

**KNOWLEDGE, BELIEF AND ATTITUDES OF PATIENTS TOWARDS BLOOD
TRANSFUSION AMONG PATIENTS ADMITTED IN KAMPALA
INTERNATIONAL UNIVERSITY-TEACHING HOSPITAL**

**A RESEARCH REPORT SUBMITTED TO
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BY

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ABSTRACT

The study about the knowledge, attitudes and beliefs of patients towards blood transfusion in KIU-TH, Bushenyi District. The study was done from Kampala International University-Teaching Hospital which is located in Bushenyi-Ishaka, Municipality Bushenyi District in South western Uganda. This was descriptive cross-sectional study design where both qualitative and quantitative methods were applied. Only 40 respondents were used in the study to represent the entire population and these were selected using simple random sampling were used to select the patients so that every patient stands a chance of being selected for the study to avoid bias. Structured questionnaires were used to collect data from the respondents.

The study findings found out that majority of respondents had ever done blood transfusion. The conditions for one to do blood transfusion, as patients with serious injuries from car crashes or natural disasters, those with major surgical procedures, and individuals with an illness that causes anemia. Majority of respondents acquired knowledge of blood transfusion as health centres, followed by television and the least mentioned internet. It was further revealed that majority of the respondents would accept to go for any blood transfusion in case, reasons being treating blood loss, under placing or supplementing blood components. Respondents revealed that there are chances of acquiring an infection through blood transfusions. Study findings further concluded that other factors affecting patients' perceptions towards blood transfusion include; nobody have approached a patient, blood is not used properly, some patients are scared and bad experience of others. Study findings concluded that blood transfusion can be lifesaving for persons who have lost large amounts of blood because of serious accidents, new medical and surgical procedures, civil conflicts, as well as for patients who have become severely anemic because of serious hematological diseases or treatments such as cancer therapy.

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DECLARATION

I, **Apili Norah** do hereby declare that the work contained in this research report is original and has never been submitted in any institution of higher learning for any academic award.

Signed.....

Date.....

APILI NORAH

(RESEARCHER)

APPROVAL

This is to certify that this research report has been under my supervision and is now ready for submission to the Uganda Nurses and Midwifery Examination Board

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DEDICATION

I dedicate this research report to my beloved **Father Mr. Okwir Laban Lay**, my dear **mother Mrs. Rose Okwir** who never left me behind in the case of needs. May God's blessings be upon them for their commitment toward me. I also dedicate this report to my Brother, Sister (**Ms. Lucy**), Friends (**Mr. Emwos, Ms. Scovia, Ms. Nassali**) and all have not mentioned not forgetting my Supervisor **Mr. Thembo J. Kalende** who worked hand in hand for the completion of this research report.

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LIST OF ACRONYMS

AIDS	Acquired Immune Deficiency Disease
ANC	Antenatal Care
HBV	Hepatitis B virus
HCV	Hepatitis C virus
HIV	Human Immunodeficiency Virus
HSSP	Health Sector Strategic Plan
KIU-TH	Kampala International University Teaching Hospital
KIU-WC	Kampala International University
NHP	National Health Policy
TTI	Transfusion-Transmissible Infections
TTIs	Transfusion Transmissible Infections
UBTS	Uganda Blood Transfusion Services
VNRBD	Voluntary Non-Remunerated Blood Donors
WHO	World Health Organization
SPSS	Statistical package for the social sciences.
SPNO	Senior principal Nursing Officer
PPH	post partum haemorrhage
UNMEB	Uganda Nurses And Midwifery Examination Board
HCIV	Health center four

Definition of the key terms

Knowledge: Understanding that is gained from combination of data, information, experience, and individual interpretation. Or the facts, information, and skills acquired by a person through experience or education; the theoretical or practical understanding of a subject.

(<http://www.businessdictionary.com/definition/knowledge.html>)

Beliefs: The state of mind in which a person thinks something to be the case, with or without there being empirical evidence to prove that something is the case with factual certainty. Or an acceptance that something exists or is true, especially one without proof.

(<https://en.wikipedia.org/wiki/Belief>)

Attitude: A settled way of thinking or feeling about someone or something, typically one that is reflected in a person's behavior.

Or A predisposition or a tendency to respond positively or negatively towards a certain idea, object, person, or situation which influences an individual's choice of action, and responses to challenges, incentives, and rewards.

(<http://www.businessdictionary.com/definition/attitude.html>)

Perception: the ability to see, hear, or become aware of something through the sense.

Or the way in which something is regard, understood, or interpreted.

(<http://www.en.oxford.dictionaries.com/definition/perception>)

CHAPTER ONE

BACKGROUND

1.0 Introduction

This chapter entails background of the study, problem statement; justification of the study, broad objective, specific objective, research questions, justification of the study, significance of the study, scope of the study was presented.

1.1 Background of the study

Blood transfusion is a safe medical procedure in which blood or blood parts is given to the patients intravenously (Goodnough LT et al, 2009). It is very crucial for the society as it is important in saving the lives of patients with trauma/accidents, bleeding disorders, major surgeries, chemotherapy, inherited/acquired hematological diseases and malignancies. Blood is an essential element for human life which has no substitute hence, the theme of World Health Day in year 2000 was “Blood saves Life. Early transfusions used whole blood but modern medical practice commonly uses only components of blood such as red blood cells, white blood cells, fresh frozen plasma, clotting factors and platelets (Carson, 2012).

Millions of lives are saved every year through blood transfusion, but the major concern especially in the developing countries is the quality and safety of blood transfusion. Transfusion transmissible infections such as HIV, Hepatitis B virus (HBV), Hepatitis C virus (HCV), syphilis and malaria have posed a major threat to the safety of blood with implications for the complexity and cost of provision of effective blood transfusion services (Cottrell et al, 2013).

