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KNOWLEDGE, ATTITUDE AND, PRACTICES TOWARDS BLOOD DONATION AMONG ADULTS AGED 18-45 YEARS IN NSAMBYA GOGONYA 1 ZONE, KAMPALA DISTRICT. A CROSS-SECTIONAL STUDY.

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ABSTRACT.

Background:
The purpose of the study was to assess knowledge, attitude, and practice towards blood donation among adults aged 18-45 years in Nsambya Gogonya 1 zone, Kampala district.

Methodology:
A descriptive cross-sectional study design was employed using a purposive sampling technique on 50 respondents. Semi A semi-structured questionnaire with both open and closed-ended questions written in English language was used. Data was manually analyzed using tally sheets and entered in a computer using the Microsoft Excel program to generate tables and figures like pie charts and bar graphs.

Results:
Findings on knowledge revealed that (100%) had ever heard about blood donation, (70%) reported that they knew their blood groups, (50%) did not know how often one should donate blood, (80%) responded that an individual should be healthy,(72%) responded that they could donate blood if called upon, (84%) responded they could encourage a friend or general public to donate blood. The study findings on practices revealed that (60%) had never donated blood, (70%) reported that they donate blood to save life.

Conclusion:
Overall knowledge and attitudes were fair but poor practices were established since participants wanted gifts that could not be given and lack of easy accessibility to blood donation camps as the majority had never attended a blood donation camp despite being willing to donate blood when called upon.

Recommendation:
The government should increase the number of blood donation centers at all levels of the community to ease the accessibility of blood donation, the Ministry of Health should increase awareness and education at all levels of the country regarding blood donation such as information about the need for blood and also education about the process and the hospital administration should establish blood donation camps to increase on the number of potential donors.

Keywords: Blood donation, Blood transfusion, Non-donors, Remunerated donors, Rhesus factor, Voluntary donors.
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BACKGROUND OF THE STUDY

In Africa, the total number of blood donations increased from 31,228 in 2002 to 43,742 in 2016, giving an annual blood collection rate evolving from 26.3 per 1,000 inhabitants in 2002 to 34.2 per 1,000 inhabitants in 2016. The percentage of voluntary donations rose from 60% to 82.5%. Since 2002 (Andre et al, 2017).

In East African countries, Uganda had the highest blood collection unit per population of 1000 people with 6.2 followed by Kenya (4.1) and Tanzania (3.6). But Uganda currently is home to over 40 million people and is characterized by a high MMR at 343/100000, high motor vehicle accidents, and the number of fatalities estimated to be at least 10 death per day due to road traffics accident. Also, with the prevalence of anemia standing at 34.4% and with high malaria being registered every year, you can only see the need for more blood being donated voluntarily by Ugandans to help in the treatment of all these complications and if statistics are anything to go by (Chevalier et al, 2016).

One percent, for Uganda with a population of 37 million would be 370,000 units. But by the end of 2017, for instance, the country had collected only 240,000 units and this was a reduction from the previous year when 260, 000 units were collected (MoH, 2018).

General objective

- *To assess knowledge, attitude, and practices towards blood donation among adults aged 18-45 years in Nsambya Gogonya 1 zone, Kampala district.*

Specific objectives

- *To assess knowledge towards blood donation among adults aged 18-45 years in Nsambya Gogonya 1 zone, Kampala district.*
- *To assess the attitude towards blood donation among adults aged 18-45 years in Nsambya Gogonya 1 zone, Kampala district.*
- *To assess the practices towards blood donation among adults aged 18-45 years in Nsambya Gogonya 1 zone, Kampala district.*

METHODOLOGY.

Study Design.

A descriptive cross-sectional study design was used to collect data from the respondents. This is because the design will help the researcher to collect data in the shortest time possible.

Study area.

The study was conducted in Nsambya Gogonya 1 zone, Kampala district. It is found in Central Uganda 5km from Kampala the capital city of Uganda.

Study populations:

The study population was adults aged 18-45 years in Nsambya Gogonya 1 zone.

Sampling Technique.
The sampling technique that was used for this study is the purposive sampling technique since a researcher was targeting a specific category of respondents.

Inclusion criteria.

The study included all medical adults aged 18-45 years in Nsambya Gogonya 1 zone, Kampala district who were willing to participate in the study.

