good	Good	Fair	Bad	Not applicable
Windhoek (N = 94)	15	12	4	4	3	62
Walvis Bay/Swakopmund (N = 100)	14	9	7	5	0	65
Oshakati/Ongwediva (N = 77)	9	8	9	1	0	73

As shown in Table 4, only in Windhoek did respondents indicate that their experiences were “bad” and indeed by only three percent of the respondents.

Why NAMBTS was rated as “excellent”, “very good” and “good”.

There were several responses, why the participants rated the NAMBTS the way they did. Some of the reasons given were; the “good attitude of the services providers”, “education of the personnel” (their professional conduct was of an acceptable level), “friendly environment provided” and the “personnel are providing information about NAMBTS”.

But there were also issues raised which negatively impacted on the willingness of the donors to return to donate blood such as; “at times no privacy” and “those with infections are not informed” among others.

Did you receive information/orientation prior to donating blood?

There were similarities in the responses from the various sites on whether they had been oriented or not prior to donating blood. The results are given in the Table 5 below.

Table 5. Oriented before donating blood

	Responses as percentage			Total
	Yes	No	No response	
Windhoek	19	22	59	100
Walvis Bay/Swakopmund	20	19	59	98
Oshakati/Ongwediva	13	17	70	100

It is worthwhile to point out that all blood donors should be oriented about blood donation prior to donating blood. This is important because it enables the donor to understand why s/he was donating blood and to what uses it would be put. A well informed donor is more likely to be a repeat donor than an uninformed one. Informed donors are also ready to self-exclude.

If “yes” what type of information was given?

The results show that the majority of the respondents (78%), 63% and 86% from Walvis Bay, Windhoek and Oshakati/Ongwediva respectively said that the question was not applicable to them. Nonetheless those who responded from these three sites gave answers which could be summarized under: the uses of blood, handling of the results, procedures to draw blood, why blood donation was important and tests that would be carried out on the blood. Others’ responses included “can’t remember”.

Did they carry out health checks?

On the question of whether a health check was carried out prior to blood donation, responses given were consistent at the three sites. These results are given in Table 6.

Table 6. Health check of donor carried out

	Responses as percentage				Total
	Yes	No	No answer	Not applicable	
Windhoek	23	14	2	61	100
Walvis Bay/Swakopmund	28	10	1	61	100
Oshakati/Ongwediva	13	17	1	70	100

Table 6 shows that more respondents from Walvis Bay/Swakopmund indicated that they had checks carried out on them, followed by those respondents in Windhoek and only 13% from Oshakati/Ongwediva. It is imperative that health checks be carried out on all donors prior to donating blood. Or the procedure should be well explained so that the donors will actually recognize it as a health check each time they go through it.

If “yes” which procedures did the assessment consist of?

Between 70% and 80% of the respondents across all three sites stated that the question was not applicable to them. Nonetheless, the remaining 20% to 30% mentioned the following health checks as having been carried out on them by the NAMBTS staff: medical history, blood test (e.g., full blood count), haemoglobin test, vital signs, glucose levels, blood groups and physical examination. Highest number of respondents from Windhoek (15%) stated that they couldn’t remember whether a health check had been carried out or not.

Did they ask you questions prior to donation?

With regards to the above question, Table 7 provides the respondents’ answers.

Table 7. Questions asked prior to blood donation

	Responses as percentage					Total
	Yes	No	No answer	Can't remember	Not applicable	
Windhoek	19	4	0	15	61	100
Walvis Bay/Swakopmund	18	7	1	12	62	100
Oshakati/Ongwediva	14	3	0	12	71	100

Table 7 indicates that only a few of the respondents were not asked questions prior to donating blood.

What types of questions were asked?

The respondents gave several types of questions posed to them by the NAMBTS staff. The respondents from Windhoek (92.6%), 91% from Walvis Bay/Swakopmund and 85.7% from Oshakati/Ongwediva stated that the question was not applicable to them.

The following were some of the answers given by those who indicated that questions were posed to them across all three sites:

- Whether they had any diseases, such as sugar disease, high blood pressure etc.
- When last they donated blood.
- Whether they were willing to donate blood.
- Their health history/status.
- Any pathology, HIV.
- HIV test.
- Whether they had STD's.

Any dislikes while donating blood?

The responses of the respondents who indicated that there were aspects of the blood donation process they did not like are given in Table 8 below.

Table 8. Any dislikes during blood donation

	Responses as percentage				Total
	Yes	No	Can't remember	Not applicable	
Windhoek	6.4	30.9	1	61.7	100
Walvis Bay/Swakopmund	8	29	7	62	100
Oshakati/Ongwediva	14.3	2.6	11.7	71.4	100

It is encouraging to note that only a minority of the respondents indicated that there was something they did not like during the blood donation process. Nonetheless every blood donor should be made to feel important and needed since the blood donation process is a voluntary activity. Those donating blood should be made to feel important if they are to be retained as

regular blood donors. A disgruntled “potential” blood donor will not come back to donate blood. As we noted above the pool of blood donors was declining each year, therefore there is need for NAMBTS staff to hold on by all means to those voluntarily offering their blood.

If “yes” what experiences did they have?

Most of the respondents from the three areas chose the “not applicable” response. Ninety one percent from Walvis Bay/Swakopmund, 92.6% from Windhoek and 96.1% from Oshakati chose this response.

The remaining respondents from all the sites gave similar but various responses of their experiences as indicated below:

- Poor counselling done.
- Wait too long in line to donate blood.
- Needles leave swelling in the flesh.
- Felt dizziness and fainted.
- Blood donation centres are way out of the way
- It’s painful and uncomfortable.
- Asked what they were looking at.

As can be seen above, most of the unpleasant experiences mentioned had to do with counselling services, unfriendly NAMBTS staff members, long waiting times, painful jabs of needles which could be a result of incompetence, lack of training, inexperience, an occasional miss or the “I don’t care attitude” on the part of the NAMBTS staff.

Did you receive something after donating blood?

Table 9 gives the responses of the respondents’ to whether they had received something upon donating blood.

Table 9. Did you receive any rewards upon donating blood?

	Responses as percentage				Total
	Yes	No	Can’t remember	Not applicable	
Windhoek (N=94)	26.6	21	4.2	60.6	100
Walvis Bay/Swakopmund (N=100)	27	9	2	62	100
Oshakati/Ongwediva (N=77)	22.1	5.2	2.6	70.1	100

The results in the table above appear to indicate that the NAMBTS needs to review the rewards given to donors. Refreshments were not seen as “rewards”, but as “food” to replace the blood donated. In fact the rewards should be given to all donors and not a few, probably a selected group. The environment must be donor friendly if they are to attract more donors.

What did you receive?

The “rewards” received by the respondents from the NAMBTS on donating blood varied. But many of the respondents mentioned biscuits, soft drinks, cookies, sweets and fruits. Some of the respondents emphasized the fact that the food was too little. For example, “a biscuit and cool drink”, “two biscuits and a cool drink”, “a 500mls coke only”. These statements do not seem to see the refreshments given in a positive light by the blood donors and the chances are that they might not return in the near future to donate blood. Nonetheless, the provision of “little” food appears to be in line with the NAMBTS practice.

KNOWLEDGE ABOUT BLOOD

What are the functions of blood?

Respondents mentioned various functions of blood. Table 10 below shows whether respondents were aware of the functions of blood.

Table 10. What are the functions of blood?

	Responses as percentage			Total
	Knows the functions	Do not know the functions	No response given	
Windhoek	53.4	46.6	0	100
Walvis Bay/Swakopmund	56	34	10	100
Oshakati/Ongwediva	44.6	39.4	16	100

The responses given by the public are encouraging considering the fact that they were not health workers to know the correct functions of blood. The knowledge they demonstrated is satisfactory.

What are the blood groups?

The majority of the respondents gave wrong answers to this question as Table 11 shows. A few of the respondents at each site gave the correct answer (i.e., A, B, AB and O).

Table 11. What are the main blood groups?

	Responses as percentage			Total
	Knows the main groups	Do not know the main groups	No response given	
Windhoek (N = 94)	13.8	62	23.4	100
Walvis Bay/Swakopmund (N=100)	9.1	74	15	100
Oshakati/Ongwediva (N=77)	9.1	77	13	100

The above low correct responses in all three sites do seem to suggest that the respondents were not knowledgeable about the different groups of blood. Probably this finding should be expected since the respondents were not health workers and their general knowledge need not include such specialized health content.

Where in the body is blood produced?

The respondents' answers to this question were much better than those given for the different blood groups as indicated in Table 12. More respondents from Walvis Bay/ Swakopmund (58%) gave correct answers compared to the other two sites.

Table 12. Where in the body is blood produced

	Responses as percentage			Total
	Knows where blood is made in the body	Does not know where blood is made in the body	No response given	
Windhoek (N=94)	45.9	29.6	24.5	100
Walvis Bay/Swakopmund (N=100)	58	13	29	100
Oshakati/Ongwediva (N=77)	32.9	45	22.1	100

The lack of knowledge in this regard for most of the respondents seems to point to a need for health education to be introduced to inform the majority of our people of the essential aspects related to blood.

Do you know your blood group?

Table 13 provides the responses to this question, i.e., whether the respondents knew their blood group.

Table 13. Do you know your own blood group?

	Responses as percentage				Total
	Knows own blood group	Do not know own blood group	Can't remember	No answer	
Windhoek (N=94)	59.6	29.8	1.1	9.6	100
Walvis Bay/Swakopmund (N=100)	33	61	0	6	100
Oshakati/Ongwediva (N=77)	26	63.6	0	10.4	100

The majority (56.6%) of respondents from Windhoek knew their blood group, while fewer respondents could answer this question (33% and 26%) from Walvis Bay/Swakopmund and Oshakati/ Ongwediva respectively. Blood donors should know their blood group especially given the many accidents taking place in our community.

If "yes" what is your blood group?

In order to ascertain that indeed the respondents knew their blood group a follow-up question asked them to indicate their blood groups. Table 14 gives this information.

Table 14. Identified own blood group

Blood group	Windhoek (N=94)	Walvis Bay/Swakopmund (N=100)	Oshakati/Ongwediva (N=77)
A	7.4%	0	3.9%
A-	2.1%	0	1.3%
A+	5.3%	4%	
B	4.3%	1%	2.6%
B+	4.3%	3%	2.6%
O	20.2%	6%	7.8%
O Rhesus +	10.7%	17%	1.3
AB	2.1%	0	2.6%
OB+	0	1%	0
AB-	0	0	1.3%
AO	0	0	1.3%
Can't remember	1.1%	1%	1.3%
No answer	42.6%	67%	74%

The majority of the respondents were not able to indicate their blood group as shown above, 42.6%, from Windhoek, 67% from Walvis Bay/ Swakopmund and 74% from Oshakati/Ongwediva research areas were not able to indicate their blood group (Table 14).

KNOWLEDGE ABOUT BLOOD TRANSFUSION

According to Table 15 below, the majority of the respondents from the research sites Swakopmund/Walvis Bay, Windhoek and Oshakati/Ongwediva demonstrated knowledge about blood transfusion by stating that they had heard about it. Nonetheless, 22% of the respondents from Oshakati/Ongwediva said “no”.

Table 15. Ever heard of blood transfusion

Research site	Frequency as percentage		
	Yes	No	No response
Windhoek (N = 94)	90.4	3.2	6.4
Oshakati/Ongwediva (N = 77)	63.6	22.1	14.3
Walvis Bay/ Swakopmund (N = 100)	85	9	6

The other question posed in an attempt to gauge the respondents' knowledge as far as blood transfusion was concerned, was: “What is blood transfusion?” The responses are given in Figure 3.

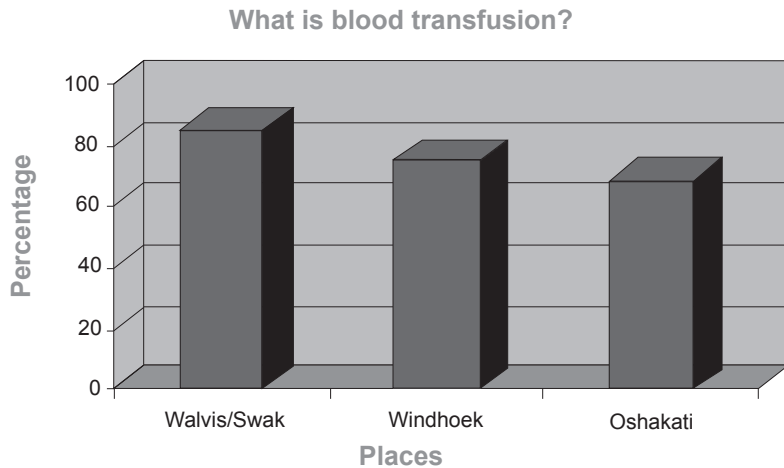
Figure 3. What is blood transfusion?

Figure 3 shows the percentages of respondents in the three research areas who knew what blood transfusion meant. In Walvis Bay/Swakopmund, 85% knew what blood transfusion meant, as did 75% in Windhoek and 68.8% in Oshakati/Ongwediva. A few respondents from all sites stated that blood transfusion meant to “donate blood”, “drawing of blood”, and “flowing of blood along the body”, among other incorrect answers.

Why some people need blood

Respondents at all sites were asked why some people needed blood. There were similarities between some of the responses, although minor variations were also observed. Table 16 gives significant responses why people needed blood transfusion.

Table 16. Why some people need blood

Reasons	Walvis Bay/ Swakopmund	Windhoek	Oshakati
When anaemic	31%	50%	27.3%
Losing of blood due to car accidents	45%	27%	23.4%
To save lives	4%	7%	15.6%
Medical reasons	3%	2%	3.9%

A few respondents from all three sites gave wrong answers to this item. Some of the responses included, “People need blood to know whether they are healthy or not”. There is a need for information sharing given that some respondents were not aware why blood transfusion was necessary in some cases.

Diseases transmitted through blood

Respondents gave various responses regarding Transfusion Transmissible Infections (TTIs). The major diseases given by all sites in order of mention: HIV/AIDS, Malaria, Hepatitis, Sexually Transmitted Diseases (STD’s) and Diabetes. HIV/AIDS was also mentioned in the context of Malaria, Diabetes or Hepatitis.

Any additional knowledge on blood transfusion

Respondents from all sites gave varied information regarding additional knowledge they had on blood transfusion. Respondents at Swakopmund/Walvis Bay had little additional knowledge to provide about blood transfusion and only 18% responded to this item. Fifty percent of the respondents from Windhoek gave further information and elaborated on their responses. Some of the additional information given was “that blood saves lives”, “diabetic persons can’t donate blood” and that “blood is screened for micro organisms”. About 42% of respondents from Oshakati did not appear to hold additional useful information as far as possible effects of donated blood were concerned.

Infected by receiving blood

The follow up question asked the respondents to indicate whether an individual could be infected through blood transfusion. The information is given in Table 17.

Table 17. Is it possible for an individual to be infected by receiving blood?

Research area	Responses in percentages		Total
	Yes	No	
Windhoek	79	21	100%
Walvis Bay/Swakopmund,	66	34	100%
Oshakati/Ongwediva	54.5	45.5	100%

Whether a person could be infected by receiving blood or not was responded to by 66% of the respondents from Walvis Bay/Swakopmund, 79% from Windhoek and 54.5% from Oshakati/Ongwediva who said “yes”, an individual could be infected by a disease(s) through blood transfusion. This demonstrated a very good level of knowledge.