Blood transfusion practice varies from one facility to another depending on the available blood and blood components, the number of patients, and the support of efficient and effective laboratory services (Erhabor and Adis, 2011). Various studies have shown the awareness and attitude of patient towards blood transfusion to be different among countries and traditions.

Lack of awareness and attitude of patient towards blood transfusion continues to be a real threat to the procedure. There is substantial evidence that the perception of the public about blood transfusion is that, it is risky (Carson, 2012). According to Ansari & Szallasi (2011), although, during the last 20 years remarkable advances have been achieved in blood safety especially transfusion transmitted infections.

According to Shenga et al, (2008) blood will be safe if there is a nationally coordinated blood transfusion service, collection of blood only from voluntary non-remunerated donors, testing of blood for transfusion transmissible infection and transfusion of the right blood to the right patient through the appropriate clinical use of blood. The need for blood is growing day by day as a result of advancement in the clinical medicine. The collection of blood only from voluntary, non-remunerated blood donors from low-risk populations is an important measure to ensure the safety, quality, availability and accessibility of blood transfusion (WHO, 2009; Bolton-Maggs et al., 2015).

In Uganda in 2003 an organization known as Uganda Blood Transfusion Service was established and it is the National Blood Service responsible for all blood transfusion and safety activities for the entire country. It operates within the framework of the National Health Policy (NHP) and the Health Sector Strategic Plan HSSP (www.ubts.go.ug/about-us.html).

The Uganda Blood Transfusion Service is a centrally coordinated department in the Ministry of Health with efficient central coordination sufficiently decentralized to render service to all regions of the country. The headquarters at Nakasero Blood Bank acts as a reference centre for the regional blood banks and other public and private hospitals. The blood collection depends on healthy volunteer donors with least risk for Transfusion Transmissible Infections (TTIs) (Blood Bank, 2014).

UBTS has grown from a service supplying blood in Central Uganda within a radius of 100 km from Kampala in 1989 to a network of 7 Regional Blood banks which include Arua, Fort-Portal, Gulu, Kitovu, Mbale, Mbarara and Nakasero; Six- (6) blood collection centers in Hoima, Jinja, Kabale, Rukungiri Lira and Soroti. At that time blood collection was mainly replacement donation and hardly any Voluntary Non-Remunerated Blood Donors (VNRBD). The percentage of VNRBD gradually increased to 85% in 1999 and currently stands at 100% (Blood Bank, 2015).

The UBTS operates within the framework of the National Health Policy and the Health Sector Strategic plan. The core function of this plan is to ensure that UBTS meets the increased demand for safe blood transfusion especially at Health Centre IVs that are located in rural areas where most of the population lives (www.ubts.go.ug/about-us.html).

Kampala International University which is located in the western part of the country access the UBTS services from the Regional Blood Bank which is in Mbarara.

1.2 Problem statement

Blood transfusion misidentification among patients has remained a great challenges to health workers and the care givers whereby most patients refuse transfusion due to fear for harm to

patients (Bolton-Maggs et al, 2013). Even though the prevalence of adequate knowledge towards blood transfusion is estimated to be 60% in developing countries, the blood transfusion rate is low.

The prevalence of transfusion-transmissible infections (TTI) in blood donations ranges from 0.002% in high-income countries to 0.85% in low income countries for HIV. Hepatitis B Virus (HBV) infections prevalence among blood donations reaches as high as 6% in low income countries (Duncanson & Pearson, 2015). Therefore transmission of Transfusion-Transmissible Infections (TTI) is preventable by establishing an adequate supply of safe blood through voluntary blood donation practices.

Despite improvements in blood safety making transfusion a much safer clinical procedure, African countries still perceive it as risky. Although it is true that new infectious agents can emerge at any time and pose a serious risk to blood recipients, such as that which occurred for West Nile Virus (Uma et al, 2013), the overall risk of any type of infection is very low. However, the emergence of HIV infections resulting from blood transfusions during the early 1980s left a lasting fear among the public that lingers today.

This is similar to stereotyping and can often lead to incorrect conclusions. For example, in the case of blood transfusion, an occurrence of an HIV transfusion-transmitted infection can represent future occurrences of transfusion-transmitted infections, leading people to incorrectly perceive a high risk of infection from transfusion. From this, the researcher intends to find out how knowledge, attitudes and beliefs of patients towards blood transfusion in Kampala International University Teaching Hospital.

1.3 Purpose of the study

To assess the knowledge, attitudes and beliefs of patients towards blood transfusion in KIU-TH, Bushenyi District.

1.4 Specific Objectives

- i. To determine the knowledge of patients admitted at Kampala International University Teaching Hospital towards blood transfusion.
- ii. To find out the attitudes of patients admitted at Kampala International University Teaching Hospital towards blood transfusion.
- iii. To find out the beliefs of patients admitted at Kampala International University Teaching Hospital towards blood transfusion.

1.5 Research question

- i. What is the knowledge of patients admitted at Kampala International University Teaching Hospital towards blood transfusion?
- ii. What are the attitudes of patients admitted at Kampala International University Teaching Hospital towards blood transfusion?
- iii. What are the beliefs of patients admitted at Kampala International University Teaching Hospital towards blood transfusion?

1.6 Significances of the study

The study findings will avail information concerning patient's attitudes towards receiving blood transfusion which will help in findings appropriate measures for efficient blood transfusion process.

The study findings will bring at hand the knowledge of patients towards blood transfusion which will help in drawing the guidelines through which patients and their care givers can be given efficient knowledge and the benefits of blood transfusion.