Exclusion criteria.

The study excluded all people who were below 18 years those above 45 years, and those who were not willing to participate in the study.

Independent variables.

The independent variables in this study were the knowledge, attitude, and practice of adults aged 18- 45 years.

Dependent variable.

The dependent variable was blood donation among adults aged 18-45 years

Data collection tool.

Questionnaires were written in English language and later translated into the local language and were administered by the researcher to gather relevant data among adults in Nsambya. These questionnaires had both open and closed-ended questions.

Data collection procedure

A letter of introduction was obtained from Kampala School of Health Sciences and was taken to the chairperson Nsambya Gogonya 1 zone who granted the researcher permission to carry out my research. The selected respondents were served with questionnaires, those who were not in a position to read and write were helped by explaining to them through translation, and their responses were recorded.

Data management and storage.

The researcher managed the data to ensure confidentiality and security. Questionnaires were checked for mistakes and missing data. Before leaving the study site, the participants were requested to correct the mistakes or fill in the missing data. Questionnaires were coded for easy checking and also to prevent losses. Training and supervision of research assistants were done to ensure the collection of quality data. The generated data was stored in both soft and hard copy for future use.

Data presentation, interpretation, and analysis.

After collecting raw data, the data was analyzed manually using tally sheets and presented using SPSS version or Microsoft Excel information of frequency distribution tables, pie charts, and bar graphs.

Quality control.

Pre-visiting.

Before the study, the researcher visited the health center in charge to obtain permission to conduct a study in the health center facility. This helped the researcher to make arrangements that ensured all the data was collected.

Pretesting.

Before the actual day of data collection, pretesting of the questionnaire was done. The questionnaire was printed in English and interpreted into the local language (Luganda) to ensure that respondents understood the questions. It was pretested in Kisenyi Health Center IV. This was aimed at evaluating the validity and reliability of the tools. Thereafter the tool was revised to suit the realities by reconstructing questions and eliminating unnecessary ones.

Ethical considerations.

Upon approval of the proposal by the supervisor, the researcher obtained an introductory letter from the Kampala School of Health Sciences. This letter introduced the researcher to the village through the chairperson of Nsambya Gogonya 1 zone to be allowed to research Knowledge, Attitudes, and Practices towards blood donation among adults. The researcher proceeded by creating a rapport with the respondents through self-introduction and requesting for their co-operation stating the reason as to why the respondents were chosen to participate in the study. The researcher then ensured free and informed consent, anonymity, and confidentiality.

RESULTS.

Demographic data.

Table 1: Shows the distribution of respondents by Bio-Data. (N= 50)

Bio-Data		**Frequency**	**Percentage (%)**
Sex	Male	30	60
	Female	20	40
	Total	**50**	**100**
Age	18-22	35	70
	23-27	10	20
	28 and above	05	10
	Total	**50**	**100**
Religious denomination	Catholic	25	50
	Anglican	10	20
	Pentecostal	05	10
	Muslim	10	20
	Others	00	00
	Total	**50**	**100**
Marital status	Married	02	4
	Unmarried	48	96
	Total	**50**	**100**
Tribe	Baganda	35	70
	Basoga	7	14
	Banyankole	8	16
	Total	**50**	**100**

From Table 1, most of the respondents (60%) were male whereas the least (40%) were female, majority of the respondents (70%) were aged between 18-22 years whereas the minority (10%) were aged 28 and above, majority of the respondents (50%) were Catholics whereas none of the respondents belonged to other religious denominations, majority of the respondents (96%) were single whereas the minority (4%) were not married, In regards to tribe majority of the respondents (70%) were Baganda whereas the minority (14%) were Basoga.