Regarding, which diseases could be transmitted via blood transfusion, 36% stated HIV, 22% said HIV and other diseases and 35% did not respond. Other diseases mentioned by about 7% of the respondents included; Tuberculosis, Hepatitis, Malaria, Cancer, and any diseases that could be transmitted by blood. Although there were some similarities in the responses given, the majority of respondents (44.2%) from Oshakati did not respond to this question.

Knowledge regarding payment for blood donation

One of the practises that NAMBTS has not actively encouraged is payment for blood donated. Accordingly, respondents were asked whether they were aware of individuals who donated blood in exchange for money. The results are given in Table 18.

Table 18. Knowledge regarding payment for blood donation

Research area	Responses in percentages			Total
	Aware	Not aware	No response	
Windhoek	6	85	9	100%
Walvis Bay/Swakopmund	3	90	7	100%
Oshakati/Ongwediva	79	3	18	100%

In Walvis Bay/Swakopmund, 90% of the respondents stated that they were not aware of individuals who were paid for donating blood while 3% confirmed that people paid for the services whereas 7% did not respond on this item. A similar picture emerged in Windhoek, where 85% stated that no one was paid for blood donation, 6% said “yes” whereas 9% did not respond. For Oshakati, the majority (79%) confirmed that no one was paid for their donation, 3% said “yes” and 18% did not respond.

Encouraging people to donate blood

Seventy five percent (75%) of the respondents from Walvis Bay/Swakopmund stated that advertising was a popular and most effective method that could be used to encourage others to donate blood. On the other hand 65% of respondents from Windhoek stated that media was the best method together with education to encourage people to consider donating blood, whereas 20.8% of the respondents from Oshakati stated that money should be given to blood donors as incentives.

How often should blood be donated?

The suggestions on how often blood could be donated, by whom and when did not vary much from site to site. The Windhoek respondents felt that blood should be donated between two to four times a year, Swakopmund/Walvis Bay respondents say between two and three times a year, while those from Oshakati said between 4 and 12 times a year. A common response as to who should donate blood, most of the respondents from all the three research sites said “any healthy person over 16 years could donate blood as often as they could do it”.

Who should not donate blood?

On the question of “who shouldn’t donate blood”, little variation was observed in the three sites. Individuals infected with the HIV/AIDS were cited by about 55% of the respondents in all. This was followed by “sick and older persons”; those with “chronic diseases” indicated by 25% and anaemic persons and pregnant women were cited by 12% of the respondents. The results appear to show that the majority of the respondents were acutely aware of who should not donate.

Reasons for not allowing people to donate infected blood

The survey revealed that most of the respondents expressed their fear that other persons could contract infection if the infected persons donate blood. The results show that 50% of respondents from Windhoek, 79% from Walvis Bay/Swakopmund and 55.9% of the respondents from Oshakati were of this view.

Can something happen to a person who donates blood

There was a general lack of knowledge among the respondents from all sites regarding the knowledge of what could happen to those who donated blood. The results are given in Table 19.

Table 19. What would happen to those who donate blood?

Research site	Responses as percentage		
	Something can happen	Nothing can happen	Do not know
Windhoek	38	10	52
Walvis Bay/ Swakopmund	39	30	31
Oshakati	16.9	33.8	49.4

As can be seen from the results above a sizeable number of the respondents tended not to know the possible consequences of donating blood. This result seems to confirm lack of knowledge among the respondents as far as blood donation was concerned and may result in fear of donating blood. Information on what could happen or how clients could react when donating blood need to be shared broadly and extensively.

Reasons on what could happen to those who donated blood

Reasons stated by 80% of the respondents in Walvis Bay/Swakopmund and Windhoek respectively in the sequence of most important mentioned to least mentioned reasons are listed below:

- Fainting
- Collapse because of shock/hunger
- Dizziness
- Weakness
- Suffer anaemia
- Loose blood
- Could pick up diseases
- Spreading of infection
- Infection with HIV

Only 15.6% of the respondents from Oshakati mentioned fainting and collapsing as what could happen to those who donated blood while, 84.4% of the respondents did not comment on this question.

Access to blood donating sites

Almost half of the respondents at all sites expressed their satisfaction regarding the accessibility of sites for blood donation. At Walvis Bay/Swakopmund, 50% indicated that they were able to access blood donation sites while 40% said “no”. In Windhoek, 61.7% had access and 29.8% of the respondents did not whereas in Oshakati, 44.2% did not have any access to blood donation sites while 37.7% of the respondents had access to these (See Table 20).

Table 20. Access to blood donation sites

Research sites	Responses as percentage			Totals
	Yes	No	No answer	
Swakopmund/ Walvis bay	50	40	10	100
Windhoek	61.7	29.8	8.5	100
Oshakati	37.7	44.2	18.2	100

Reasons why people could not access donation sites

The respondents in most cases stated similar constraints to accessing the blood donation sites.

Some of the reasons given were:

“Do not know where the sites are”.

“Lack of information”.

“Lack of transport, sites too far”.

“Too busy at work, no time”.

“View NAMBTS as private and services not for public”.

“No enough advertisement”.

There was very little inconsistency regarding reasons mentioned when compared by sites.

Confidentiality and safety of NAMBTS

Overall, reasonable numbers of respondents expressed satisfaction with respect to confidentiality and safety of blood donated to NAMBTS (see Table 21).

Table 21 Are you satisfied with NAMBTS maintaining of confidentiality and safety of donors?

Research site	Responses as percentage	
	Satisfied with confidentiality of donors	Satisfied with safety of donors
Windhoek	48	54.3
Walvis Bay/Swakopmund	60	61
Oshakati/Ongwediva	39	42.9

From the above results, it seemed the NAMBTS maintained confidentiality and safety of the blood donors. This is of the utmost importance in the blood donor-service provider relationship. Indeed, confidentiality and safety are the two cornerstones in pre and post counselling of individuals prior to blood donation and should be paramount.

As shown in Table 21, the respondents in Walvis Bay/Swakopmund were very satisfied with these two aspects of the NAMBTS while Oshakati was not highly satisfied.

Is the NAMBTS environment conducive for donor welfare?

There wasn't much discrepancy between the sites on whether NAMBTS was sensitive to donor welfare concerns or not. Almost 50% of the respondents in Windhoek stated that the NAMBTS was sensitive to the welfare concerns while an almost equal number (50%) said "no". In Swakopmund/Walvis Bay, 57% said the NAMBTS was sensitive to donor welfare concerns while 7% said "no". In Oshakati, 31.2% said "yes" and 5.2% said "no". The regular blood donors and potential donors would greatly appreciate a donor friendly environment at the NAMBTS.

Continue to donate blood

On the question whether donors would continue to donate blood, a minority of the regular donors (22%) from Swakopmund, 22.3% from Windhoek and 15.6% from Oshakati said that they would, whereas the majority of respondents over 77% in the three sites did not respond to this question. It seems to us that more educational campaigns and advocacy are needed in order to recruit more blood donors. Nonetheless, there was evidence that some donors did not feel welcome at the NAMBTS sites.

Messages about blood donation

According to the data 81% of the respondents at Walvis Bay/Swakopmund, 76.6% at Windhoek and 59.7% at Oshakati, had seen or heard messages regarding blood donation. With regards to the messages heard and seen regarding blood donation, some similarities were noted. Sixty eight percent (68%) of the respondents in Walvis Bay/ Swakopmund, 80% in Windhoek and 49.4% in Oshakati, gave the most mentioned messages which included: "please donate blood and save lives", "please donate blood, I do" among others.

Information/orientation post donation

In Swakopmund/Walvis Bay only one quarter (25%) of the respondents indicated that NAMBTS did provide orientation and/or information post donation, 23% said "no" whereas the majority (52%) did not respond. In Windhoek, 37.2% said "yes" and 18% said "no". The majority (44.2%) did not respond on this item. Without appropriate information sharing and communication, donors will lose interest and motivation to donate and drift away.

Blood donation messages

Eighty one percent of the respondents in Walvis Bay/Swakopmund, 76.6% from Windhoek and 59.7% from Oshakati indicated that they have seen and heard the message on blood donation.

Television, radio, pamphlets and bill boards were cited as the sources of the messages on blood donation. These were also cited in combination with other methods.

Only a few respondents did not respond to this item. Half of the respondents from Walvis Bay/ Swakopmund, 55% from Windhoek and 59% from Oshakati stated that the messages seen and heard on blood donation were aimed at everybody, healthy and above the age of 16 years, and not for one specific individual.

Would like to hear messages in future

Respondents were asked to indicate whether they would like to hear/or see these messages in the future. The majority of the respondents (94.7%) in Walvis Bay/Swakopmund, 90% in Windhoek and 90.9% in Oshakati said they would like to hear these messages in future.

Reasons/or why they would like to hear messages on blood donation

When probed for reasons why they wished to hear messages on blood donation, there were variations of responses that were advanced in all the sites. Common reasons were mentioned by the majority of the respondents. Such as; “to get more people involved to donate”, “to save lives”, “that everyone can hear the message”, “to make people aware of the importance of blood donation” among others. Only a small number of respondents (about 5%) did not comment on this item.

Best ways to disseminate messages on blood donation

The most popular ways to disseminate information about blood donation favoured by the respondents at the three research sites were radio and television by 80% of the respondents in Windhoek, 89% in Swakopmund/Walvis Bay and 68% from Oshakati/Ongwediva. These modes were then followed by printed media and interpersonal modes of communication.

The other best media to be used to disseminate information on blood donation identified by all three sites included pamphlets, booklets, drama groups, audio-visual, and workshops in that order. Five percent of the respondents from all sites did not respond to this question.

What should be said to convince others to donate blood

Although there were some similarities in the information obtained from the three research sites, some variations in their responses were noted.

The most commonly mentioned messages from all three sites are quoted below:

- “Can save somebody’s life”.
- “Explain advantages of donating blood”.
- “Can save your own life”.
- “Good to know your status”.
- “Help people in mind”.
- “Feel good of your own status”.
- “You and your family may need it”.
- “Babies need blood, so adults should donate”.
- “A lot of people die during holidays”.
- “Tell them that they will get paid”.

A few respondents (10%) did not respond to this item. From the above quoted possible approaches to convincing an individual to donate blood, the conclusion reached is that this group of respondents demonstrated knowledge of blood donation, which could be used to advantage in this task.

Suggestions made by respondents

There were several suggestions made by respondents at all sites regarding increasing the activities of NAMBTS. The suggestions were similar at all three surveyed sites of Walvis Bay/Swakopmund, Windhoek and Oshakati/Ongwediva.

The suggestions included:

- More blood donation sites should be established.
- More education should be given on blood donation.
- NAMBTS should be more blood donor-friendly.
- NAMBTS should be decentralized to all the regions.
- Blood donor sites should be made more attractive and regular.
- Something to eat and drink should be given prior to blood donation.
- Extensive counselling should be done prior to blood donation.
- Give information from house to house on blood donation.
- Aseptic techniques be maintained all the time when drawing blood.
- Confidentiality principle be maintained at all times.
- Hold meetings at tertiary institutions on blood donation
- More information be shared on blood donation.
- Workshops on blood donation be held all around the country.
- Maintaining of good relationships with the blood donors.
- Arrange transport for health workers for the blood donation exercise.
- Proper training should be provided to the NAMBTS personnel.
- Advertisement be done using all the languages in all the regions.

SECTION 2: FOCUS GROUP DISCUSSIONS

Introduction

Although the focus group discussions (FGDs) were held in smaller groups in the various target areas, all the principles of group discussions were adhered to and observed by the researchers. Participation was open to scholars/students only and was not compulsory. Relevant health information was disseminated to the respondents as their need or lack of information were identified, thus the principle of benevolence was observed.

Residential Areas of the Respondents

Table 22 indicates the residential areas of the respondents.

Table 22. Residential areas of the focus group

Area	Number	Percentage
Oshakati/Ongwediva	20	21
Swakopmund	19	20
Walvis bay	20	21
Windhoek	35	38
Total	94	100

Participation in the focus group discussions was voluntary. Very few of the respondents withdrew from the group discussions though. The data reflected above shows the respondents who actively participated in the discussions until the end. All the target areas were therefore represented.

Ages

Table 23 below indicates the age range of the respondents.

Table 23. Age range of focus groups

Age of ranges	Number	Percentage
16-20 years	42	45
21-25 years	52	55
Total	94	100

The majority of respondents in FDG were between 21-25 years old. This represents the ages of the scholars in secondary schools in Namibia. As indicated above, the focus group discussions were carried out with scholars/students only.

Gender

The majority (58%) of the respondents were females and 42% were males.

Highest level of Education

The majority (60%) of the respondents were in grades 11 to 12, while 18% were in grades 9 to 10. Twenty percent of the respondents were in Tertiary Institutions. Table 22 indicates the highest education level of the respondents.

Table 24. Highest education level of focus group members

Grade	Number	Percentage
9-10	17	18
11-12	57	61
Tertiary Institutions	20	21
Total	94	100

All of the respondents were therefore still actively involved in learning.

SECTION A: BLOOD DONATION PRACTICES

The majority of the respondents in the target areas (Oshakati/Ongwediva, Walvis Bay/Swakopmund and Windhoek) had never donated blood. The following Table 23 indicates the blood donation practices of focus group respondents.

Table 25: Blood donation practices of respondents

Area	Donated Blood	Never Donated Blood
Oshakati/Ongwediva	10%	90%
Swakopmund	21%	79%
Walvis Bay	20%	80%
Windhoek	29%	71%

It is encouraging to note that although the majority of the respondents had never donated blood, they however, indicated that they intended donating blood. The respondents who had donated blood were recent voluntary, non-remunerated donors. Very few of the participants who had never donated blood indicated that they did not intend to donate blood.

The non-remunerated respondents who had donated blood cited the following reasons for donating blood.

- “To help other people who lose blood in the body”.
- “To provide it to assist somebody who needs it”.
- “It is for a good cause and to find out my blood type”.
- “To save lives of those who’re seriously ill”.
- “Because I saw a need for donating blood”
- “I believe that every drop of blood that is donated can save at least one life and through doing so, I can also be helped if involved in an accident one day”.

Most of the respondents who had never donated blood gave the following reasons for not doing so.

- “Don’t know where to go to donate blood.”
- “I have not found these people taking it.”
- “Not yet ready/too young to donate blood.”
- “Don’t have time/don’t get time. They are at school and have homework and walk long distances”
- “No clear information is available concerning blood donation”.

Some other statements were made:

- “Do not know the good or bad side of donating blood”
- “There is this thing going around about needles are not sterilized.”
- “It’s because I did not obtain convincing data concerning blood donation.”
- “Afraid of needles”

Few of the participants were not sure whether they should donate blood as shown by their statements below:

“I was not told my country needs blood.”

“I was not asked to donate blood.”

“I am not yet interested to donate blood.”

“I do not know where to go to donate blood; I am so scared to collapse.”

“I am scared of getting HIV/AIDS.”