The study findings will be used by future researchers who will be interested in doing a study related to this.

1.7 Justification of the study

The study about Blood transfusion was done among patients at KIU-TH established the knowledge, attitudes and beliefs of patients towards blood transfusion. According to Carson, (2012) Blood transfusion is a safe medical procedure in which blood or blood parts is given to the patients intravenously. Lack of awareness and attitude of patient towards blood transfusion continues to be a real threat to the procedure. There is substantial evidence that the perception of the public about blood transfusion is that, it is risky. The need for blood is growing day by day as a result of advancement in the clinical medicine. The study addressed the perceptions, attitudes and beliefs can be drawn to guidelines during blood transfusion.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Introduction

In this chapter, the researcher assessed the studies by other researcher concerning the knowledge, attitudes and beliefs of patients towards blood transfusion.

2.1 The knowledge of patients towards blood transfusion among patients admitted at KIU-TH

In a study which was carried out by (Erhabor and Adias, 2011) in Ghana, four hundred and seventy (94%) of the respondents belief that proper screening prevent transfusion transmissible infections (TTIs) while (6%) refuse to belief that proper screening prevent TTIs during blood transfusion. Out of 30 who refuse to belief in proper screening to prevent TTIs, (50%) belief that it depends on destiny and (50%) belief it is probability of being infected by transfused blood. Out of the 500 respondents, (22%) know someone who acquired TTIs through blood transfusion.

According to the study by Carson et al, (2012) in UK found out that (what people actually know), experts scored higher than the general public. The degree of confidence is divided into 3 outcomes: under confident (knowing less than you think you do), over confident (knowing more than you think you do), and calibrated confidence (knowing what you think you know). All groups showed under confidence, hence the negative (minus) sign, and journalists and blood donors scored higher on calibrated knowledge (what people think they know). Although all groups showed under confidence, it is suggested that because the general public has less access to medical information,

they are more likely to have lower confidence in what they know and thus rely more on heuristics to make decisions (Carruthers & Phillip, 2009).

Studies in the UK by Action Plan for blood safety measured transfusion knowledge of medical experts and the general public. A study by Davis et al (2012) measured objective knowledge, confidence, and calibrated knowledge in 4 stakeholder groups general practitioners, anesthetists, health/lifestyle journalists, and blood donors (journalists and donors were viewed as part of the general public). Results supported Slovic's conceptual model that risk perception has very little to do with probability-based assessments and more with intuition.

According to the study by Adekola et al, (2015) on Knowledge, Beliefs, Awareness and Attitudes regarding blood transfusion. Out of 500 participants, 41.3% had adequate understanding of blood transfusion in cases of Need for blood transfusion like in case of surgery; Post-partum hemorrhage (PPH), trauma and accident cases, and 40.8% had the general knowledge of the need for blood transfusion. Sources of information about blood transfusion of the 500 respondents includes; 24.5% from Doctor, 16.3% from Nurses, 24.5% from media, 24.5% from other sources such as friends and family and religious houses.

The study by Adekola et al, (2015) further shows that only 34% of the respondents understand the benefit of blood transfusion as a means to save many lives, 52% had the general understanding of the blood transfusion and 22% knew someone who acquired TTIs through blood transfusion.

2.2. The attitudes of patients towards blood transfusion among patients admitted at KIU-TH

In a study from Canada conducted in 2012, general practitioners and anesthetists were found to be more probabilistic, whereas the general public relied more on a nonprobabilistic risk assessment

approach (Carson et al, 2012). Findings were consistent with the common belief that the general public views blood transfusion riskier than physicians do.

According to the study by Oriyomi et al, (2015) about attitude, beliefs and knowledge of patients towards blood transfusion practice in Nigeria very few people (20%) showed readiness for blood transfusion and (80%) were not ready for blood transfusion. Majority of the respondents refused blood transfusion due to the following reasons whereby (10.3%) said it is very dangerous, 80(20.5%) belief is a means of transfusing another person's life to the patient life, while others refused due to fear of infection and fear of death, (2.6%) lack of money, (12.8%) religion beliefs and (7.7%) due to ignorance.

According to Illob et al, (2012) most people belief that everyone who undergoes blood transfusion is likely to contact Human immunodeficiency virus (HIV) or any other TTIs. In Illob and others study in 2012 in Libya by Shittu et al., (2014) found out that 65% have the religion belief that support blood transfusion, (14%) have religion views that is contrary to blood transfusion and (18%) cannot decide.

Higher perception of risk in general is evident in persons with lower education and income, as well as in women, minorities, and married persons (Galel et al., (2009). In addition, those who have not received blood transfusion are also found to have higher risk perception of transfusion. An interesting finding showed that white men have the lowest risk perception of blood transfusion and other hazards. It has been postulated that they are able to better manage, control, and benefit from risky activities and technologies, or at least they think they are able to do so (Carson et al, 2012).

Although these findings on the role of demographics are observed in many studies, there are other determinants as well (Eldh et al., 2010). Demographic characteristics may also explain risk

perception by physicians and the general public. Both groups were found to have different perceptions, with physicians having lower perception of dread of blood transfusion and laypeople having higher perception of dread. However, this difference between physicians and laypeople is more of a generalization across many types of hazards; thus, expertise level appeared to have no association with risk perception in transfusion; rather, demographics may better explain the difference between the 2 groups (Dhingra et al, 2014).