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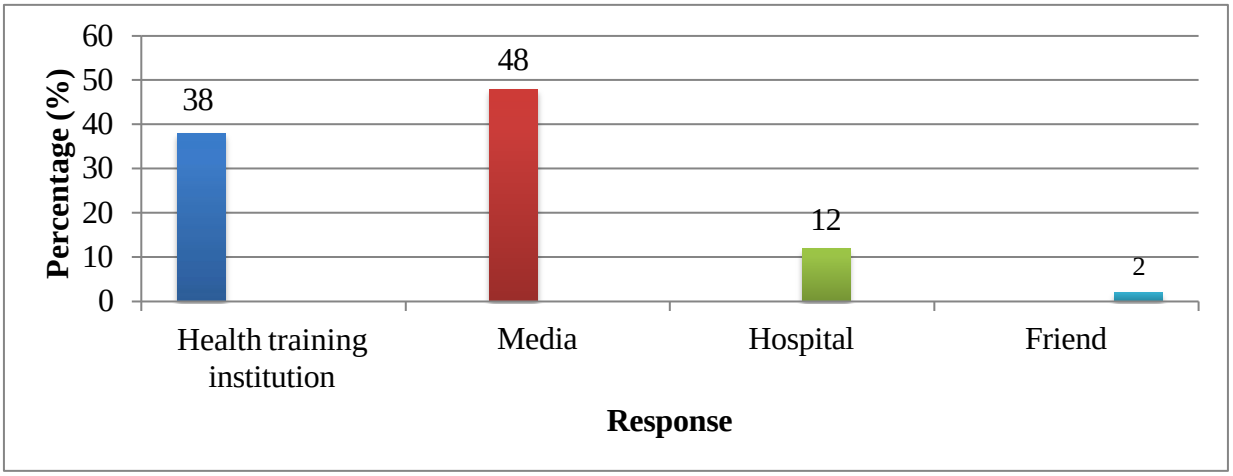
Knowledge towards blood donation among adults aged 18-45 years.

Table 2: Shows the distribution of respondents according to whether they had ever heard about blood donation. (N=50)

Response	Frequency(f)	Percentage (%)
Yes	50	100
No	00	0
Total	**50**	**100**

From Table 2, the majority of the respondents (100%) had ever heard about blood donation whereas none of the respondents had never heard about blood donation.

Figure 1: Shows the distribution of respondents according to where they obtained information about blood donation.(N=50)



From figure 1, most of the respondents (48%) obtained information about blood transfusion from the media whereas the least of the respondents (2%) obtained information about blood transfusion from a friend.

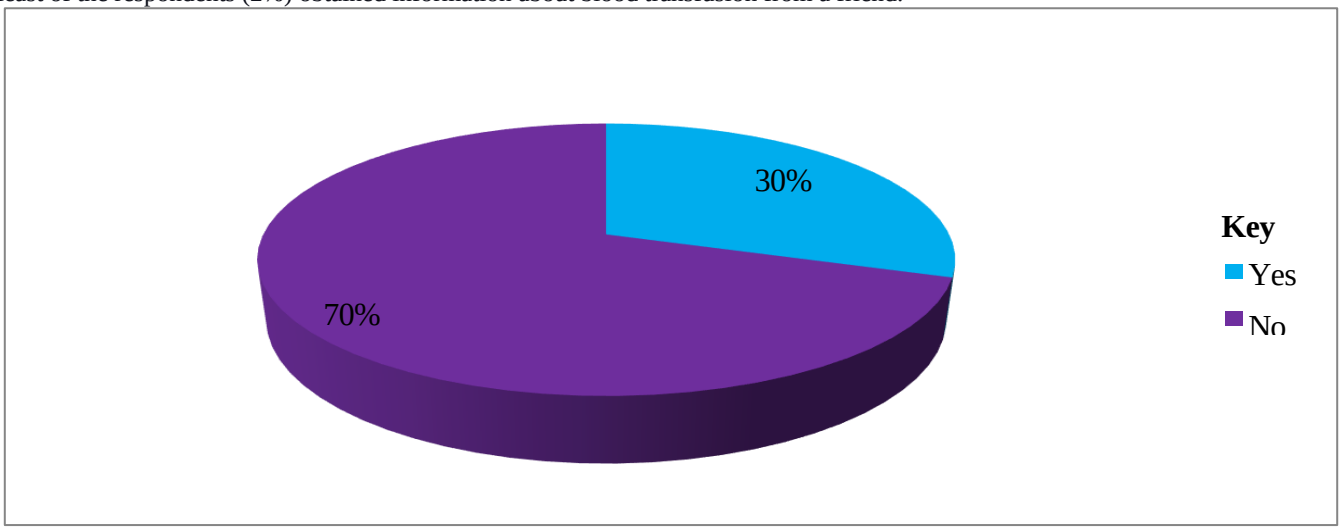


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Figure 2: Shows distribution of respondents according to whether they know their blood groups. (N=50)

From Figure 2, the majority of the respondents (70%) reported that they know their own blood groups whereas 30% reported that they didn't know their blood groups.