From the above mentioned information it became evident that more information regarding blood donation needed to be disseminated. The time for blood donation clinics also needed to be considered as well as factors influencing the willingness of the donors to donate blood.

None of the donors regularly donated blood. Some of the respondents indicated that they sometimes donated blood. The majority of the respondents never donated blood.

Very few of the respondents donated blood on their own volition. Some indicated that they donated blood because they were asked by their teachers, or ‘Through my mother and father’, ‘Our class visited the blood clinic’, ‘Because of the number of people who need blood’, ‘They advertised at school’.

The respondents who had donated blood knew what the blood was going to be used for. According to them, the donated blood was going to be used, ‘to give it to those people who have insufficient blood in the body’, ‘to save lives,’ ‘accidents’, and ‘in hospitals.’

All the respondents irrespective of skin colour and area of residence stated that they were not aware of any cultural traits/taboo regarding human blood transfusion.

SECTION B: OPINION ABOUT BLOOD TRANSFUSION SERVICE OF NAMIBIA

As indicated earlier, the majority of the respondents had never donated blood. Those respondents who had donated blood graded the Blood Transfusion Service of Namibia between “good” (majority) and “excellent” (very few).

The following were some of the reasons given:

- “The blood is safe as it is tested before using it”.
- “The blood is tested in the hospital for diseases before use.”
- “Everything is in order and communication is good.”
- “They take your history about your health first.”
- “They give you some information first and you are not forced.”
- “Good, because it took long, but people were kind and compassionate”
- “Excellent, because people were kind and supportive.”

Some of the respondents in the North (Oshakati/Ongwediva) said that they had not received any orientation or health information from anyone before donating blood. Few of the respondents from Swakopmund had the same experience.

Those respondents who had received information stated that they were informed about the following:

- All barriers regarding donation of blood.
- When to donate blood.
- Need for blood donation in Namibia.
- To eat something before donating.
- How blood will be used.
- Who will receive blood?

The health checks carried out by the NAMBTS staff consisted of the following:

- Blood pressure.
- Blood types.
- Amount of iron in blood.
- Other diseases like STIs.
- Allergies.
- Weight.

All the non-remunerated respondents who had donated blood indicated that they had received biscuits and fruit juices before they donated blood.

SECTION C: KNOWLEDGE ABOUT BLOOD

Blood's function

Many of the respondents directly or indirectly knew the function of blood. The following were some of the answers given:

- “Contains red and white cells, which carry oxygen around the body”.
- “Fights bacteria that enter the body, infection, defence mechanism against diseases”.
- “Transports nutrients food around the body”.
- “Keeps us alive, helps body to function”.

Considering the fact that not all respondents had Biology or Life Science as subjects at school, the answers they gave were satisfactory.

The majority of the respondents did not know what types of blood there were. They stated “white and red blood cells”, “red blood”, “OA, OB” as blood types. Very few knew the correct types, i.e., “A, B, AB and O”. Probably this needs to be emphasized in the school curriculum.

The majority (95%) of all the respondents did not know what their blood group was.

SECTION D: KNOWLEDGE ABOUT BLOOD TRANSFUSION

The majority (90%) of the participants had heard about blood transfusion. All of these participants were able to describe what blood transfusion was correctly.

Examples were:

“When you donate blood and someone else is given the blood in the hospital”.

“When you get blood from somebody else”.

“Process by which a person receives blood through a drip usually in the hospital”.

“Administration of blood to somebody else with the same blood group.”

Very few (10%) did not know what blood transfusion was and had not heard about blood transfusion.

Many of the participants indicated anaemia and not having enough blood as an indication for blood transfusion. Many also stated that certain diseases also caused people to need a blood transfusion. After car accidents and loss of blood during operations were indicated as times when blood was needed or else the individual would die due to loss of blood.

The majority of the participants indicated that a person could get infected with a disease by receiving blood. Some participants indicated that a person couldn't get infected with a disease by receiving blood. Few (about 15%) of the participants did not know whether a person could get infected with a disease or not by receiving blood.

Most of the participants knew that the “blood is tested before use” and that “it may be safe”. Some mentioned that one could get allergic reactions because “it is not your own blood” and you can also “get HIV/AIDS”. Others (about 20%) knew little about blood transfusion except what they had heard. These stated that, “I need more information.”

SECTION E: KNOWLEDGE ABOUT BLOOD DONATION

In order to have more people donating blood all of the participants stated that the following could be done:

“Create awareness of the need to donate blood”.

“Disseminate” more information to people at community level about blood transfusion and donation”.

“Hold meetings with people and share information to be able to convince them”

“Educate the people”.

“Provide convincing data in all indigenous languages in the Republic”.

“Pay or give them something in turn for their blood like school bags, mathematics sets or calculators from NAMBTS”.

Many participants thought that blood transfusion information should “be in the school curriculum as a core subject”, so that students and learners will be well informed of the necessity of donating blood.

All the participants did not know how often blood should be donated and had the following to say:

“Maybe two times per year”.

“Perhaps three times a year”.

“When needed any time”.

“Depends on the percentage of blood needed and the health of people”.

Few of the participants indicated that blood could be donated “once a month”, “every two months to three months”.

Everyone stated that anyone “whose blood was tested, was free from disease and was willing” could donate blood. A few focus group members indicated that donors should be young people, and “also those working in the hospitals.”

All the participants indicated that “people infected with HIV/AIDS and other diseases cannot donate blood”. Some of the participants indicated that “old people and children couldn’t donate blood”. “These people cannot donate blood, as they will infect all the people who receive their blood during transfusion” was the reason given for not allowing people with the HIV virus to donate blood.

The majority (80%) of the participants had seen or heard messages about blood donation, few of them did not remember and very few had not seen or heard messages about blood donation. The following Table 24 indicates where the participants saw or heard the messages regarding blood donation.

Table 26. Where participants saw or heard blood donation messages

Source of message	Frequency as percentage
Advertisement	15
Pamphlets	15
Television (TV)	70
Radio	60
Posters	25
Bill Boards	5

It is evident from the table above that the majority of the participants saw or heard blood donation messages from the radio and television. Some of the participants (25%) although significant had seen blood donation messages on posters, while 15% of the participants had seen these messages on pamphlets and advertisements.

The majority of the participants indicated that these messages on blood donation were aimed at everyone, “at us”. The few that did not respond were those who had never seen or could not remember seeing any messages on blood donation.

The majority of the participants (85%) thought that messages regarding blood donation were aimed at everybody who is healthy and willing to donate blood. Further probing questions revealed that there was nothing to motivate even those who had heard or seen these messages to donate blood. They also knew that donating blood was important to save lives, but still did not donate. It is therefore important for people to hear and decide for themselves to give or not to give blood. Fear and misconceptions needed to be managed by the NAMBTS through continued education.

The best way to disseminate messages about blood donation was by radio and television given by 85% of the focus group members. The following Table 25 reflects the best ways to disseminate messages about blood donation.

Table 27. Best ways to disseminate messages about blood donation

Source of message	Percentage
Radio	85
Television (TV)	85
Bill Boards	65
Written Media	35
Other Printed Media	15
Interpersonal	10

According to the majority (85%) of the participants said that radio messages must be broadcast in the various local languages so that everybody who heard the messages could understand. Sixty five percent (65%) of the participants thought that Bill Boards were the best informative/ educational materials to provide information about blood donation. Posters and notices should be put up at schools, shops, Cuca shops, places where community programs were held. The languages should be indigenous.

Radio and TV programs were also listed as educational media that could be used best to provide information about blood donation by 30% of the participants. They also indicated that the programs should be scheduled at specific times with all the necessary information available. Listening to the radio was preferred, since not everyone was literate. Twenty percent (20%) of the participants said that introducing information about blood donation in the school programme/syllabus and making books available at schools under “Life studies”/Life science” were the best ways to provide information to the learners on blood donation.

Convincing a person to donate blood

The following statements were made by the focus groups on how to convince a person to donate blood:

“It is the only way you can contribute to save a person’s life”.

“It could be you or your family needing blood”.

“Just feel pity for those people “

“An injury to one is injury to all way of thinking is necessary”

“If someone is in danger—all can help by donating blood”

“The NAMBTS will not draw too much blood. That little blood contributes to the well being and health of people “

“It is not just taking your blood or taking you for granted they are not paying for blood but just to thank them (people)”

“God will feel good - many blessings for helping sick people”

“Not to be influenced by others - people must decide for themselves, think positively”

Half of the participants suggested that NAMBTS should make more information available throughout the country regarding their activities, aims, needs, advantages and disadvantages regarding blood donations. They also identified a need to be informed about the results of the blood test and “tips about health” as well as “medical treatment if diseases are detected.”

The findings from the focus group appear to indicate that many of the individuals in the discussion group were not knowledgeable regarding blood donation. There is a dire need to provide proper information to all people. And as a way of motivating more people to donate blood, 35% of the participants suggested that the NAMBTS should provide some incentives to the blood donors e.g. school bags or books, food (maize meal, sugar) or money. According to them, this will ensure that the number of voluntary donors increases.

DISCUSSION OF FOCUS GROUP RESULTS

Although the majority of the respondents had never donated blood, they indicated that they were willing in future to consider donating blood. From the reasoning cited for not donating blood it is evident that information was needed to be disseminated to eradicate ignorance and misconceptions with regards to blood donation.

Many of the respondents directly or indirectly knew what the blood's functions were and what this was going to be used for. The majority (95%) of the scholars/students did not know what their blood groups were. The majority (90%) however knew about the NAMBTS and correctly stated what blood transfusion was.

All the participants knew that people infected with HIV/AIDS couldn't donate blood. This was also observed with all other respondents from the various areas.

Currently television and radio seem to be the main sources of dissemination of information that featured strongly with 70% and 60% of the respondents indicating these sources respectively. The best ways to disseminate messages about blood donation included the use of the radio in various languages and television, both indicated by 85% of the respondents. Thirty five percent indicated that written media was also a way to disseminate messages about blood donation. The best informative/educational material to provide information was listed as radio messages. Twenty percent of the scholars/students also indicated that information on blood and blood donations should be introduced in the school syllabi/curricula under Life Science or Biology.

When the reasons why people did not donate blood were considered, lack of information featured throughout. This should be considered in the relation to the prevailing health situation in the country.

Overall the experiences, perceptions, attitudes and knowledge of the respondents regarding non-remunerated blood donation are positive when one considers their suggestions or comments regarding improvement of blood donation practices.

SECTION 3: HEALTH PERSONNEL

In this section we report the results involving health personnel in three research sites of Walvis Bay/Swakopmund, Windhoek and Oshakati/Ongwediva. A total of 149 health personnel responded to the 12 multiple choice questions intended to measure their knowledge on different aspects related to blood and/or blood transfusion.

A. KNOWLEDGE ABOUT BLOOD

Three questions (Question 1 through 3) addressed this aspect of the health personnel knowledge about blood as shown below.

1. What is blood?

The 149 respondents' replies to the question "What is blood?" are given in Table 28.

Table 28. What is blood?

Answer	Frequencies as percentage			Total (N= 149)
	Walvis Bay/ Swakopmund (N = 49)	Windhoek (N = 50)	Oshakati/ Ongwediva (N = 50)	
a. Complex fluid consisting of cells suspended in plasma	32.7	4.0	4.0	13.4
b. A transportation medium	8.1	2.0	2.0	4.0
c. A mixture of red cells, white cells and platelets	10.2	16.0	2.0	9.4
d. a, b and c	6.1	30.0	50.0	28.9
e. a and c**	42.9	48.0	40.0	43.6
f. Blank	-	-	1(2.0)	0.7

**Denotes correct response

Sixty five (43.6%) of the respondents knew that blood was a complex fluid, consisting of cells suspended in plasma and that it was also a mixture of red and white blood cells and platelets. It should be noted that the health personnel from Windhoek (48%) displayed more knowledge on what blood was, followed by those from Swakopmund/Walvisbay (42.9%) and by those from Oshakati/Ongwediva (40%) as shown in Table 26. The professional nurses are expected to demonstrate good knowledge regarding the definition of blood, but this does not seem to be the case in this regard.

2. Which are the main blood groups?

The results for the above question are given in Table 29 below.

Table 29. Main blood groups

Answer	Frequencies as percentage			Total (N = 149)
	Walvis Bay/ Swakopmund (N = 49)	Windhoek (N = 50)	Oshakati/ Ongwediva (N = 50)	
a. A, B, O	57.1	40.0	44.0	47.0
b. A, B, AB, O	18.4	40.0	48.0	35.6
c. Rh D negative, Rh D positive	6.1	2.0	2.0	3.4
d. a and c	4.1	6.0	2.0	4.0
e. b and c	14.3	10.0	4.0	9.4
Blank	-	2.0	-	0.7

Table 29 shows that the health personnel knew what the main blood groups were. The Rh was however not recognised as much as the ABO blood group.

B. BLOOD TRANSFUSION

Two questions, 4 and 5 addressed the aspect of blood transfusion as indicated below.

3. When is a blood transfusion necessary?

Table 30 provides the 149 health personnel's responses to the above question.

Table 30. Situations when blood transfusion is needed

Answer	Frequencies as percentage			Total (N = 149)
	Walvis Bay/ Swakopmund (N = 49)	Windhoek (N = 50)	Oshakati/ Ongwediva (N = 50)	
a. Situations associated with major surgery	2.0	6.0	8.0	5.4
b. Situations associated with chronic disease	-	-	-	-
c. Haematological disorders	8.2	16.0	8.0	10.7
d. Pregnancy and labour complications	2.0	-	2.0	1.3
e. All the above**	81.6	72.0	82.0	78.5
Blank	6.1	6.0	-	4.0

**Denotes correct response

Overall the knowledge of the health personnel is quite high regarding situations when blood transfusion was needed. A significant number of the respondents 117 (78%) gave the correct answer. This seems to indicate that the respondents were aware of when blood transfusion was necessary to be carried out.

4. What infection can a person get by receiving a blood transfusion?

For this question the answer from the health personnel are given in Table 31.

Table 31. Possible infections from receiving blood

Answer	Frequencies as percentage			Totals (N = 149)
	Walvis Bay/ Swakopmund (N = 49)	Windhoek (N = 50)	Oshakati/ Ongwediva (N = 50)	
a. Human immunodeficiency virus (HIV)	4.1	10.0	4.0	6.0
b. Human T-cells lymphotropic virus (HTLV)	-	4.0	-	1.3
c. Hepatitis B and C	2.0	2.0	2.0	2.6
d. Tuberculosis	-	-	-	-
e. a, b, c**	89.8	80.0	94.0	87.9
Blank	4.1	4.0	-	2.7

**Denotes correct response

According to the results in Table 31, 87.9% of the respondents gave the correct response to the question of “what infections a person might get by receiving a blood transfusion”. It is interesting to note that more respondents from Oshakati/Ongwediva gave the correct response as compared to the other two sites.

C. BLOOD DONATION

Questions 6 to 12 addressed aspects related to blood donation, specifically the knowledge level of the health personnel with respect to blood donation. The results are given in Tables 32 to 37.

5. What type of donor has the greatest possibility of donating safe blood?

One aspect facing the health personnel is to identify the donors who would provide the safest blood to the recipients. Their answers are given in Table 32.