In a similar study conducted among by Boulware et al., (2012), it was revealed that age, tribe and gender are important determinants in those willing to undergo blood donation and transfusion (Uma et al, 2013). This study also shows that respondents were more likely to be females (62%) than males (38%). In addition, 82% of the respondents were between 33-65 years of age. In a similar study conducted among by Erhabor and Adias (2011), it was revealed that 20% of Saudis would refuse blood transfusion even if they are in need, because of the risk of acquiring an infectious disease.

Furthermore, 11.6% claimed that they or a family member acquired infectious diseases including hepatitis and acquired immune deficiency disease (AIDS) following blood transfusion (11). Sixty-eight percent (68%) of the respondents in this current study believe that everyone who receives blood is likely to have HIV or any TTIs (Dhingra et al., 2009). In addition, in study by Doherty & Stavropoulou (2012) in this current study stated that they know someone who acquired infections through blood transfusion. Thus, the risks of transmitting blood-borne infections remain a major source of worry to blood recipients.

Moreso, the study by Adekola et al, (2015), indicated that only 20% showed readiness for blood transfusion and 80% were not ready for blood transfusion. 400 participants refused blood

transfusion due to the following reasons; very dangerous, belief is a means of transfusing another person's life to the patient life, due to fear of infection, fear of death, lack of money, religion beliefs and due to ignorance.

2.3 Beliefs of patients towards blood transfusion among patients admitted at KIU-TH.

Another theory focuses on the role of culture, encompassing worldviews from different social, political, and cultural backgrounds and postulates that these additional cultural and contextual factors may drive risk perception (Adeniyi et al., 2015). In addition Dhingra et al, (2014) indicates that factors such as demographics and socioeconomic status are also important. Research has shown that sex, income, and education play a role in risk perception, whereas other demographic factors such as race and ethnicity may be important as indicators of the cultural context that help to form perceptions. Ultimately, the perception of risk is driven heavily by a combination of psychological and scientific attributes (Bashawri, 2014).

The importance of blood transfusion cannot be over-emphasized; in the study that was conducted to determine the attitude, beliefs and knowledge about blood transfusion practice among patients attending a tertiary health institution in Osogbo, Osun State, Nigeria (Uma Set al., 2013). The result of the study would enable stakeholders in blood transfusion practice to intensify their efforts in developing promotional and educational approaches to enhance the willingness of patients to accept blood transfusion when the need arises (Erhabor and Adias, 2011).

According to the study by Shenga and Sengupta (2008), religion has a great influence upon ones acceptance to blood transfusion. According to Erhabor and Adias (2011), people who believe in Jehovah's Witnesses don't accept blood transfusions, they say that both the Old and New Testaments clearly command us to abstain from blood quoting the verses of (Genesis 9:4;

Leviticus 17:10; Deuteronomy 12:23; Acts 15:28, 29). They further say that God views blood as representing life. (Leviticus 17:14) therefore, they avoid taking blood not only in obedience to God but also out of respect for him as the Giver of life.

According to the study which was done by Adekola et al, (2015), on Attitude, Beliefs and Knowledge of Patients towards Blood Transfusion Practice in Osogbo, (94%) of the respondents belief that proper screening prevent transfusion transmissible infections (TTIs) while 30(6%) refuse to belief that proper screening prevent TTIs during blood transfusion. Herve et al., (2013) also found out that most of the patients refuse to believe in proper screening to prevent TTIs, 15(50%) belief that it depends on destiny and 15(50%) belief it is probability of being infected by transfused blood. Out of the 500 respondents, 110(22%) know someone who acquired TTIs through blood transfusion.

The study by Adekola et al further show that one hundred and sixty 160(32%) respondents belief that everyone who undergoes blood transfusion is likely to contract Human immunodeficiency virus (HIV) or any other TTIs. Three hundred and forty 340(65%) have the religion belief that support blood transfusion, 70(14%) have religion views that is contrary to blood transfusion and 90(18%) cannot decide.

Furthermore the study by Dzik et al (2008) also 90% of the respondents had the belief that blood transfusion can save lives while 10% did not belief in blood transfusion as a procedure used to save lives. 20% belief that it's expand life span of the people, 12% its reduce mortality and Four hundred and 94% of the respondents belief that proper screening prevent transfusion transmissible infections (TTIs) while 6% refused to belief that proper screening prevent TTIs during blood transfusion. Out of 30 who refused to believe in proper screening to prevent TTIs, 50% belief that

it depends on destiny and 50% believed it is probability of being infected by transfused blood. One hundred and sixty 160(32%) respondents belief that everyone who undergoes blood transfusion is likely to contact Human immunodeficiency virus (HIV) or any other TTIs. Respondents further 65% had the religion beliefs that support blood transfusion, 14% had religion views that is contrary to blood transfusion and 18% cannot decide.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

The chapter entails research design, area of study, study population, sample size, sampling procedures, and methods, data collection methods, research procedure, data analysis.

3.2 Study design and rational

This was descriptive cross-sectional study design where both qualitative and quantitative methods were applied. This method was preferred because of its rapidity, cost effectiveness and ability to obtain data in depth and because it helps to capture information which could easily be transformed into numerical form. This approach was used to assess the knowledge, attitudes and beliefs of patients towards blood transfusion in KIU-TH, Bushenyi District. It was used because the study was qualitative and required in-depth information to have a proper understanding which easily provided a quick snapshot of what was going on with the variables for the research problem.