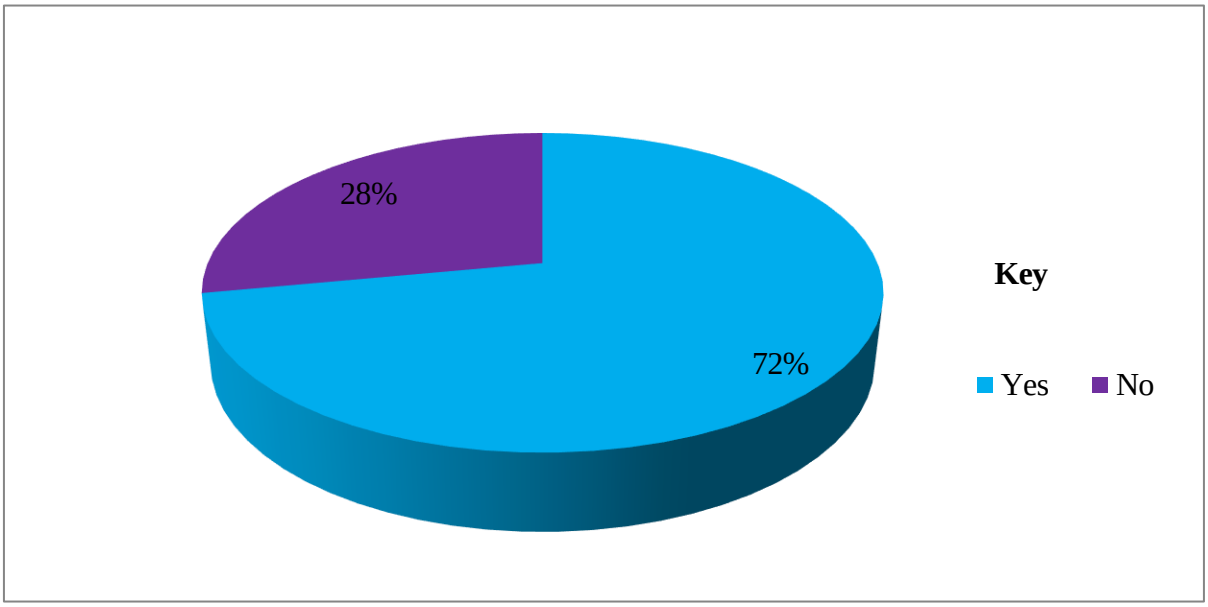
Table 3: Shows the distribution of respondents according to their blood group. (N=50)

Response	Frequency(f)	Percentage (%)
O^+	28	56
A^+	15	30
B^+	5	10
AB^+	7	14
Total	**50**	**100**

From table 3, a half of the respondents (56%) reported that they are of blood group O^+ whereas the least (10%) were of blood group B^+.

Attitudes towards blood donation among adults aged 18-45 years.

Figure 3: Shows the distribution of respondents according whether they could donate if called upon or reminded to do so(N=50)



From figure 3, majority of the respondents (72%) responded that they could donate blood if called upon whereas the minority (28%) responded that they could not donate if called upon to donate.