Table 32. Donor with greatest possibility of donating safe blood

Answer	Frequencies as percentage			Totals (N = 149)
	Walvis Bay/ Swakopmund (N = 49)	Windhoek (N = 50)	Oshakati/ Ongwediva (N = 50)	
a. Commercial donor	-	10.0	2.0	4.0
b. Professional donor	8.2	6.0	12.0	8.8
c. Regular voluntary non-remunerated donor**	40.8	30.0	34.0	34.9
d. Family replacement donor	4.1	6.0	10.0	6.7
e. Regular donor	46.9	46.0	39.0	43.6
Blank	-	2.0	4.0	2.6

**Denotes correct response

Table 32 shows that 52 (34.9%) of the health personnel provided the correct answer regarding which category of donor had the greatest possibility of donating safe blood. The respondents from Swakopmund/Walvisbay (40.8%) provided the correct answer, followed by Oshakati (34.0%) and last Windhoek (30.0%). These results appear to point to a dire need for the upgrading of the respondents' knowledge in this area.

6. What are the disadvantages that the potential donors have?

Table 33 gives the possible challenges that health personnel may experience with potential blood donors.

Table 33. Disadvantages with potential donors

Answer	Frequencies as percentage			Totals (N = 149)
	Walvis Bay/ Swakopmund (N = 49)	Windhoek (N = 50)	Oshakati/ Ongwediva (N = 50)	
a. No health record	-	6.0	2.0	2.7
b. Unknown lifestyles	6.1	2.0	4.0	4.0
c. No records of previous analysis	4.1	6.0	-	3.6
d. All the above**	61.2	56	66	61.1
e. None of the above	24.5	18.0	24	22.1
Blank	4.1	12.0	4.0	6.7

**Denotes correct response

The correct responses to this question (see Table 33) ranged from a low of 56% in Windhoek to a high of 66% in Oshakati/Ongwediva. Even though on average 61.1% of the respondents gave the correct response, more needs to be done in this area to raise, through training the knowledge level of the health personnel.

7. What is the “window period”?

Knowledge of what “a window period” is, is necessary to ensure blood recipients are not exposed to potential infections. The findings with respect to this question are given in Table 34.

Table 34. Understanding of window period

Answer	Frequencies (%)			Totals (N = 149)
	Walvis Bay/ Swakopmund (N = 49)	Windhoek (N = 50)	Oshakati/ Ongwediva (N = 50)	
a. Period between infection and the development of detectable antibodies**	81.6	88.0	86.0	85.2
b. Period of sexual promiscuity	-	-	-	-
c. Period of inactivity of the vital cycle of micro-organisms	6.1	8.0	2.0	5.4
d. Period in which there is a greater possibility of getting an infection	4.1	-	8.0	4.0
e. None of the above	6.1	2.0	4.0	4.0
Blank	2.0	2.0	-	1.3

**Denotes correct response

The definition of what a “window period” was, appears to have been known by 127 (85.2%) of the respondents. There was small variation among the three research sites in terms of knowledge levels. Forty four (88%) of health personnel in Windhoek, 86% in Oshakati and 81.6% in Walvis Bay/Swakopmund provided the correct answer (see Table 34).

8. Which behaviour in donors is considered risk factors that can affect the safety of transfusion?

Behaviours viewed by the health personnel respondents as risky for safe blood transfusion are given in Table 35.

Table 35. Risky donor behaviours

Answer	Frequencies as percentage			Total (N = 149)
	Walvis Bay/ Swakopmund (N = 49)	Windhoek (N = 50)	Oshakati/ Ongwediva (N = 50)	
a. Sexual promiscuity and prostitution	2.0	8.0	2.0	4.0
b. Homosexuality and male bisexuality	-	-	-	-
c. Drug addiction	-	-	-	-
d. Skin scarification, tattooing and blood rituals	-	-	2.0	0.7
e. All of the above**	95.9	90.0	96.0	94.0
Blank	2.0	2.0	-	1.3

**Denotes correct response

Table 35 shows that the majority of the health personnel (94%) in all three sites responded to this item correctly by stating the risky donor behaviours, which included sexual promiscuity and prostitution, drug addiction, skin scarification, tattooing and blood rituals and homosexuality and bisexuality. For both Oshakati/Ongwediva and Walvis Bay/Swakopmund about 96.0% of the respondents gave the correct response to this question while 90% of the health personnel from Windhoek responded correctly. This seems to suggest that the health personnel were aware of possible donor behaviours that would place the blood recipient at risk of infection.

9. Which signs and symptoms in the potential donor would be contra-indicated in donating blood?

Table 36 provides answers to the question of the possible signs and symptoms in donors contra-indicated in donating blood.

Table 36. Signs and symptoms in donors contra-indicated in donating blood

Answer	Frequencies as percentage			Totals (N = 149)
	Walvis Bay/ Swakopmund (N = 49)	Windhoek (N = 50)	Oshakati/ Ongwediva (N = 50)	
a. Paleness	-	6.0	6.0	4.0
b. Pregnancy	-	4.0	4.0	2.7
c. Persistent cough	-	2.0	-	0.7
d. Diarrhoea	-	-	-	-
e. all of the above **	95.9	86.0	90.0	90.6
Blank	4.1	2.0	-	2.0

**Denotes correct response

Table 36 shows that 135 (90.6%) of the respondents knew the signs and symptoms in donors contra-indicated in donating blood. This finding shows a very high level of knowledge of the health personnel with regards to this aspect of blood donation. The health workers in all sites appeared to have an excellent knowledge and understanding regarding this aspect as shown by their knowledge levels ranging from 86% to 96%.

10. Which signs and physical conditions in the potential donor would be dangerous for the recipient?

The respondents' answers to the question stated above are given in Table 37.

Table 37. Signs and physical conditions detrimental to blood recipient

Answer	Frequencies as percentage			Total (N = 149)
	Walvis Bay/ Swakopmund (N = 49)	Windhoek (N = 50)	Oshakati/ Ongwediva (N = 50)	
a. Herpes zoster and brucellosis	-	-	4.0	1.3
b. Prolonged diarrhoea	-	-	-	-
c. Swollen glands and skin rashes	-	-	2.0	0.7
d. HIV/AIDS	4.1	4.0	10.0	6.0
e. All of the above**	95.9	94.0	82.0	90.6
Blank	-	2.0	2.0	1.3

**Denotes correct response

The majority, 135 respondents (90.6%) of the health personnel answered this correctly. The knowledge level of the respondents as far as signs and symptoms which are dangerous for the blood recipient was concerned was generally high among the three research sites. Nonetheless, more respondents from Walvis Bay/ Swakopmund (96%) gave the correct response, followed by those from Windhoek (94%) and last by those from Oshakati/Ongwediva (82%) (See Table 37).

11. Which are some of the tests that should be carried out on the donor's blood to prevent the transmission of diseases?

The tests that should be carried out on donated blood to ensure prevention of infections is given in Table 38.

Table 38. Tests that should be carried out on donated blood to prevent transmission of diseases

Answer	Frequencies (%)			Total (N = 149)
	Walvis Bay/ Swakopmund (N = 49)	Windhoek (N = 50)	Oshakati/ Ongwediva (N = 50)	
a. ABO, Rh and antibodies	-	10.0	2.0	4.0
b. Anti-HIV 1 and Anti-HIV 2	-	2.0	-	0.7
c. Anti-HCV and HbsAg	-	-	-	-
d. Anti-Trypanosoma cruzi and syphilis	-	-	2.0	0.7
e. b, c and d**	100.0	78.0	90.00	89.3
Blank	-	10.0	6.0	5.4

** Denotes correct response

Knowledge of tests that should be carried out on donated blood to prevent transmission of diseases was well demonstrated by 133 (89.3%) of the respondents. This indicates that the health workers were knowledgeable about the tests that should be carried out on donated blood. All the health personnel from Walvis Bay/Swakopmund (100%) knew the correct answer, followed by 90% of the health personnel from Oshakati/Ongwediva and 78% from Windhoek.

Although the majority of the health personnel in all the sites were knowledgeable on many aspects regarding blood, blood donation and blood transfusion, there is however a need to strengthen specific areas of knowledge such as possible safe blood.

13. Signs and symptoms of recipients having negative reaction to blood transfusion

The responses of the signs and symptoms associated with a recipient's negative reaction to blood transfusion from the respondents from the three research sites are given in Table 39.

Table 39. Signs and symptoms associated with a negative reaction by recipient of blood transfusion

Answer	Responses		
	Walvis Bay/ Swakopmund	Windhoek	Oshakati/ Ongwediva
Sweating	✓	✓	✓
Low BP	✓	✓	
Paleness			✓
Rapid pulse	✓	✓	
Skin rashes	✓	✓	
Allergy/Itching	✓	✓	✓
Shortness of breath		✓	✓
Diarrhoea			✓
Vomiting/nausea	✓		✓
Shivering			✓
Dizziness			✓
Headache			✓
Restlessness			✓
Shock			✓

Table 39 shows that the respondents were aware of both the signs and symptoms associated with a negative reaction to blood transfusion. This is important because the health personnel would then be in a position to render appropriate care to the recipient if they negatively reacted to blood transfusion.

14. Action to be taken in case of negative reaction

The responses to the kind of action that should be taken in case of a recipient's negative reaction to blood transfusion from the three research sites are given in Table 40.

Table 40. Action to be taken in case of a negative reaction to a blood transfusion.

Answer	Responses		
	Walvis Bay/ Swakopmund	Windhoek	Oshakati/ Ongwediva
Stop transfusion	✓	✓	✓
Stop transfusion and call a doctor	✓	✓	
Stop transfusion and administer phenergan or solu-cortef	✓	✓	✓
Stop transfusion and monitor vital signs	✓		
Replace transfusion with normal saline		✓	
Administer shock treatment or side effects	✓	✓	✓

Table 40 shows several actions to be taken in case of a negative reaction to a blood transfusion. The most common indicated action was the discontinuation of transfusion and/or stopping of transfusion and reporting to the doctor. Other actions included stopping the transfusion and giving solu-cortef or phenergan. The results appear to show that the respondents were familiar with the procedure to be taken to address a recipient's negative reaction to a blood transfusion.

15. Action to be taken to avoid affecting the health of the blood recipient.

Below in Table 41 the action to be taken by the health personnel in order to avoid affecting the health of the blood recipient is given.

Table 41. Action to be taken to avoid affecting the health of the blood recipient

	Walvis Bay/ Swakopmund	Windhoek	Oshakati/ Ongwediva
Use safe and sterile procedures	✓	✓	✓
Health education	✓	✓	✓
Proper screening of donors	✓	✓	✓
Check for infectious diseases		✓	
Healthy eating/diet		✓	
Regular blood testing/check iron levels		✓	
Cross match blood.	✓		
Check pulse, respiration and temperature	✓		
Find out the client's health history		✓	
Run intravenous Infusion slowly			✓

The results in this section appear to indicate that the respondents were aware of how to avoid affecting the health of an individual receiving blood. The use of sterile procedures, providing health education to the donor and proper screening of the blood donor were identified across the three research sites (Table 41).

16. Are you currently a blood donor?

The responses of the health workers to this question are given in Table 42.

Table 42. Are you a blood donor?

	Frequency as percentage			Total (N = 149)
	Walvis Bay/ Swakopmund (N = 49)	Windhoek (N = 50)	Oshakati/ Ongwediva (N = 50)	
Yes	6.1	14.0	10.0	10.1
No	89.8	80.0	88.0	85.9
Blank	4.1	6.0	2.0	4.0

From Table 42 it is clear that very few of the health workers (10.1%) in this case were blood donors. It is interesting to note that in all three sites 80% or more of the respondents were not blood donors. It is possible that this might be due to fear of stigmatization if they tested HIV positive during the screening process. The HIV test is performed on the donated blood. Accordingly, this test might reveal the donors HIV status which most of the respondents did not wish to know.

There is therefore a need for more sensitization, as far as blood donation is concerned and the keeping of confidentiality should be stressed during these sensitization sessions.

17. Reasons for donating blood

The respondents' reasons for donating blood are given in Table 43.

Table 43. Reasons for donating blood

Reason	Walvis Bay/ Swakopmund	Windhoek	Oshakati/ Ongwediva
To save lives in the community	✓	✓	✓
Civil duty		✓	
Thought it is necessary		✓	✓
Blood is useful		✓	✓
There is a need for more blood	✓		

The results in Table 43 show that a variety of reasons were identified by those respondents why they donated blood.

18. Reasons for not donating blood

Table 44 gives the reasons why most of the respondents did not donate blood.

Table 44. Reasons given by the respondents for not donating blood

Reason	Walvis Bay/ Swakopmund	Windhoek	Oshakati/ Ongwediva
I don't have time	✓	✓	
Due to pregnancy		✓	
Distance (i.e. too far);		✓	
Against God's word		✓	
Blood is not safe		✓	
Not enough blood	✓	✓	
Chronically ill		✓	✓
Suffering from low Hb	✓	✓	
Afraid of needles		✓	
Do not know where to go for blood donation		✓	
I am HIV positive	✓		✓
They do not give money			✓
Not sure of my status			✓
Not approached by NAMBTS	✓		✓
I don't believe blood saves lives			✓
I don't know why			✓
Lack of information on procedure of donation			✓
Will do so when I start working			✓
Lost my donor card			✓
Not interested	✓		

The reasons given above for not donating blood should be addressed by the NAMBTS. Most of the reasons hinged on fear. More advocacy and education of potential donors are clearly needed to address these factors if more health workers are to become blood donors.

It is imperative that an effective communication strategy be put in place to address many of the concerns given above.

19. Are there cultural taboos to blood transfusion

Table 45 gives the responses to whether cultural taboos existed in respect of blood donation in the three research areas.

Table 45. Existence of cultural taboos to blood transfusion

	Frequency as percentage			Totals (N = 149)
	Walvis Bay/ Swakopmund (N = 49)	Windhoek (N = 50)	Oshakati/ Ongwediva (N = 50)	
Yes	63.3	44.0	62.0	56.4
No	20.4	56.0	32	36.2
Blank	16.3	-	6.0	7.4

It is important to note that Windhoek, Walvis Bay and Swakopmund are urban towns and cosmopolitan in nature. Oshakati and Ongwediva are rural towns in Northern Namibia. The majority of the respondents (63.3%) in Walvis Bay/ Swakopmund (coastal towns) indicated that there were cultural taboos related to blood and 62.0% in Oshakati/Ongwediva. The majority of the respondents in Windhoek indicated that there were no cultural taboos/traits regarding blood transfusion.

In all sites the number of respondents who were not blood donors included the health personnel and members of the public. The comments from the majority of the respondents were in contrast to the cultural taboos responses from Walvis Bay. Although the majority of the respondents in Swakopmund indicated ‘yes’ to the question on cultural taboos, only 8% indicated religion as a taboo. The other 58% of the ‘yes’ responses did not indicate any cultural aspects. There is therefore doubt whether the question on culture and blood taboos was well understood.

With the Focus Group Discussions (i.e., scholars/students) all the respondents from the various sites indicated that there were no blood-related cultural taboos.

20. Any concluding comments

The respondents were asked to make any comments on any aspects of blood donation. There were various suggestions given, summarized in Table 46 below.