3.3 Study setting and rational

The study was conducted at Obstetrics and Gynaecology, medical, surgical, and paediatric Wards of KIU-TH, Bushenyi District. Bushenyi District is bordered by Rubirizi District to the northwest, Buhweju District to the northeast, Sheema District to the east, Mitooma District to the south and Rukungiri District to the west. The largest town in the district, Ishaka, is located 75 kilometres (47 mi), by road, northwest of Mbarara, the largest city in the sub-region. The coordinates of the district are: 00 32S, 30 11E. KIU-TH is a private not for profit located in Bushenyi district, western Uganda. KIU-TH is one of the health facilities providing ANC services to pregnant women in KIU-TH, neighboring villages and sub counties in Bushenyi district. Therefore, the researcher easily got the respondents for the study and it was also convenient for the researcher because of its access.

3.4.0 Study population

The study population is the total group of individual or things meeting the designated criteria of interest to the researcher. In this study, the study population comprised of patients attending

Kampala International University Teaching Hospital in different wards of Obstetrics and Gynaecology, medical, surgical, and paediatrics wards.

3.4.1 Sample size determination

The researcher arrived on this sample size using Slovene's formula

$$n = \frac{N}{1 + N(e)^2}$$

Where n is sample size, N=Total Population, e= marginal error or level of significance and it usually ranges from 1%-5% which is 0.01-0.05

$$N = 100 / 1 + 100 (0.05)^2$$

$$70 / 1.75$$

$$= 40$$

Therefore the researcher only used 40 respondents to represent the entire population. The researcher could not go on with a number more than this because of limited time for the study.

3.4.2 Sampling procedure

The researcher used the purposive sampling technique to select Kampala International University Teaching Hospital as the study area because it was the biggest Hospital in Bushenyi district and it admits very many patients who are in critical conditions and sometimes blood transfusion was always required for some. Therefore, the researcher easily got the respondents for the study and it was also convenient for the researcher because of its access.

Simple random sampling techniques were used to select the patients that were used in the study so that every patient stands a chance of being selected for the study and to enable the researcher obtain data that was balanced or not biased.

3.4.3 Inclusion criteria

All patients were at the ward during the time of sample selection and they were selected for the study.

All patients who were consented for the study were interviewed and results were used in the study.

1.4.3 Exclusion criteria

The patients who were not consented in the study did not participate in the study.

Patients who were not in the selected wards during the time of sample selection were excluded.

3.5 Definition of variables

The study focused at finding out the knowledge, attitudes and beliefs of patients towards blood transfusion in Kampala International University Teaching Hospital. Therefore knowledge, attitudes and beliefs were the dependent variables for the study and Blood transfusion was the independent was the independent variable.

3.6 Research instruments

3.6.1 Data collection method

Primary data was collected using a self-administered questionnaire; they were administered to all participants that were involved in the study. Personal interviewing was chosen on two grounds. First, this approach was more likely to improve the response rate, as people have a greater obligation to respond when they have face-to-face or engagement, and secondly, interviews with respondents afforded insight into issues not anticipated by the study.

3.6.2 Data collection tool

3.6.3 Self-administered Questionnaires

A questionnaire is written lists of questions were the answers to it are answered by respondents in written. Questionnaires were administered to respondents who could easily read and write. Respondents were given a chance to read the questions, interpret what was required of them and then write down the answers. This method was used because it enabled the researcher to get first-hand information, it was simple to use and the respondents answered the questions according to their feelings.

3.7.0 Data collection Procedure

An introductory letter was obtained from the head of Department of Nursing that introduced the researcher to the SPNO of Kampala International University Teaching Hospital that gave the researcher permission to carry out research in the hospital.

3.7.1 Data Management

Reliability; is a measure of the degree to which a research instrument yields consistent results or data after repeated trial.

The pilot study enabled the researcher to assess the clarity of the questionnaire items so that those items found to be inadequate or vague were modified to improve the quality of the research instrument thus increasing its reliability. The reliability of data was confirmed by the approval of data collection methods and tools by the university through the research supervisor, pre-testing the tools and careful choice of relevant questions and words that were used in the study.

Validity; The pilot study helped to improve face validity of the instruments and the researcher also sought assistance from her supervisor, who is an expert in research helped improve content validity

of the data. Data was collected confirming to the tests of validity. The validity of the data was guaranteed because the research tools that were used in the study were designed to capture all the relevant information required to fulfill the objectives of the study. Where questionnaires were not applied, interviews were used to get into deep analysis of the matter.

3.7.2 Data analysis

Data collected was sorted, edited and analyzed by the use of frequencies and percentages. The data was presented in frequencies and percentages because they easily showed the number of subjects in a given category. A number of tables were used to present data findings. Responses from interviews were transcribed. The transcribed data was then organized in themes and categories that were emerged. Data was then counterchecked before; it was cleaned, edited, coded, and then entered into SPSS data base. General analysis was performed using SPSS version 20 and then interpreted later in tables.

3.8 Ethical considerations

Consent from the participants to participate in study was sought before interview with the respondent. Discussions with concerned people were done and the issues regarding the objectives, future use of the information to the people were explained to the people. The information from the respondents was kept with high confidentiality and integrity.

3.9 Limitations and delimitation of the Study

High cost for stationary, typing, transport and other related costs like time. This was solved through using available funds properly and the researcher did most of the work like typing questionnaire distribution and collection by himself.

The researcher also faced the challenge of lack of cooperation of some respondents, which led to collection of half-baked data. This was solved by informing respondents that the study was only for academic purposes this induced respondents to give full information on the study.

Some respondents were trying to conceal data for the sake of personal and official reasons while some were not willing to express their feelings freely. However, minimized by promising confidentiality of the responses given in the process of conducting the study.

3.10 Dissemination of the results

After data analysis, it was presented in tables, pie charts, graphs and the data that was vabatim was coted directly. Copies of the report were forwarded to;

1. Department of school of Nursing.
2. Personal copy for future references was kept.
3. UNMEB as a requirement for the award of Diploma in nursing sciences.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.0 Introduction

This chapter analyzes the data collected and its interpretation in relation to the studied subjects. The empirical findings of the study are presented, analyzed and interpreted as given below.