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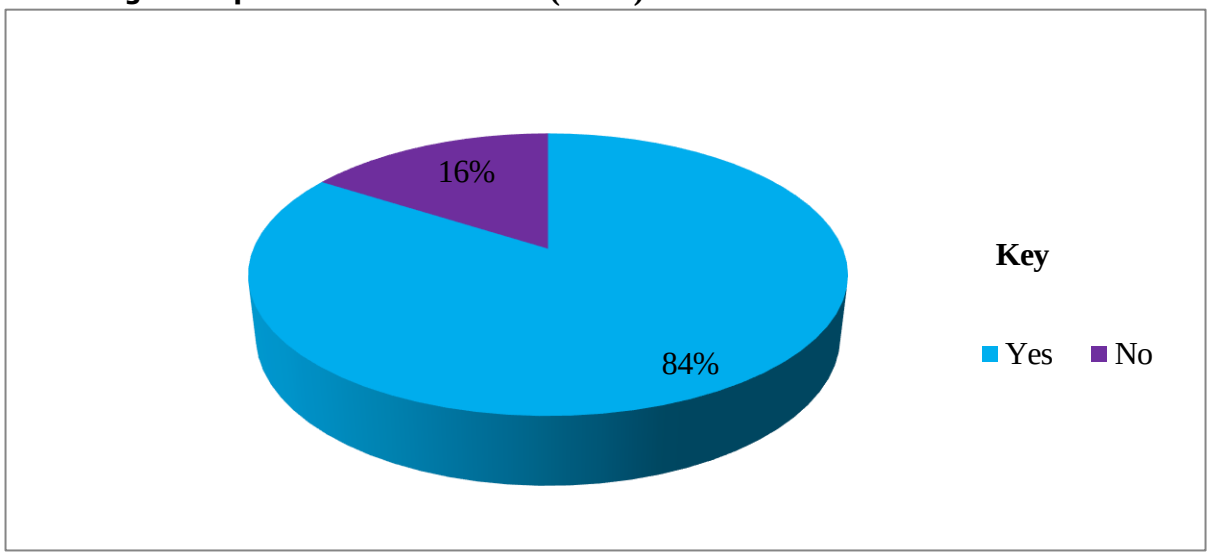
Figure 4: Shows the distribution of respondents according to whether they could encourage a friend or general public to donate blood. (N=50)



From figure 4, the majority of the respondents (84%) responded they could encourage a friend or the general public to donate blood whereas the minority (16%) disagreed that they could encourage a friend or the general public to donate blood

Table 4: Shows the distribution of respondents according to why they were not willing to encourage a friend or the general public to donate blood.

Response	**Frequency(f)**	**Percentage (%)**
Something can happen to the donor	8	16
Fear of reduction of blood	40	80
Blood donation can result in transmission of infections	2	4
Total	**50**	**100**

From Table 4, the majority of the respondents (80%) reported that they fear a reduction of blood from the donor as to why they could not encourage a friend or the general public to donate blood whereas the minority (4%) reported that blood donation can result in transmission of infections as to why they fear reduction of blood from the donor as to why they could not encourage a friend or general public to donate blood.

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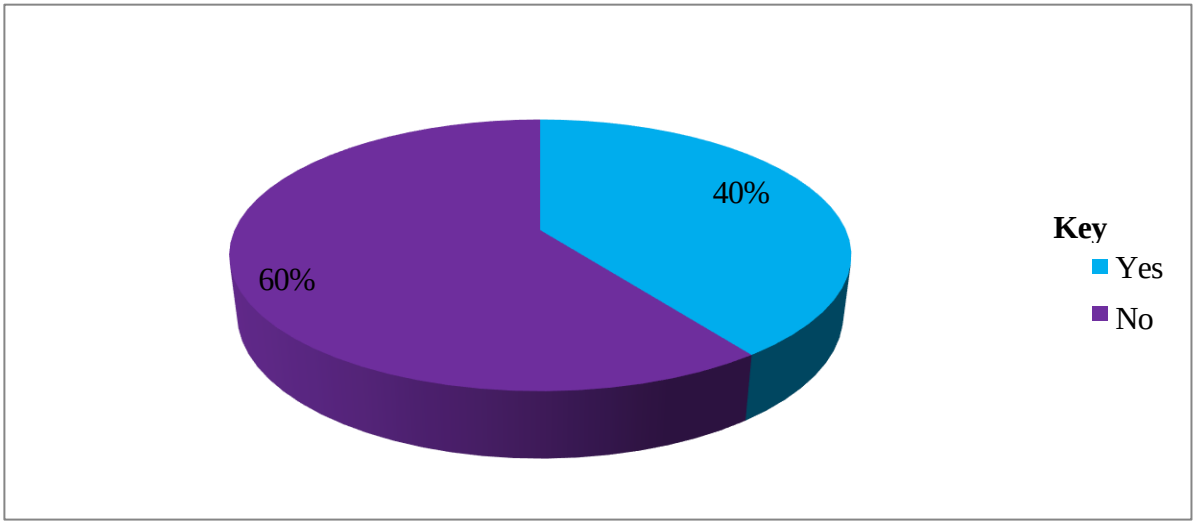
Practices towards blood donation among adults aged 18-45 years.