Table 46. Comments on the process of blood donation and practice

Suggestions	Responses		
	Walvis Bay/ Swakopmund	Windhoek	Oshakati/ Ongwediva
Education is imperative for blood donation		✓	✓
Carry out awareness campaigns	✓	✓	✓
Look for more blood donors	✓		
Pay blood donors money	✓	✓	✓
Blood donation should be made compulsory		✓	
Creation of family donation bank		✓	
Establish permanent satellite donation clinics		✓	
Advertise for blood donation regularly and not only during Christmas		✓	✓
All donated blood should be Tested for HIV		✓	✓
Treat blood donors with respect		✓	✓
Health workers should be encouraged to donate blood			

The majority of the respondents recognized the importance of awareness campaigns in getting more blood donors. Indeed this is essential if current donors are to be retained and new ones attracted to donate blood. In addition there is need to inform the general public of the importance of blood donation in saving the lives of people who find themselves in need of a blood transfusion.

From the foregoing it seems as if the health personnel knew what to do in case of emergencies that might arise during the blood donation process. However, it is also evident that the knowledge varied from area to area. Accordingly, more refresher courses may be the solution to these discrepancies in knowledge level of the health personnel as far as the blood transfusion and blood donation process and practice are concerned.

SECTION 4: THE BLOOD TRANSFUSION SERVICE OF NAMIBIA

In this section of the report we present results from the survey involving NAMBTS staff (both from the clinic and laboratory division).

Fourteen NAMBTS staff were interviewed using a semi-structured questionnaire. The group consisted of both females and males. Their positions in the NAMBTS ranged from laboratory assistants, medical technicians, medical officer, registered and enrolled nurses, midwives to clinical assistants. Twelve members of the group were stationed in Windhoek and two in Oshakati. Those interviewed were health workers and health professionals found on day duty during the period interviews were conducted. Those on leave, night duty and maternity leave were excluded from the interviews.

The difference in the numbers of respondents is due to the fact that the NAMBTS personnel in Windhoek also served the other regions and conducted blood donation campaigns in those regions, and NAMBTS does not keep staff in all regions in the country.

1. Qualifications of the respondents

As far as qualifications were concerned the highest qualification was an MB ChB and the lowest was grade 10. The education levels of respondents are given in Table 47 below.

Table 47. Qualifications of the NAMBTS respondents (N= 14)

Qualification	Frequency	Percent
MB CHB	1	7.1
Nurse	2	14.3
Diploma in Nursing	1	7.1
Grade 10	2	14.3
Grade 12	3	21.3
Comprehensive Nursing Diploma	1	7.1
No answer given	4	28.6
Total	14	100.0

Knowledge of whether the respondents received any other training was also sought. Fifty percent (50%) of the respondents stated that they had received some other training while the rest had not.

On whether they had received training in blood transfusion, 50% said “yes”, 43% said “no”, 21,4% had received some informal training and 14,3% had undergone “on the job training” (Table 48).

Table 48. Other training received by NAMBTS personnel in blood transfusion

	Frequency	Percent
Yes	7	50.0
No	5	35.7
No answer given	2	14.3
Total	14	100.0

The training undergone by the respondents included computer training, quality control, customer care and blood transfusion technology. The time period when the last training took place varied from 3 months to 2 years ago. One of the respondents stated that the training is “on going”.

As far as knowledge of how long they had worked at the NAMBTS is concerned, 50% of the respondents had worked at NAMBTS for between 6 and 19 years. Of the remaining 50%, about 28.5% indicated “not applicable”, whereas 21.5% had worked for less than 6 years at the NAMBTS. It became evident that the majority of staff had gained on-going experience regarding blood transfusion services over time by working at the NAMBTS.

6. How many people are working in this blood transfusion service

The total number of staff at the NAMBTS were of different categories and were involved in performing various functions. The functions were dictated by the nature of their position and the amount of work in the service.

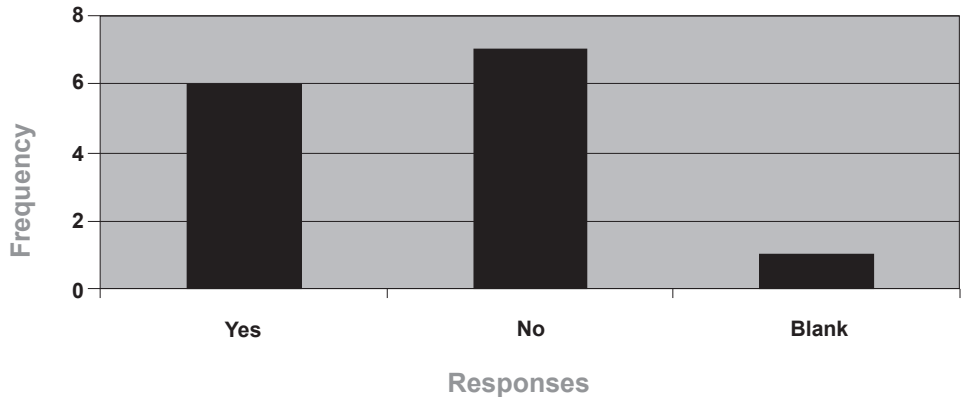
7. Every day schedule of NAMBTS

The respondents gave various schedules from Monday to Sunday. The length of the working hours were also not the same. Thus the duration differed among the days. The hours worked were also connected to the services rendered. Three percent 3% of the respondents mentioned Monday through Sunday, as the days on which laboratory work and meetings were conducted. Monday to Tuesday where blood donation clinics, also part of the time on Wednesday to Thursday, blood donation clinics were held. The rest of the activities were also equally distributed in terms of job categories.

8. Does the service work shifts?

Fifty percent of the respondents said “no”, whilst 42% said “yes”. The rest (7,1%) did not respond. This result seems to indicate a discrepancy in terms of knowledge of the institutions’ mandate and procedures for a large number of the respondents. See Figure 4 below.

Figure 4. Does NAMBTS have shifts



9. If “yes” what shifts?

This question was not applicable for the majority (50%) of the staff. The staff on shifts were also tasked with different functions. About 8.1% of the respondents indicated that the time spent on different tasks on each day were not very different.

According to the respondents who had shifts, the shifts were divided in night shifts on Mondays, Wednesdays to Sunday. Staff on afternoon and night shifts were responsible for blood screening, while those usually in the morning shift often tended to collect the blood from the potential donors.

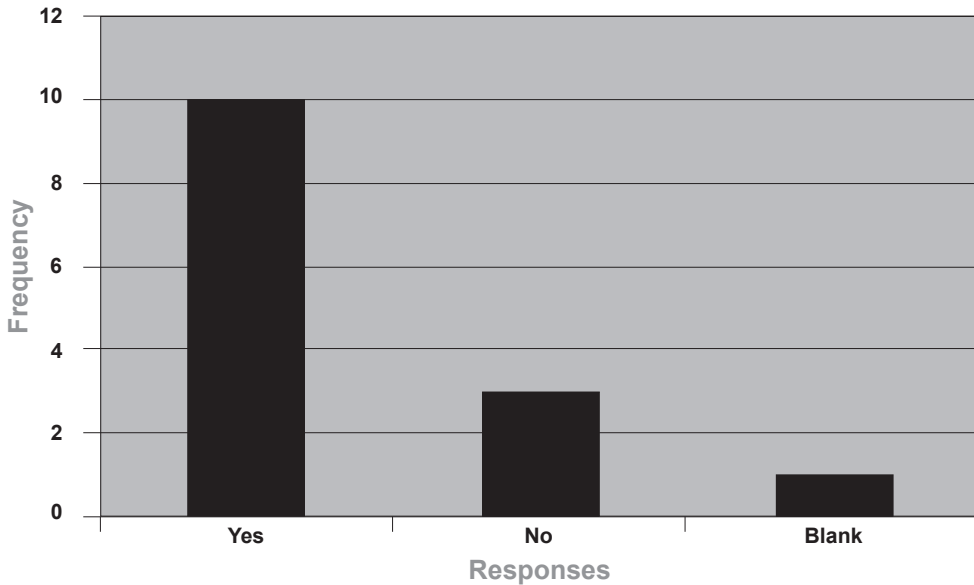
10. Type of service provided each day, Monday – Friday

Most of the staff (42.9%) didn’t respond to this question. The services mentioned by those who responded ranged from cross matching to blood grouping, stock level checking and other related tasks.

11. Does NAMBTS provide information and counselling to blood donors?

Ten (71.4%) of the respondents said that these services were part of the duty sheet, while 3 (21.4%) said “no”. One respondent did not answer the question.

Figure 5. Does NAMBTS provide information and counselling to donors



12. If “yes” what does this include?

For this question 21.4% said that this is not applicable to them, another group (14,3%) didn’t respond. The majority of the various responses were given by as many as there were respondents. That is almost each one of the respondents (7.1%) gave a different answer. Nonetheless, the responses were of an information transmission (educative) and/or of service provision in nature. From the lack of uniformity among the respondents it is clear that a lot of information sharing and health education were needed.

13. Does NAMBTS perform health checks on donors?

All respondents (100%), answered yes to this question. It is indeed, worthwhile to note that the health status of the blood donors were also taken care of. Also important is the fact that many of the health conditions could be picked up during the screening process and hopefully the donor could be referred to his/her doctor for further investigation and treatment if necessary.

14. If “yes” what aspects does it include?

The most utilized parameters were the medical questionnaire, Hb, BP, and weight check, which were given by 14.3% of the respondents. Various other types of health check parameters were also used to assess the health conditions of the donors. These other parameters were given by 7.1% of the respondents each.

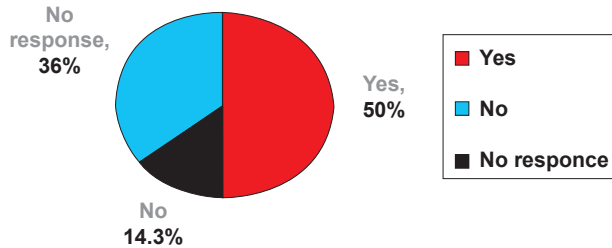
15. If “yes” who performs this check?

The majority of the respondents (42.9%) indicated that most of the health assessments were performed by registered nurses, or by donor clinic sister 14.3% in that order. The other staff members were also used as the case dictated. These included, the health care sister, the doctor, clinic assistants, etc.

16. Does NAMBTS select potential donors?

This question was responded to in the affirmative by 50% of the respondents. However 14.3% said “no” and 35.7% didn’t answer. There is a concern as far as this aspect was concerned. The HIV/AIDS pandemic has led to a drop in the pool of blood donors (Figure 6).

Figure 6. Selection of potential donors by NAMBTS



17. If “yes” how is the selection done?

The majority of the respondents (42.9%) didn’t know what was done in selecting the blood donors. But, those who knew the selection procedure gave various responses. These responses given by 7.1% each by the respondents reflected the tools employed in recruiting the right blood donors. The tools include; counselling, targeting institutions, using recruiters, and the standard health questionnaire for screening potential donors.

How does NAMBTS ensure privacy during screening?

This question had also different responses from the 14 respondents. The majority (28.6%) had no answer and 14,3% reported that there was no privacy during the screening. Several single (7.1%) responses were also given by the respondents.

18. Are donors supervised by NAMBTS after donating?

The respondents affirming “yes” accounted for 42.9% while 21,4% said “no”. Furthermore 7.1% of the respondents said that the donors were supervised only when possible and the rest 28.6% gave no response (see Table 49).

Table 49. Are donors supervised by NAMBTS after blood donation?

	Frequency	Percent
Yes	6	42.9
No	3	21.4
Only when possible	1	7.1
No answer	4	28.6
Total	14	100.0

19. If “yes” what kind of supervision?

The majority (42.9%) didn’t know, 21.4% choose not applicable and 14.3% said the NAMBTS staff looked for fainting and/ or any bleeding. The remaining 21.3% was equally distributed (i.e., 7.1%) among different respondents indicating some kind of monitoring of the donor, including the giving of a soft drink and also communicating with a client.

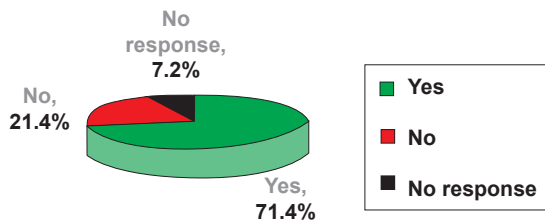
If “yes” how is the supervision done?

Half of the respondents had no answer while 21.4% choose not applicable. The other, 14.3% were concerned about the condition of the donors, communicating with him/her to get information. Another 7.1% said clinic staff checked for bleeding at the puncture site.

20. Does NAMBTS provide incentives?

Most of the respondents (71.4%) said “yes”, while 21.4% said “no” and 7.1% had no response (See Figure 7).

Figure 7. Whether NAMBTS provides incentives to the blood donors



21. If “yes” which?

Half of the respondents (50%) said that they provided gifts after several donations, 14.3% mentioned key holders, certificates, etc depending on the number of donations made. A large percentage of the respondents (21.4%) chose not applicable, which is surprising given that they all worked for the NAMBTS. As such they should be able to know whether they gave incentives to the donors or not.

22. Does NAMBTS provide remuneration?

Over half of the respondents (64.3%) said “no”. However, 21.4% said “yes”, while 7.1% did not answer and another 7.1% chose “not applicable”. The question of whether the NAMBTS paid some donors needs to be clarified since some donors appear to have received some payment for the blood donated.

23. If “yes” what type?

It is interesting to note that even though 21.4% of the NAMBTS respondents said that they provided incentives to donors, the majority of them (64.3%) indicated that the question was not applicable, while 14.3% did not respond.

24. Does NAMBTS provide post-donation information?

Half of the respondents said “yes”, 35.7% said “no” and 14.3% did not provide any response.

25. What aspects are included in post-donation information and orientation, post donation counselling?

Not applicable and no response were given by 35.7% of the respondents. The rest (7.1%), mentioned referrals and information on the results of the positive HIV tests while (7.1%) included counselling on any other disease.

26. Does NAMBTS perform blood analysis after donation?

Close to 79% of the respondents responded “yes”, while 21.4% said “no”.

27. If “yes” what tests?

The majority (21.4% & 14.3%) indicated that the tests carried out were HIV, STD and HBsAg, HCV & RPR. Other tests were given by the respondents, many of which were given by single respondents.

29. Blood donor records kept

About 14.3% of the respondents mentioned that medical history was kept and saved in the computer. Record keeping is an important element in terms of knowing what has been done and will act as a reference for the future.

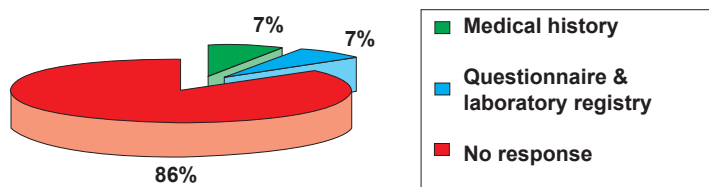
What registry instruments are kept?

The majority of the respondents (92.9%) said they did not have the registry instruments. Indeed, (7.1%) of the respondents indicated that the information instruments were health profile records. Apart from these no other instruments were employed.