4.1 Biographic Data of the Respondents

This section presents socio- economic and demographic characteristics of respondents which include; age, sex, occupation, level of education and marital status. The data on the respondents' demographics is summarized in the frequency distribution as showed in tables below. Frequency tables were used for proper interpretation of the findings.

Table 1: Biographic Data of the Respondents

Age of the respondent	Frequency (n=40)	Percentage (%)
20 – 25	18	45.0
15 – 20	15	37.5
Below 15	5	12.5
Above 25	2	5.0
Sex		
Male	21	52.5
Female	19	47.5
Parents occupation		
Peasant	32	80
Civil servant	8	20
Marital status		
Married	35	87.5
Single	4	10
Divorced	1	2.5

Source: Field data, 2017

Study findings presented in table 1 above indicated that majority of respondents interviewed 18 (45%) were above 20-25 years, followed by 15 (37.5%) who were 15-20 years then 5 (12.5%) were below 15 years and the least 2 (5%) were above 25 years. This implies that majority of the respondents were 20-25 years since it is the age group of most students at campus and the questionnaire was administered to students.

It was found out that 21 (52.5%) of the respondents were males while 19 (47.5%) were females. This implies that all the sexes of respondents participated in the study; therefore the study provided reliable and genuine information.

Study findings also indicated that parent's occupation that is; majority of the respondents mentioned that their parents are peasants and the least 8 (20%) mentioned civil servants. This implies that majority of the patients admitted in Kampala International teaching hospital are from peasant headed families.

Findings on respondent's marital status, that is; majority of the respondents 35 (87.5%) were single then 4 (10.0%) were married and 1 (2.5%) was divorced. The above study findings implies that majority of the respondents were single because these were students at Kampala International University teaching hospital.

4.2 Knowledge of patients at Kampala International University Teaching Hospital towards blood transfusion.

In relation to above sub heading, different questions about knowledge of patients at Kampala International University Teaching Hospital towards blood transfusion were posed to respondents to give their views as indicated in appendices of this report. The findings were present in tables below for easy interpretation.

Table 2: Whether respondents have ever done blood transfusion

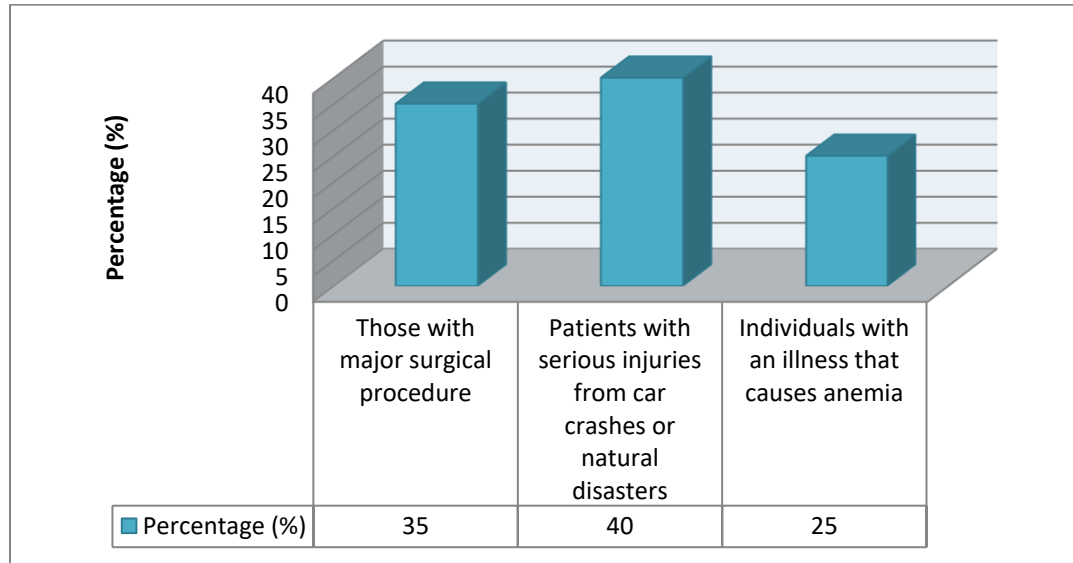
Response	Frequency (f)	Percentage (%)
Yes	38	95
No	2	5
Total	40	100

Source: Field data, 2017

Findings from the field indicated that 38 (95%) of the respondents has ever done blood transfusion, while 2 (5%) have not. This implies that students at Kampala International Teaching hospital have

knowledge about blood transfusion. In addition, the study further found out that most of the patients have done blood transfusion once.

Figure 1: Conditions for one to do blood transfusion



Source: Field data, 2017

Study findings presented in table above revealed the conditions for one to do blood transfusion, these included; 16 (40%) mentioned patients with serious injuries from car crashes or natural disasters, 14 (35%) mentioned those with major surgical procedures, and 10 (40%) mentioned individuals with an illness that causes anemia. This implies that conditions for one to do blood transfusion are those with serious loss of blood in the body.