Figure 5: Shows the distribution of respondents according to whether they had ever donated blood. (N=50)



From figure 5, majority of the respondents (60%) had never donated blood whereas the minority (40%) had ever donated blood.

Table 5: Shows the distribution of respondents according to why they donated blood.

Response	**Frequency(f)**	**Percentage (%)**
Friend or relative needed blood	0	0
To save life	35	70
Someone asked me to go with them	15	30
A doctor told me to donate blood for health reason	0	0
Remunerated(paid)	0	0
Total	**50**	**100**

From table 5, majority of the respondents (70%) reported that they donate blood to save life whereas none of the respondents reported to donate blood because; friend or relative needed blood, a doctor told me to donate blood for health reason or where remunerated(paid) to donate.

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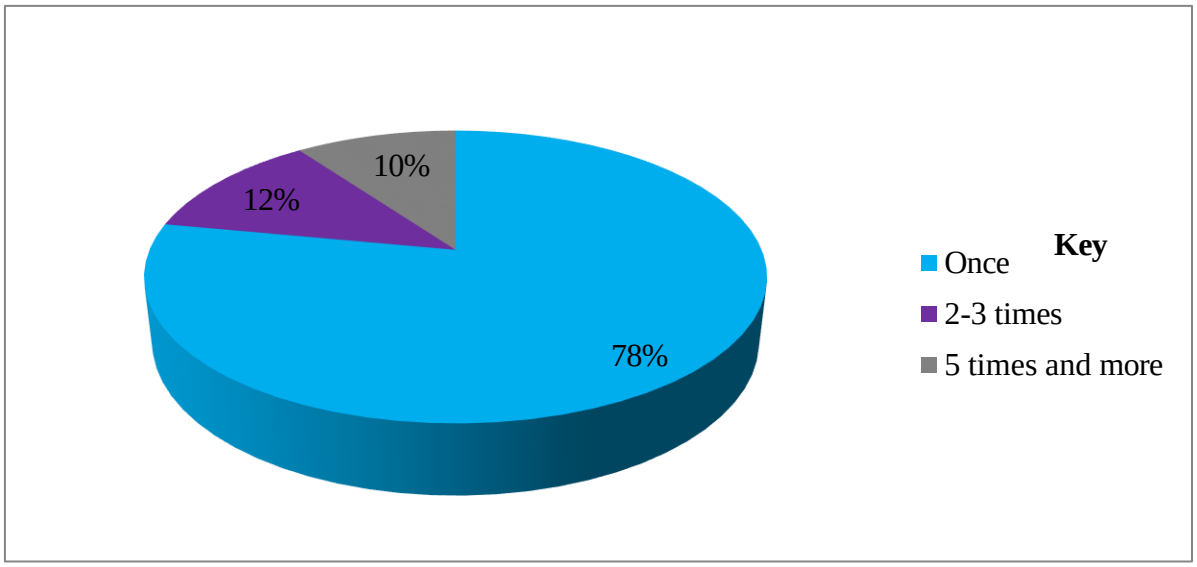
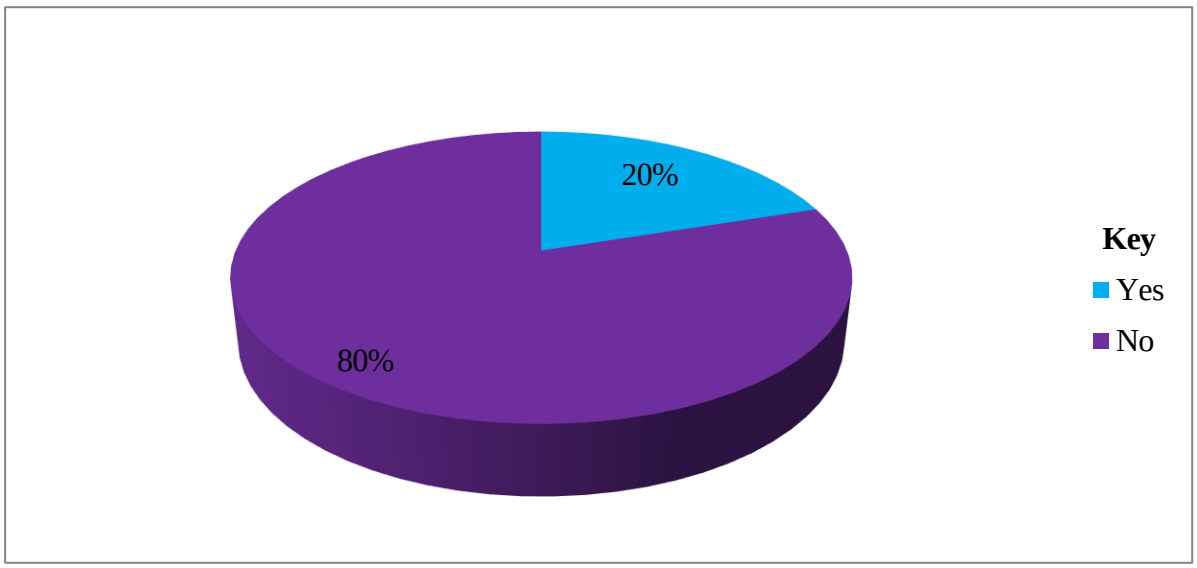
Figure 6: showing the distribution of respondents according to how many times they had ever donated blood. (N=50)