The registry instruments kept and frequency of their use

The majority of the respondents (85.7%) did not respond to this item. As indicated earlier on, the most frequently used instruments were the medical history questionnaire and laboratory registry, both given by 7% of the respondents respectively, shown in Figure 8.

Figure 8. Registry instruments and their frequency of use



This response was given by 7.1% of the respondents. As far as the use of this instrument was concerned, none of the 14 respondents gave an answer.

30. Do you have an Act that governs blood donation and transfusion practices?

About 7.1% of the respondents didn’t know whether an Act existed that guided their practice. An equal number of respondents (28.6%) said “yes” and “no” respectively. Interestingly, 35.7% of the respondents said there was no Act in place. This finding seems to contradict those who said there was an Act on blood donation services that guided the blood donation practice in the country.

Do you have guidelines that govern blood donation and transfusion practices?

There was an overwhelming response of “yes” by 71.4% of the respondents to this item, nonetheless 14.3% didn’t respond, 7.1% said “no” and another 7.1% said, “don’t know”.

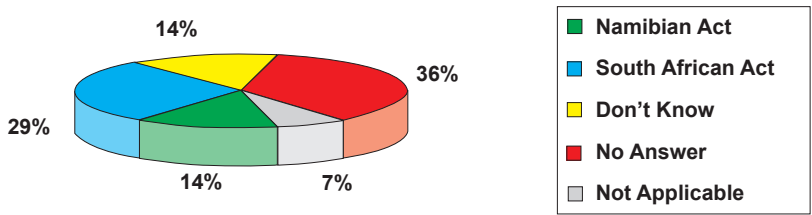
Do you have policies on blood donation and transfusion?

Sixty four point three percent of the respondents stated “yes” they had a policies, while 14.3% said “no”. Another 14.3% gave no response. The response to the question on policies and guidelines is an issue of concern, because these are the tools that should be used to guide blood donation service delivery in the country. The lack of such an important document may result in doing something that is contrary to what is laid down in these documents.

31. If “yes” which Act is used by NAMBTS to govern blood donation and transfusion practices?

The most utilized Act was the South African Act indicated by 28.6% of the respondents. The Namibian Act was indicated by 14.3% of the respondents, while the majority 35.7% did not answer. See Figure 12 for their responses.

Figure 9. Act being used to inform NAMBTS operations



It is interesting that two Acts are being used in the country to guide the blood transfusion services. This situation may lead to confusion and needs to be addressed.

32. If “yes” do you disseminate the information to the public

Only 7.1% of the respondents said that the information was transmitted to the public. The majority (50%) didn’t respond and 21.4% indicated that information was for the use of the NAMBTS staff only.

33. If “no” why?

There was no response from most of the respondents (64.3%). Some (7.1%) cited confidentiality while others (7.1%) said that the documents were locked up.

34. How many donors visit the blood donation clinic per day?

The majority (28.5%) could not remember. Amongst those who remembered, 14.3% said that 75 clients visited the clinic per day. But, of importance is the finding that the number of donors varies from clinic to clinic. One of the respondents (7.1%) gave the number at 25, which is on the lower side.

How many donors per month?

The number of visits per month varied among the clinics, but they generally ranged from 1500 to 2000. These do refer to blood donations per month for all blood donation clinics.

How many donors per year?

The respondents indicated that the visits per year ranged from 18 000 to 22 000. These do refer to blood donations per year for all clinics.

35. Are there regular voluntary remunerated blood donors?

The majority (78.6%) said “no” while 14.3% indicated “yes”.

36. If “yes” how many donations have they given?

Of those who had responded “yes” to the question, only one gave the figure of between 209 to 220 units of blood donated.

37. If “yes” what characteristics do these donors have in common.

Only (7.1%) indicated “friendliness”. The majority (78.6%) said the question was not applicable, and 14.3% did not respond.

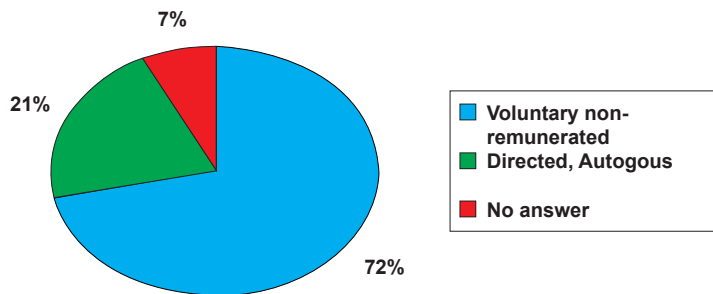
38. If “yes” why do they come to donate?

Only 7.1% of the respondents said that they donated blood “to save lives” while another 7.1% said was just doing it out “of their good will”. The majority (78%) of the respondents choose not applicable.

39. Type of donors visiting NAMBTS

Close to 72% of the respondents indicated that most of the blood donors were voluntary non-remunerated donors and the other group indicated by 21.4% of the respondents were the directed and autologous group (Figure 10).

Figure 10. Type of donors visiting the NAMBTS



40. What percentage of each type of donor do you estimate are there?

From the pool of donors, 99% were voluntary non-remunerated, while the remaining 1% was divided among the other groups of donors (autologous, and directed).

41. Time spent by a donor at the NAMBTS clinic when donating blood

The longest time spent at the NAMBTS was 60 minutes, and the shortest time was 15 minutes. The majority (28.6%) of the donors spent 20 minutes on the whole process of donating blood. Only 7.1% indicated that the donors spent 15 minutes at the NAMBTS.

42. Positive aspects of NAMBTS

A large number of respondents (42.9%) indicated that safe blood was provided to the nation by the NAMBTS and this was a positive aspect. Nonetheless, as many varied responses as the remaining number of respondents was given. Some include responses such as “good relationship with the donors”, “good customer care and friendly staff”.

43. Aspects to be improved at NAMBTS

Again several individual aspects (indicated by 7.1% of the respondents each) were given by the 14 respondents and included the following:

- Quality control
- Training
- Maintaining of privacy
- Information sharing
- Advertisement

44. Suggestions to improve NAMBTS services

The most prominent improvement mentioned was proper training of the staff. This was cited by 14.3% of the respondents. Staff training is important if a quality service is to be delivered by the NAMBTS.

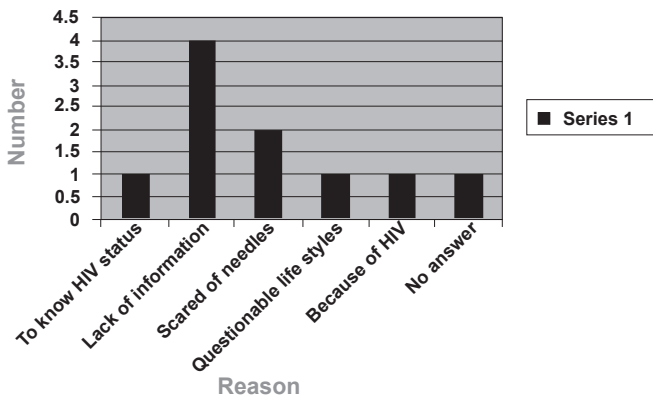
45. Reasons why people refuse to donate blood

There were various reasons given, but the most prominent ones are given in Table 50 and Figure 11.

Table 50. Main reasons why people refuse to donate blood

Reason	Frequency as percentage (N= 7)
Afraid of results	42.9
Lack of information	28.6
They might be infected during donation	28.6

Figure 11. Reasons why people do not donate blood

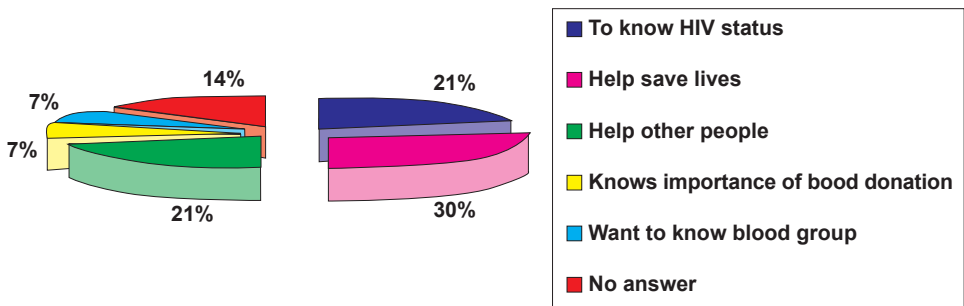


It is clear that advocacy should be strengthened and emphasis placed on counselling to ensure attracting more people to donate blood.

46. Reasons why people donate blood

When probed for reasons why people donated blood (21.4%) said “to save lives” and “help other people respectively”. Some (14.3%) of the respondents said that; “they wanted to know their status” since the HIV test is provided free to those donating blood. Other reasons are given in Figure 12.

Figure 12. Reasons why people donate blood (N = 14).



47. Type of promotion used to motivate the public

The majority of the respondents (71.4%) indicated that donors could be used for advocacy purposes. These would help in recruiting others who would eventually become regular blood donors.

49. If “yes” what type of promotion?

Several kinds of promotions were given by the respondents. Most of these were given by individuals (i.e., 7.1%) and include:

- Radio
- TV
- Newspapers
- Posters

50. If “yes” what media should be used for this purpose?

The popular media indicated were radio & newspapers and radio indicated by 14.3% of the respondents respectively. Other media like TV, posters, interviews, flyers, etc. were indicated by (7.1%) of the respondents, again singly.

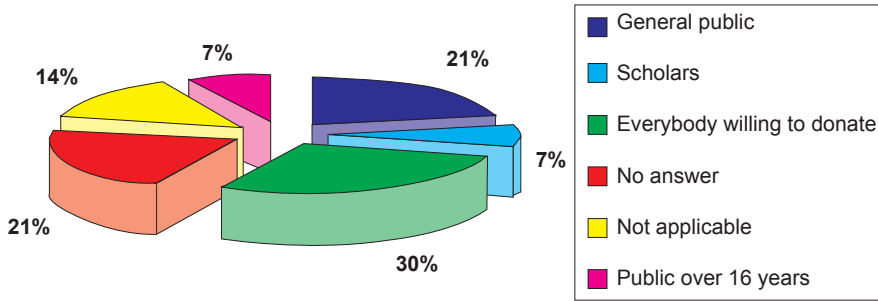
51. Main message given if “yes”

As far as the main messages conveyed by these media reflected the need to get more people to donate blood, i.e., “Donate to save lives” and “Donate at permanent clinic” given by 14.3% of the respondents respectively. The remaining various messages, were not rated as highly as the above two messages.

52. At whom were these messages directed?

The messages were directed at different audiences. The first target given by 28.6% of the respondents was to “everybody who donates blood” and “the general public” cited by 14.3% of the respondents. The remaining messages were directed to scholars, prospective donors, and others (see Figure 13).

Figure 13. At whom the messages were directed.



53. What materials are available on blood donation?

The most available materials identified were posters, flyers and booklets given by 14.3% of the respondents.

Description of materials

Materials available on blood donation dealt mostly with information on NAMBTS and the criteria for blood donation indicated by 14.3% and 7.1% of the respondents respectively. The finding in this regard is that there was lack of material, especially on counselling and health education among others.

54. Suggestions on transmission of NAMBTS messages

Most of the elements of health education were mentioned. These covered a wide range of issues such as uses of blood, regular donor aspects as well as target groups. In this category all the above were indicated by 7.1% of the respondents respectively. Nonetheless over half (57.1%) of the respondents gave “no response” as their answer to this question.

55. Indicate the media to be used

There were a number of suggestions like pamphlets on doors, talk at high schools given by 7.1% respondents respectively. But the media predominantly identified by the respondents were Radio, TV, and newspapers cited by 21.4% of the respondents and Radio and TV indicated by 14.3% of the respondents.

56. What could the message be?

Probed for this question, 28.6% of the respondents indicated the following message; “Please donate blood to save a life”. This was the most commonly cited message given.

57. How could a greater number of people be convinced?

It was noted that the understanding of the importance of blood and education would convince people as to the importance of donating blood which could save their own lives. Possible ways of convincing others to donate blood were given by 14.3% of the respondents respectively.

What do you know about autologous blood donation?

Ironically 42.9% of the respondents did not respond, however 35.7% gave the correct answer, i.e. that it was donating blood for self.

Suggestions to improve NAMBTS delivery

The most important concern indicated by the respondents was the need for training of the NAMBTS staff. Provision of appropriate skills to NAMBTS staff would enable them to retain the donors.

DISCUSSION OF NAMBTS RESULTS

According to all 14 (100%) NAMBTS staff members health checks are performed on blood donors. The majority (71.4%) of NAMBTS staff also indicated that information and orientation (pre-counseling) to blood donors were done.

Although the NAMBTS renders information pre-counseling services as reflected in Figure 9, it is also evident that more information needs to be disseminated.

The issue of the incentives given to donors only after several donations e.g. key holders, and certificates needs to be clarified, as well as the remuneration issue.

There is need to strengthen or review the issue regarding the registry instruments, as is reflected by the high percentages of responses indicating that the NAMBTS does not have the registry instruments and the infrequent use of the registry instruments respectively.

There is some discrepancy with regard to the provision of past donation information and orientation (post-donation counselling). The majority (50%) of the NAMBTS respondents who said post-donation counselling was provided could not indicate the counselling aspects included. Only 7.1% of the respondents indicated aspects such as referrals and results of the HIV positive tests. There is therefore a need to strengthen post-donation counselling.

It is expected that health care professionals function within an ethical legal framework. This is governed by various Acts. It is encouraging to note that the NAMBTS of Namibia also functions under relevant Act(s). Nursing personnel directly or indirectly dealing with NAMBTS ought to be conversant with the NAMBTS Act. The same applies to other Acts which influence the practice of the nursing e.g. Medicine and Substance Act, Social Security Act, Nursing Act and Labour Act. When one considers the responses regarding the NAMBTS Act and the dissemination of information, there seems to be a need to disseminate relevant educative information to health personnel. This in turn will equip them with the necessary knowledge and skills necessary even for counselling, and giving relevant information to the public. In addition there is need to have one Act to guide NAMBTS services in the country.

There is also a need to disseminate information regarding autologous blood transfusion. The fact that only 35.7% of the respondents knew what autologous blood donation and transfusion is, is cause for alarm, since most have been involved with blood donation.

Training

It became evident that the majority of the personnel employed at the NAMBTS were health workers, some had basic undergraduate education while others had Nursing Diplomas. Some of the personnel had undergone training 2 years ago. This underscores the need for additional training on blood bank services, customer care and blood transfusion technology. Regular in-service training for the health personnel and other support staff should be considered as a priority.

Services shifts (functioning)

The majority (50%) of the respondents stated that the NAMBTS did not operate using shifts.

The scheduling of blood donation hours seems to be a limiting factor for donors. The NAMBTS operates on certain days for certain scheduled hours during that specific shift or day/night. More flexible hours allow a donor to donate blood at his/her convenient time and place. Some respondents from the public mentioned that the services were far from their homes and couldn't be reached without paying transport. They are seen to operate at times and venues that can't be accessed by them.

Almost 42% of the respondents stated that they did not know about shifts. They indicated that there was a discrepancy in terms of knowledge of the NAMBTS mandate, rules and procedures.