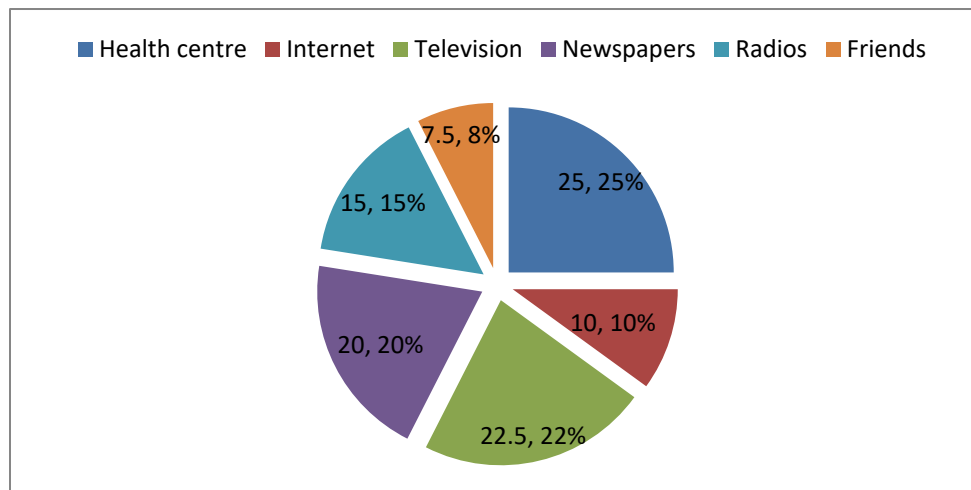
Table 3: Whether blood transfusion is helpful

Response	Frequency (f)	Percentage (%)
Yes	35	87.5
No	5	12.5
Total	40	100

Source: Field data, 2017

Study findings indicated that 35 (87.5%) of the respondents mentioned that blood transfusion is helpful while 5 (12.5%) mentioned no. This implies that blood transfusion is helpful since the majority agreed with the statement. The study further revealed ways of how blood transfusion is helpful to the patients as they were indicated by respondents as a transfusion provides the part or parts of blood needed in patient's body, with red blood cells being the most commonly transfused, also blood transfusions can be a life saving measure.

Figure 2: Source of knowledge about blood transfusion



Source: Field data, 2017

Findings from the field indicated the sources of knowledge about blood transfusion, these included; 10 (25.0%) mentioned health centre, 9 (22.5%) television, 8 (20.0%) newspapers, 6 (15.0%) radios, and 4 (10.0%) internet. This implies that there are different sources of knowledge about blood transfusion as health centres being the leading source.

4.3 Attitudes of patients at Kampala International University Teaching Hospital towards blood transfusion

In relation to above sub heading, the researcher posed questions concerning attitudes of patients' at Kampala International University Teaching Hospital towards blood transfusion through use of

questionnaires as indicated in appendices of this report. The findings are presented in frequency tables below for easy interpretation.

Table 4: Whether respondents would accept to go for any blood transfusion

Response	Frequency (f)	Percentage (%)
Yes	30	75
No	10	25
Total	40	100

Source: Field data, 2017

Study findings presented in table above revealed that 30 (75%) of the respondents would accept to go for any blood transfusion in case while 10 (25%) would not. This implies that majority of the respondents would accept to go for any blood transfusion meaning that is they are aware of how helpful it is. In addition respondents gave reasons such as treating blood loss, and replacing or supplementing blood components.

Table 5: Whether there is any chance of one acquiring an infection through blood transfusions

Response	Frequency (f)	Percentage (%)
Yes	40	100
No	-	-
Total	40	100

Source: Field data, 2017

From the field it was indicated that there are chances of acquiring an infection through blood transfusions as it was agreed by all respondents 40 (100). This means that anyone can acquire infection through if blood transfusions not properly handled.

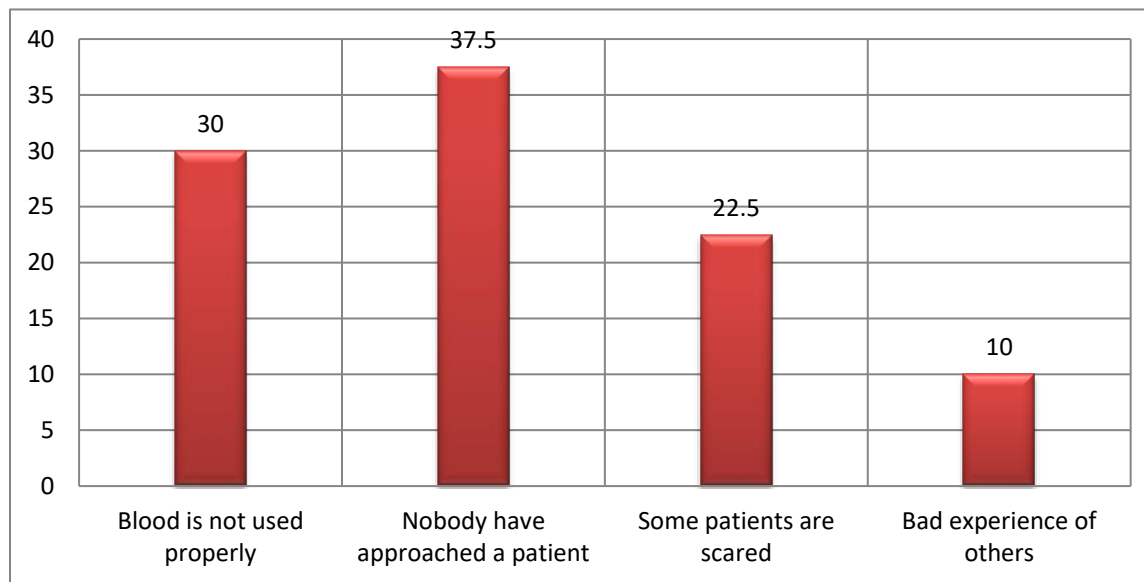
Table 6: Whether there is any person known that has ever acquired an infection through blood transfusion

Response	Frequency (f)	Percentage (%)
Yes	25	62.5
No	15	37.5
Total	40	100

Source: Field data, 2017

From the field, it was found out that 25 (62.5%) of the respondents knew persons who have ever acquired an infection through blood transfusion while 15 (37.5%) have not. This implies that there are victims who have acquired an infection through blood transfusion in Kampala International teaching hospital.