From figure 6, majority of the respondents (78%) reported that they had donated once whereas the minority (10%) reported that they had donated 5 times and more.

Figure 7: Showing the distribution of respondents according to whether they had ever attended a blood donation camp. (N=50)



From figure 7, majority of the respondents (80%) agreed that they had ever attended a blood donation camp whereas the minority of the respondents (20%) had never attended a blood donation camp.

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DISCUSSION.

Knowledge of blood donation among adults aged 18-45 years.

Interestingly, all respondents had ever heard of blood donation as of the 50 adults who participated in the study, results showed that a majority of the respondents (100%) had ever heard about blood donation. This showed that adults were well-informed about blood donation. These results were in line with Kedir et al (2017), where results showed that 93.7% of the respondents had heard about blood donation.

The study also revealed that most of the respondents (48%) obtained information about blood transfusion from the media. This was attributed to residents wanting to know more about blood donation by using different types of media. These results were in agreement with Kebadnew et al (2017), who stated that 38.94% of the respondents had heard about blood donation from mass media.

Also, the study showed that a majority of the respondents (70%) reported that they knew their blood groups. This was attributed to the fact that most had ever checked the status of their blood groups before donation. These results were in agreement with Benedict et al (2013), who stated that 93.9% of the respondents knew their blood groups.

Furthermore, the study revealed that half of the respondents (56%) reported that they were of blood group O. This was attributed to the fact that all respondents were Africans and blood group O is the commonest in Africa. These results were in disagreement with Renu et al (2018), who reported that 33.7% of the respondents reported blood group B.

The study revealed that half of the respondents (50%) did not know how often one should donate blood. This was attributed to respondents not being informed about the time interval between one donation and the next. These results were in agreement with Addisu et al (2017), were reported that 72.1% of the respondents did not know how often an individual can donate blood.

The study also showed that a majority of the respondents (80%) responded that an individual should be healthy before donating blood. This was attributed to respondents being knowledgeable on the route of infection transmission which includes blood. These results were in agreement with Sultan et al (2017), who reported that 83.8% of the respondents knew the dangers of receiving blood from diseased individuals.

Attitude toward blood donation among adults aged 18-45 years.

This was attributed to the fact that respondents were knowledgeable about the advantages of blood donation. These findings were in agreement with Mulugeta, et al (2016), who showed that 96.5% of the participants thought that blood donation is important.

The study also showed that a majority of the respondents (72%) responded that they could donate blood if called upon. This study has yet to discover if most of the respondents were willing to donate blood. These results were in agreement with Kedir et al (2017), who showed that 77.5 % of the respondents showed a willingness to donate blood in the future.

Furthermore, the study showed that a majority of the respondents (70%) responded that voluntary donor is the best source of blood donation and This was attributed to the positive attitude they had towards saving a life. These results contradict with Benedict et al (2013), who revealed that 7.1% of the respondents cited replacement donors as the best source of blood donation.