Provision of information, education and counselling

Although 71.4% of the NAMBTS personnel indicated that donors received information and counselling, the remaining 28.6% stated the opposite, which implies that there had been instances when donors had not received any information or counselling prior to blood donation. Some respondents from the public from all three sites also confirmed that they had not receive any information, education or counselling prior to blood donation.

If valuable information is not shared with the donor, it could contribute to fear, hence their unwillingness to donate blood to save lives. Withholding of knowledge from potential of blood donors is as psychological barrier and needs to be addressed as one of the priorities.

Similar research results in Zimbabwe during October 1998 reveal that most respondents (74%) indicated that the population required information from ZIMBTS prior to blood donation (Donor Information Service Department, 1998). Almost 38% of the respondents stated that they were not given post-donation information, which is of great concern. The NAMBTS personnel could use the donors to do advocacy and recruitment of potential donors for them. It is also imperative to retain the voluntary non-remunerated donors. The donors should be counselled to know how to deal with the outcome of the results and the consequences.

Performing of health checks and selection of potential blood donors by NAMBTS personnel

It is encouraging to observe that NAMBTS personnel performed health checks on donors prior to blood donation. This was indicated by the majority (100%) of the NAMBTS staff. In contrast some respondents from the public and during some focus group discussions among the scholars, it was highlighted that there were occasions where some of them did not undergo health checks prior to blood donation. These barriers could also contribute to fear, uncertainty on donating blood and reduction in possible and regular blood donors.

Health check is one of the crucial parameters that should be carried out prior to blood donation to all donors. The tests NAMBTS personnel carry out include; haemoglobin test, weight and medical questionnaire were used. On the selection of blood donors, it became evident that NAMBTS selected the potential donors. Some respondents (14.3%) at the NAMBTS services mentioned that there was no selection of potential blood donors, which was of great concern, because the HIV/AIDS epidemic, Hepatitis B & C led to the reduction in the pool of blood donors in many societies. The majority of the respondents at the NAMBTS also did not know how potential donors were selected. The NAMBTS could require the hiring of experts or technicians that could promote the selection of donors, which would be constructive in increasing and retaining the pool of desired donors.

Privacy, supervision, incentives

The health personnel at the NAMBTS realized the importance of privacy, while a minority number did not respond to this item, which seems to imply that privacy was not constantly ensured during the screening process. Supervision was provided to the donors after donating blood to ensure that all was fine with the donor. Most of the respondents affirmed that they provided incentives to donors during and after blood donation, such as key holders, certificates, just to mention what interviewees stated.

Some of the respondents from the public believed and stated that they wished to receive incentives even if they were in monetary terms. But, this was mentioned to a much lesser extent in all three sites. NAMBTS needs to create a conducive and donor friendly environment that would attract a greater number of desired type of donors (WHO and Pan American Health Organization, 2003).

Blood analysis

It became evident that the majority (76%) of the respondents knew that blood analysis was performed after blood donation. It is of great concern that some health personnel at the NAMBTS did not know that blood analysis was performed at the NAMBTS. The tests carried out mentioned by the majority of the health personnel included HIV, HBsAg, HCV and RPR. There was lack of communication and information sharing among the health personnel at the blood bank.

Record keeping and documentation

The respondents demonstrated lack of knowledge on whether the medical records and instruments were kept, which are legal documents. Most of the personnel stated that they were not aware of any Namibian Act guiding blood donation under which NAMBTS operates, except the South African Act. But, they stated that they had guidelines and blood policy documents on blood transfusion and donation. The purpose of the guidelines and policies to support physicians in their clinical decisions related to the appropriate use of donor blood (Physician's Guide, 2004).

The main purpose of this documentation was to optimize patient outcomes and ensure the appropriate use of allogeneic (donors) blood supply. There is a need to design educational programmes/in-service education programmes that would serve as information and knowledge sharing to keep staff members up to date in order to deliver quality services and to attract more donors.

Blood donation

On the item of how many donors came to the NAMBTS per day, per month and per year, a few of the interviewees stated that 75 clients visited the clinic daily, about 1 500–2 000 per month and between 18 000–22 000 per year. On whether the NAMBTS remunerated blood donors, only minority 14.3% responded that NAMBTS remunerated donors. There seems to be inconsistency in terms of remuneration, because some donors were “remunerated” and some were not. This needs to be corrected.

Those regular remunerated donors according to the minority (7.1%) of the respondents gave donations amounting to 209 to 220 units and demonstrated politeness. These donors mentioned that the main reason for donating blood was out of their free will, to save lives. This response is consistent with that of the public, health workers and scholars’ responses. The pool of donors (99%) were non-remunerated group. Time spent by donors at NAMBTS donation site was 60 minutes and the shortest was 15 minutes, which needs to be reduced.

According to the public views/observations and perceptions, the waiting process is too long, which they can’t afford. This situation could lead to discouragement and demotivation of donors to donate blood as well as loss of very loyal reliable donors, which could be retained for long time.

Positive aspects and aspects to be improved at NAMBTS

The health personnel at the blood bank viewed a good relationship with the donors as the cornerstone for effective blood donation. This was followed by good customer care and friendly staff members. Besides the above-mentioned positive aspects, the NAMBTS personnel indicated that the following aspects should be improved at the NAMBTS; namely, quality control, training, privacy and confidentiality, information knowledge sharing as well as increasing of advertisement regarding blood donation to attract more donors.

Psychological barriers

The respondents gave various responses and the most mentioned were, afraid of the outcomes of the results, lack of information prior or post donation and the fact that they might be infected during donation. The public responses also showed similarities. In addition they mentioned fear associated with needles and pain when needles were inserted as well as the time it took to donate blood and when that was not suitable to them. Educational campaigns consisting of various aspects and strategies such as counselling should be used to eliminate fear of the unknown. Advocacy strategies also need to be strengthened and emphasized.

Reasons for donating blood

The health personnel at the NAMBTS demonstrated awareness of why people donated blood. The main reasons given were to save other peoples' lives and help others in need that creates a sense of moral responsibility towards others. Some respondents also wished to find out about their HIV status. According to the anthropological studies (WHO & PAHO, 2003) done in Latin America and the Caribbean stated that humanitarianism, solidarity with other human beings, getting rid of access blood etc were the main reasons for donating blood. It seems that more people could donate blood in Namibia for the wrong reasons.

Promotion strategies regarding blood donation

The majority of the health personnel were of the opinion that the donors themselves should be used for advocacy purposes.

The main media to use to disseminate messages and the importance of blood donation was the radio, television, newspapers, posters, flyers and personal interviews. The main message used to promote blood donation was indicated as "donate blood, and save lives" that would be aimed at everybody within the community.

NAMBTS nationally makes use of the following materials in dissemination messages about blood: namely posters, flyers and booklets to spread the message on the importance of blood donation. There is a lack of promotional material for blood donation e.g. on counselling, health education, and others.

The majority of the health personnel stated that a greater number of the people could be convinced by educating them on the importance of blood and the saving of their own lives. Education was identified as the main method to convince people to donate blood, and is consistent with studies from other countries such as Zimbabwe (Donor Information Services Department, 1998).

Suggestions to improve NAMBTS

The priority aspect mentioned by the NAMBTS personnel was training that needs to be strengthened to retain the blood donors.

It is imperative to design educational programs for the health personnel, technicians and other support staff. The various aspects to be included in the program could be: to reduce the lack of knowledge about blood, blood donation and transfusion as well as to emphasize the importance of blood donation. This will equip the NAMBTS personnel to be aggressive in recruiting the potential blood donors and to retain them. It will also help NAMBTS to share the correct information with the public in order for them to make informed decisions.

STUDY CONCLUSIONS

The NAMBTS of Namibia has been serving the nation for more than 40 years. In general the mission of providing the MOHSS with safe blood is being realized. Despite the efforts, many changes have taken place both in Namibia and the whole world. This has prompted the UN agencies, development partners and governments to re-address the national blood transfusion services, especially in the wake of the many infectious diseases affecting the human kind, such as HIV/AIDS, the HBV, HCV AVIAN flu and Ebola. The changes have also affected technology, human behaviour and therefore requires specific training of staff involved in different human endeavour.

The answers given seem to indicate that little effective communication has come from the NAMBTS to allay the potential donors' fears as far as donating blood was concerned.

Overall Namibia is performing well in terms of the objectives of this specific study. However some aspects should be addressed seriously as outlined in the recommendations, which are specific and tailored to the situation on the ground.

LIMITATIONS OF THE STUDY

The following are some of the limitations of the study.

1. Preferably the study could be conducted in all the regions in order for national picture to emerge.
2. Due to time constraints, the questionnaires could not be translated into local languages to facilitate wider participation.
3. The questionnaires were too long and as a result many respondents did not answer all the questions.
4. Using the same questionnaire for the NAMBTS participants, which represented the clinic staff and laboratory technicians, distorts some of the findings.

STUDY RECOMMENDATIONS

The study revealed a number of shortcomings that are critical and need urgent attention.

1. The public should be educated about blood donation and blood transfusion services. The key players of blood transfusion should be equipped with specific knowledge. These health workers will then transmit the correct information to the regular non-remunerated donors and the public at large.
2. It is imperative to take note of the changing environment and dynamics of the emerging diseases of the 21st century. The health workers need in-service training as the changing environment demands scientifically based information sharing. The training is not only to update the health workers in terms of their specific knowledge but should also be geared towards the stakeholders concerns. This training should include, latest scientific technologies, understanding of the customer care components and the counselling of clients (pre- post test counselling).
3. Services provision strategies should be revised. This means that work shifts schedules should be addressed by all health workers concerned. The work shifts should be in line with what is happening on the ground. That is the pool of blood donors' community and its behaviour has to be taken into account when revising these work shift strategies. It is also imperative to revise the shifts to ensure that all health workers are part of the process to strengthen the efforts being embarked upon. This will keep the health workers abreast of their functions, and not only the carrying out of routine duties without specific knowledge attached to them.
4. All health workers and NAMBTS staff should be trained in information communication. In this way they will be able to provide appropriate information to the donors. It is the right of the blood donor to know all aspects regarding the services. The health workers have to be knowledgeable about blood donation, which in turn they have to transmit to their clients. Communication in terms of latest developments regarding blood donation should be a must. Well targeted communication, education and intervention programmes be planned and implemented. This will enhance and facilitate informed consent and participation in blood donation campaigns.
5. Guidelines should be made available to all health workers. There is a dire need for in service training for all health workers, so that they are all at the same wavelength concerning health check procedures. The guidelines should include; selection of donors, promotion of the services, tests (procedures) carried out and health checks conducted etc.

6. There is need for the creation of an enabling environment in terms of privacy for the donors. Privacy will ensure the clients' dignity as an integral part of the blood donation services. At all times the privacy of the clients should be respected. This will provide a personal touch between the service providers and the clients.
7. The incentives given to blood donors should be consistent. Guiding principles in the provision of these should be provided so that all donors are treated in the same manner. The NAMBTS is urged to pay urgent attention to this issue.
8. Documentation and record keeping have to be clear to the health workers regarding blood donation. Since these documents are based on legal framework, the NAMBTS is urgently urged to update the health workers on these issues. The officials should ensure the safekeeping of these documents and refer to them in any eventuality. Policies and guidelines should be developed to maintain consistency. The clients, as well as service-driven factors should be considered to ensure smooth running of the institution.
9. NAMBTS should seriously review the time spent by the clients at the blood donation site and the incentives given to the donors.
10. In terms of service related aspects the aspects to be addressed should include; quality control system, training, conducive environment of clients (privacy, confidentiality), strengthening of promotion components and advocacy to the public.
11. With regard to psychological aspects of clients' several aspects should be included and should include health education and customer care for all NAMBTS staff.
12. The health workers should educate the public on services provided by NAMBTS to make the clients at ease. It is important to address the issues of fear for diseases, approach in terms of customer care and the procedures carried out. Many clients' fear of needles and diseases that might be picked up during the blood donation procedures. All these can be addressed through well-tailored programmes.

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INSTRUMENT L

CLASSIFICATION OF INFORMANTS

1. Has never donated blood / does not have intention to donate blood.
2. Has never donated blood/would donate
3. Recent voluntary non-remunerated donor (last 12 months)
4. How about donors that have lapsed for more than 12 months

Date of interview:

1. Region:

2. Residential Area:

3. Gender:

Male	<input type="checkbox"/>	Female	<input type="checkbox"/>
------	--------------------------	--------	--------------------------

4. Age:

5. Scholar/Student:

6. Highest Education:

7. Occupation:

A. BLOOD DONATION PRACTICES

1. Have you ever donate blood?

Yes

No

2. If “Yes” why do you donate blood?

.....

.....

.....

3. If “No” why do you not donate blood?

.....
.....
.....

4. If yes, when last did you donate blood?

.....

5. How often do you donate blood?

Regularly	<input type="checkbox"/>
Sometimes	<input type="checkbox"/>
Seldom	<input type="checkbox"/>
Never	<input type="checkbox"/>

6. The last time you donated blood, where did you donate?

Hospital	<input type="checkbox"/>
Blood bank	<input type="checkbox"/>
Street Collection	<input type="checkbox"/>
Other (Specify)

7. The last time you donated blood, did someone ask you to donate?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

8. If yes, who asked you to donate blood?

.....

9. If no, how did you find out about the need to donate blood?

.....

10. Did you know what the blood was going to be used for?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

11. If yes, what was it going to be used for?

.....
.....
.....

12. Are there any cultural traits/taboos regarding human blood transfusion?

Yes
No

13. If yes, explain.

.....
.....
.....

B. OPINION ABOUT BLOOD TRANSFUSION SERVICES

(Those who donated blood)

14. The last time you donated blood, what did you think of the blood transfusion service?

Excellent
Very good
Good
Fair
Bad

15. Why do you say that? Explain and elaborate.

.....
.....

16. Did you receive any information or orientation from anyone before you donated your blood?

Yes
No

17. If yes, what information did you receive?

.....
.....

18. Did they carry out a health check before you donated blood?

Yes
No

19. If yes, what did the health check they carried out consist of?

.....
.....

20. Did they ask you some questions before you donated blood?

Yes
No
Can't remember

21. If yes, what questions did they ask you?

.....

22. The last time you donated blood, was there something you did not like?

Yes
No

23. If yes, what was it that you did not like? Tell us?

.....
.....

24. If yes, why did you dislike it?

.....
.....

25. The last time you donated blood; did they give you something after you donated?

Yes
No
Don't remember

26. What did they give you?

.....

C. KNOWLEDGE ABOUT BLOOD

27. What is blood's function?

.....

28. What types of blood are these?

.....

29. Did you know your blood group or type?

Yes
No

30. If yes, what is your blood group?

.....

D. KNOWLEDGE ABOUT BLOOD TRANSFUSION

31. Have you heard about blood transfusion?

Yes
No

32. According to you, what is a blood transfusion?

.....

33. Why do certain people need blood transfusion?

.....
.....
.....

34. Can a person get infected with a disease by receiving blood?

Yes
No
Don't know

35. If yes, which diseases?

.....

36. What else do you know about blood transfusion?

.....
.....
.....

E. KNOWLEDGE ABOUT BLOOD DONATION

37. In your opinion, what could be done in order to have more people donating blood?

.....
.....

38. How often can blood be donated?

.....

39. Who can donate blood?

.....

40. Who CANNOT donate or should not donate blood? (Specify)

.....