The findings revealed that a majority of the respondents (84%) responded they could encourage a friend or general public to donate blood. This was attributed to the fact that respondents understood its benefits in health. These results were in agreement with Dnyanesh et al (2018), who stated that 96% of participants agreed about encouraging the general public to volunteer for blood donation.

The study showed that a majority of the respondents (80%) reported fear of reduction of blood from the donor as to why they could not encourage a friend or the general public to donate blood. This was attributed to the fact that respondents were well-informed about its effects. These findings were in agreement with Megdelawit et al (2014), who stated that 76.6% of the respondents believed that blood donation makes one weak as the reason for not donating.

Practices towards blood donation among adults aged 18-45 years

The study showed that most of the respondents (60%) had never donated blood and this was attributed to the fact that blood donation camps are not always in place. This was in disagreement with Kebadnew et al (2017), who stated that 66.4% of study subjects have ever donated blood in their lifetime.

The study results also showed that a majority of the respondents (70%) reported that they donate blood to save lives. This was attributed to the fact that all respondents were well-informed about the benefits of blood donation.

Furthermore, the study showed that a majority of the respondents (54%) reported the reason for non-donation by non-donors was they were not approached to donate. This was in disagreement with Kedir et al (2015), who reported that 33.8 % of the respondents said the reason for non-donation was the inability to think of it.

The study also showed that a majority of the respondents (78%) reported that they had donated once. Also, the study showed that a majority of the respondents (36%) reported that they donated sometime in the last year and this was because of a lack of regular visits to blood donation centers to donate.

Finally, the study revealed that a majority of the respondents (80%) agreed that they had ever attended a blood donation camp. This was attributed to due to the willingness to donate blood and this could also be due to increased sensitization on blood donation by the MOH. These findings were in

agreement with Sultan et al (2017), who stated that 20% of the students had ever attended blood donation camps.

CONCLUSION.

Generally, the knowledge of blood donation among adults in Nsambya Gogonya 1 zone was fair as (100%) had ever heard about blood donation, (48%) obtained information about blood transfusion from the media, (70%) reported that they knew their blood groups, (56%) reported that they are of blood group O., (50%) did not know how often one should donate blood and (80%) responded that an individual should be healthy before donating blood.
The study revealed poor practices towards blood donation among adults of Nsambya Gogonya 1 zone as (60%) had never donated blood and this was because they had never come across blood donation service, (and 70%) reported that they donate blood to save lives, (54%) reported reason for non-donation by non-donors was they were not approached to donate, (78%) reported that they had donated once, (36%) reported that they donated sometime in the last year and (80%) agreed that they had ever attended a blood donation camp.
The researcher concluded that the overall knowledge of adults aged 18-45 years was good with fair attitudes and poor practice as findings showed some people wanted gifts that could not be given and lacked easy accessibility to blood donation camps as the majority had never attended a blood donation camps despite willing to donate blood when called upon.

RECOMMENDATIONS

The government should increase the number of blood donation centers at all levels of the community to ease the accessibility of blood donation.

The Ministry of Health should increase awareness and education at all levels of the country regarding blood donation such as information about the need for blood and also education about the process.

UBTS should award donors with gifts and certificates upon their blood donation practice to increase their motivation for the next donation.

UBTS should organize social events, such as blood collection drives throughout the year that could approach health care providers and initiate blood donation.

UBTS should organize blood donation camps and donation campaigns at all levels of the country to increase the number of blood donors.

Further research and studies should be carried out on a larger scale on this global phenomenon to identify more gaps and perhaps possible interventions accordingly.

The hospital administration should establish blood donation camps to increase the number of potential donors.

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ABBREVIATIONS

CDC: Centre for Disease Control
HIV/AIDS: Human Immunodeficiency Virus and Acquired Immunodeficiency Syndrome.
KAP: Knowledge, Attitude, and Practices.
MMR: Maternal Mortality Rate.
MOH: Ministry of Health.
UAHEB: Uganda Allied Examination Board.
VBD: Voluntary Blood Donation.
VNRBD: Voluntary Non-Remunerated Blood Donation.
WHO: World Health Organization.
UAHEB: Uganda Allied Health Examinations Board

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