41. Why shouldn't these people donate blood?

.....

42. Can something happen to the person who donates blood?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

43. If yes, what can happen?

.....

44. Have you ever seen or heard messages about blood donation?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't remember	<input type="checkbox"/>

45. If yes, what could be seen or what did the message say?

.....

Don't remember

46. If yes, where did you see or hear those messages?

Advertisement	<input type="checkbox"/>
Pamphlets	<input type="checkbox"/>
Television	<input type="checkbox"/>
Radio	<input type="checkbox"/>
Posters	<input type="checkbox"/>
Bill Boards	<input type="checkbox"/>

47. If yes to whom do you think those messages were aimed at?

.....

48. In the future, would you like to hear or see messages about blood donation?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

49. If yes, why?

.....

50. If no, why not.

.....

51. What would be the best way to disseminate messages about blood donation?

Radio	<input type="checkbox"/>
Television	<input type="checkbox"/>
Written media	<input type="checkbox"/>
Other printed media	<input type="checkbox"/>
Interpersonal	<input type="checkbox"/>

52. What type of informative/educational materials do you think would be best to provide information about blood donation?

.....

.....

53. If you have to convince a person to donate blood, what would you say to convince him/her?

.....
.....
.....

54. What suggestions do you have regarding blood transfusion services?

.....
.....
.....

Thank you for you time.

Interview Ends

INSTRUMENT M

GUIDE TO INTERVIEW HEALTH PERSONNEL IN A BLOOD TRANSFUSION SERVICE

The objective M is to gather information about a blood transfusion service.

Interview a member of the health personnel in a blood transfusion service (doctor, nurse, lab professional, phlebotomist, technician).

DATE:

Name of the Service:

Address of the Service:

Occupation/Rank:

Qualifications:

Name of Interviewer:

A. BASIC INFORMATION

1. What level of studies did you reach?

.....

2. Did you receive any other training?

Yes
No

3. Have you received any training on blood transfusion/donation?

.....

4. If yes, which? When did the last one take place?

.....

5. How long have you worked at this blood transfusion service?

.....

6. How many people work in this blood transfusion service?

Position	Function	Number

7. What schedule does the blood transfusion service have every day?

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

8. Does it have shifts?

Yes

No

9. If yes, what shifts does it have?

.....

10. What type of service does it provide every day?

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

11. Does the blood transfusion service provide information and orientation to blood donors before blood donation?

Yes

No

12. If yes, what aspects does this pre-donation information and orientation include?

.....

13. Does the blood transfusion service perform a health check on the donor before blood donation?

Yes
No

14. If yes, what aspects does this health check include?

.....

15. If yes, who performs this health check?

.....

16. Does the blood transfusion service make a selection of potential donors?

Yes
No

17. If yes, how does the service make this selection?

.....

18. Does the blood transfusion service supervise donors after they have donated their blood?

Yes
No

19. If yes, what does this supervision consists of? How is the supervision done?

.....

20. Does the blood transfusion service provide any incentive(s) to blood donors?

Yes
No

21. If yes, which?

.....

.....

22. Does the blood transfusion service provide any remuneration to blood donors?

Yes

No

23. If yes, what type of remuneration?

.....

24. Does the blood transfusion service provide post-donation information and orientation to blood donors?

Yes

No

25. If yes, what aspects does this post-donation and orientation include?

.....

.....

26. Does the blood transfusion perform a blood analysis after donation?

Yes

No

Sometimes

27. If yes, what tests does this analysis include?

.....

28. If No, why not? Why sometimes not?

.....

.....

29. What blood donor records does the blood transfusion service keep? (Ask the informant to show you all registry instruments kept. Write down the name of the registry instrument and its description. Then, indicate if it is always, sometimes or never used and the reason why it is not used).

Instrument	Description	Is it used? 1. Always 2. Sometimes	(2 or 3) Reason why it is not used

30. Do you have the following documents available?

- Act yes/no
- Guidelines yes/no
- Policies yes/no

31. If yes, under which act does the NAMBTS operate?

- Namibia Act
- South African Act

32. If yes, did you disseminate the information to the public?

- Yes
- No

33. If no, why did you not make known the relevant documents to the public?

.....

34. At an average, how many donors come to the blood transfusion service per day, per month, per year?

- Per Day
- Per month
- Per year
- Can't remember

35. Do you know if the blood transfusion service has regular voluntary remunerated (paid) donors?

Yes

No

36. If yes, in average, how many donations have they given?

.....

37. If yes, what characteristics do these donors have in common?

.....

38. If yes, do you know why they come to donate?

.....

39. Mostly, what type of donors does the blood transfusion service have?

Voluntary non-remunerated	<input type="checkbox"/>
Family replacement	<input type="checkbox"/>
Commercial or professional	<input type="checkbox"/>
Directed	<input type="checkbox"/>
Autologous	<input type="checkbox"/>
Other	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

40. Of these informants, what percentage of each type do you estimate there are?

Voluntary non-remunerated	<input type="checkbox"/>
Family replacement	<input type="checkbox"/>
Commercial or professional	<input type="checkbox"/>
Directed	<input type="checkbox"/>
Autologous	<input type="checkbox"/>
Other	<input type="checkbox"/>
Does not know	<input type="checkbox"/>

41. How much time does a blood donor spend at the blood transfusion service?

Hours

Minutes

42. What would you say are the positive aspects of this blood transfusion service?

.....

43. What would you say, are the aspects that should be improved in this blood transfusion service?

.....

44. What other suggestion could you give in order to improve this blood transfusion service? Any other suggestion?

.....

C. COMMUNICATION

45. Why do you think many people refuse to donate blood?

.....

46. And people who donate blood, why do you think they do it?

.....

47. Do you carry out any type of promotion for the public to motivate them into donating blood?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

48. If no, why not?

.....

49. If yes, what type of promotion?

.....

50. If yes, through what media of instruction is it done?

.....

51. If yes, what are the main messages given?

.....

52. If yes, to whom are the messages aimed at?

.....

53. If yes, what materials on blood donations do you have? (Ask the informant to show you the materials on blood donation they have and complete the following table).

Type of material	Description	Use

54. If messages on blood donation could be transmitted in the future, what would you suggest?

.....

55. Through what media of instruction could this be done?

.....

56. What could the message be?

.....

57. How could a greater number of people be convinced to donate blood?

.....

Thank you for your time.

INSTRUMENT N

TEST FOR HEALTH PERSONNEL REGARDING THEIR KNOWLEDGE ABOUT BLOOD, BLOOD TRANSFUSION AND DONATION

The objective of instrument N is to evaluate the knowledge of health personnel regarding blood, blood transfusion and donation. Circle the letter that includes the correct answer

A. BLOOD

1. What is blood?
 - a. Complex fluid consisting of cells suspended in plasma
 - b. A transportation medium
 - c. A mixture of red cells, white cells and platelets
 - d. a, b and c
 - e. a and c

2. Which are the main blood groups?
 - a. A, B, O
 - b. A, B, AB, O
 - c. Rh D negative, Rh D positive
 - d. a and c
 - e. b and c

B. BLOOD TRANSFUSION

3. When is a blood transfusion necessary?
 - a. Situations associated with major surgery
 - b. Situations associated with chronic disease
 - c. Haematological disorders
 - d. Pregnancy and labour complications
 - e. All the above

4. What infection can a person get by receiving a blood transfusion?
 - a. Human immunodeficiency virus (HIV)
 - b. Human T-cells lymphotropic virus (HTLV)
 - c. Hepatitis B and C
 - d. Tuberculosis
 - e. a, b, c

C. BLOOD DONATION

5. What type of donor has the greatest possibility of donating safe blood?
 - a. Commercial donor
 - b. Professional donor
 - c. Regular voluntary non-remunerated donor
 - d. Family replacement donor
 - e. Regular donor

6. What disadvantages do potential donors have?
 - a. No health record
 - b. Unknown lifestyles
 - c. No records of previous analysis
 - d. All the above
 - e. None of the above

7. What is the “window period”?
 - a. Period between infection and the development of detectable antibodies
 - b. Period of sexual promiscuity
 - c. Period of inactivity of the vital cycle of micro-organisms
 - d. Period in which there is a greater possibility of getting an infection
 - e. None of the above

8. Which behaviours in donors are considered risk factors that can affect the safety of transfusion?
 - a. Sexual promiscuity and prostitution
 - b. Homosexuality and male bisexuality
 - c. Drug addiction
 - d. Skin scarification, tattooing and blood rituals
 - e. All of the above

9. Which signs and symptoms in the potential donor would be contraindicated in donating blood?
 - a. Paleness
 - b. Pregnancy
 - c. Persistent cough
 - d. Diarrhoea
 - e. all of the above

10. Which signs and physical conditions in the potential donor would be dangerous for the recipient?
- a. Herpes zoster and brucellosis
 - b. Prolonged diarrhoea
 - c. Swollen glands and skin rashes
 - d. HIV/AIDS
 - e. All of the above

11. Which are some of the tests that should be carried out on the donor's blood to prevent the transmission of diseases?
- a. ABO, Rh and antibodies
 - b. Anti-HIV 1 and Anti-HIV 2
 - c. Anti-HCV and HbsAg
 - d. Anti-Trypanosoma cruzi and syphilis
 - e. b, c and d

12. What can be done to avoid affecting the health of a person donating blood?
-
-

13. How would you know that the blood recipient is having a negative reaction to donor blood during a blood transfusion? (signs and symptoms)
-
-

14. What would you do when a patient reacts negatively to blood transfusion?
-
-

15. What would you do to detect negative reactions in good time (earlier)?
-
-

16. Are you currently a blood donor?

Yes

No

17. If yes why?

.....
.....

18. If no, why?

.....
.....

19. Are there any cultural taboos/traits regarding human blood transfusion?

.....
.....

20. Do you have any comments or suggestions regarding blood donation?

.....
.....

INSTRUCTION FOR INSTRUMENT N (THPK-D)

The objective of instrument N (THPK-D) is to evaluate the knowledge of health personnel regarding blood, blood transfusion and donation.

Instrument THPK-3 is applied by handing out the multiple-choice test to all members of the health personnel in a blood transfusion service.

Following is a list of correct answers:

- 1. e
- 2. e
- 3. e
- 4. e
- 5. c
- 6. d
- 7. a
- 8. e
- 9. e
- 10. e
- 11. e

INSTRUMENT O

FOCUS GROUP DISCUSSIONS

TITLE: **CLASSIFICATION OF INFORMANTS AND DONORS:**

1. Has never donated blood, does not have intention to donate.
2. Has never donated, would donate
3. Recent voluntary non-remunerated donor (12 months)

DATE OF INTERVIEWS:

Residential area:

Age:

Region & Town:

Male
Female

Highest level of education:

Grade 2-4	<input type="checkbox"/>
Grade 5-6	<input type="checkbox"/>
Grade 9-10	<input type="checkbox"/>
Grade 11-12	<input type="checkbox"/>

Occupation

Farmer	
Domestic Worker	
Unemployed	
Clerk	
Supervisor	
Manager	
Teacher	
Health Worker	
Student/scholar	
Housewife	
Other specify	

A. BLOOD DONATION PRACTICES

1. Have your ever donate blood?

Yes

No

2. If “Yes” why do you donate blood?

.....

.....

.....

3. If “No” why do you not donate blood?

.....

.....

.....

4. How often did you donate blood?

Always

Sometimes

Seldom

Never

5. The last time you donated blood, did someone ask you to donate?

Yes
No

6. If yes, who asked you to donate blood?

.....

7. If no, how did you find out about the need to donate blood?

.....

8. Did you know what the blood was going to be used for?

Yes
No

9. If yes, what was it going to be used for?

.....
.....
.....

10. Are there any cultural traits/taboo regarding transfusion of human blood?

Yes
No

11. If yes, explain.

.....
.....
.....

B. OPINION ABOUT BLOOD TRANSFUSION SERVICES

(Those who donated blood)

12. The last time you donated blood, what did you think of the blood transfusion service?

Excellent
Very good
Good
Fair
Bad

13. Why do you say that? Explain and elaborate.

.....
.....

14. Did you receive any information or orientation from anyone before you donated your blood?

Yes
No

15. If yes, what information did you receive?

.....
.....

16. Did they carry out a health check before you donated blood?

Yes
No

17. If yes, what did the health check they carried out consist of?

.....
.....

18. What did they give you?

.....

C. KNOWLEDGE ABOUT BLOOD

19. What is blood's function?

.....

20. What types of blood are there?

.....

21. If so, what is your blood group?

.....

D. KNOWLEDGE ABOUT BLOOD TRANSFUSION

22. Have you hear about blood transfusion?

Yes
No

23. According to you, what is a blood transfusion?

.....

24. Why do certain people need blood transfusion?

.....
.....
.....

25. Can a person get infected with a disease by receiving blood?

Yes
No
Don't know

26. What else do you know about blood transfusion?

.....
.....
.....

E. KNOWLEDGE ABOUT BLOOD DONATION

27. In your opinion, what could be done in order to have more people donating blood?

.....
.....

28. How often can blood be donated?

.....

29. Who can donate blood?

.....

30. Who CANNOT donate or should not donate blood? (Specify)

.....

31. Why shouldn't these people donate blood?

.....

34. Have you ever seen or heard messages about blood donation?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't remember	<input type="checkbox"/>

35. If yes, where did you see or hear those messages?

Advertisement	<input type="checkbox"/>
Pamphlets	<input type="checkbox"/>
Television	<input type="checkbox"/>
Radio	<input type="checkbox"/>
Posters	<input type="checkbox"/>
Bill Boards	<input type="checkbox"/>

36. If yes to who do you think those messages were aimed at?

.....

37. If yes, why?

.....

38. If no, why not.

.....

39. What would be the best way to disseminate messages about blood donation?

Radio	<input type="checkbox"/>
Television	<input type="checkbox"/>
Written media	<input type="checkbox"/>
Other printed media	<input type="checkbox"/>
Interpersonal	<input type="checkbox"/>

DEFINITION OF TERMS

The following terms will be understood as defined here.

Blood donation

Refers to the process by which a blood donor voluntarily has blood drawn from the body for storage in a blood bank for subsequent use in a blood transfusion.

Communication

Is a process of exchanging information and ideas between two or more individuals. It is an active process involving the encoding, transmitting and decoding of the messages received.

Education

The word is derived from the Latin word “educare” meaning to “raise”. It refers to formal education. It covers a range of experiences from formal to informal learning to the building of understanding through day to day experiences.

Non-remuneration

Is the non receipt of any payment or reward for work done. With respect to blood donation, remuneration refers to payment received for donating blood. Regular blood donor

Recruitment

Is the process of adding new members to an already existing defined group. In this case this should be understood to refer to adding new members to the group of regular blood donors.

Remuneration

Is a payment made or reward received for work done. With respect to blood donation, remuneration refers to payment received for donating blood.

Retention

Refers to the act of keeping what one has. In our study this refers to keeping the group of the number of blood donors intact.

Safety

Is a condition of being protected against physical, emotional, psychological, political or any other consequences of failure. In this study it will be understood to refer to the consequences of the failure to follow the appropriate procedures.

Voluntary

This term describes actions that one does because of own’s choice. The person is not forced to do the action.

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