Figure 3: Other factors affecting patient's perceptions towards blood transfusion



Source: Field data, 2017

Study findings presented in figure 3 above indicated other factors affecting patient's perceptions towards blood transfusion, these included; - 15 (37.5%) of respondents who mentioned nobody have approached a patient, 12 (30%) of the respondents who mentioned that blood is not used properly, 9 (22.5%) who mentioned that some patients are scared and 4 (10%) who mentioned that bad experience of others.

4.4 Beliefs of patients at Kampala International University Teaching Hospital towards blood transfusion

In relation to above sub heading both structured and closed questions in questionnaires about Beliefs of patients at Kampala International University Teaching Hospital towards blood transfusion were posed to respondents to collect primary data as indicated in appendices of this report. The findings of the sub section were presented in frequency tables below.

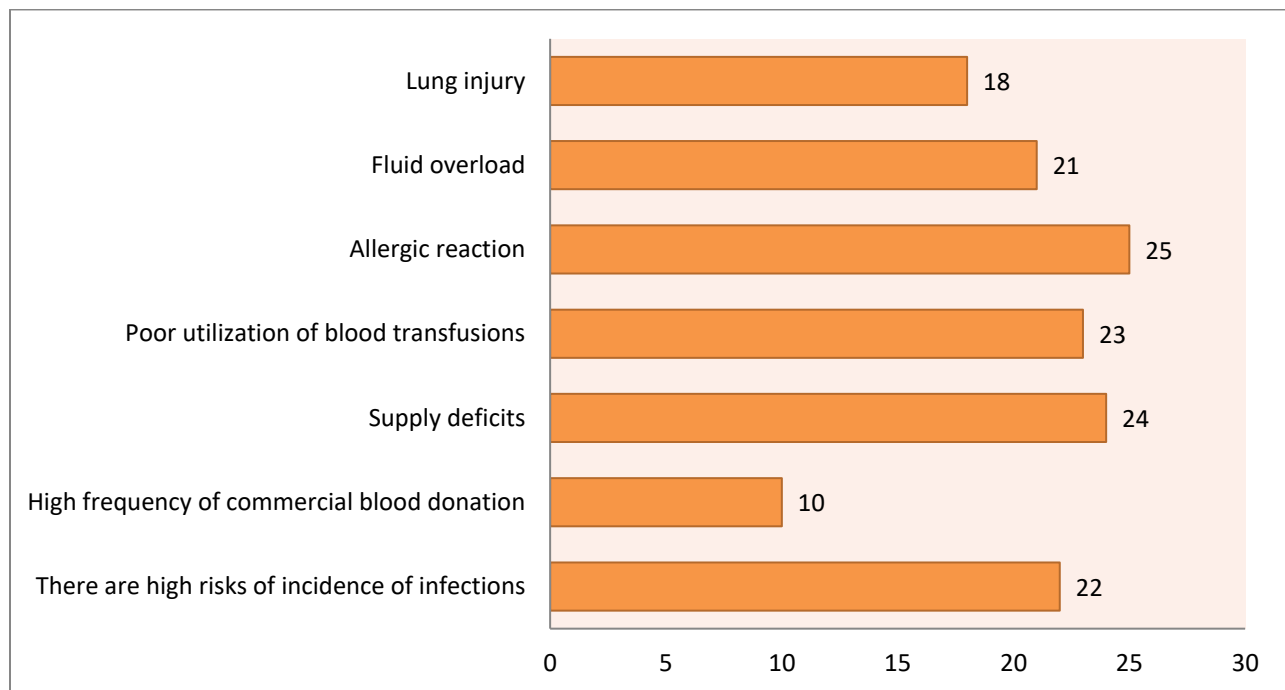
Table 7: Whether blood transfusion help the patients in treating some diseases

Response	Frequency (f)	Percentage (%)
Yes	28	70
No	12	30
Total	40	100

Source: Field data, 2017

The study findings presented in table 7 above found out that 28 (70%) of the respondents mentioned that blood transfusion help the patients in treating some diseases, while 12 (30%) mentioned no. This implies that blood transfusion help patients in treating some disease since majority of the respondents responded yes to the statement. Study findings further revealed that blood transfusion can be lifesaving for persons who have lost large amounts of blood because of serious accidents, new medical and surgical procedures, civil conflicts, as well as for patients who have become severely anemic because of serious hematological diseases or treatments such as cancer therapy.

Figure 4: The challenges associated with blood transfusion



Source: Field data, 2017

Study findings presented in figure 4 above revealed the challenges associated with blood transfusion, these included;- 22 (55%) of the respondents who mentioned that there are high risks of incidence of infections, 10 (25%) of the respondents mentioned high frequency of commercial blood donation, 24 (60%) mentioned supply deficits, 23 (60%) mentioned poor utilization of blood transfusions, 25 (57.5%) poor utilization of blood transfusions, 21 (62.5%) fluid overload, and 18 (45%) lung injury. This implies that there are challenges associated with blood transfusion in Kampala International hospital.

CHAPTER FIVE

DISCUSSION OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

The main objective of this study was to assess the knowledge, belief and attitudes of patients towards blood transfusion among patients admitted in Kampala International University-Teaching hospital. Chapter five gives a detailed discussion of the findings, presents the conclusions from the data analysis as well as recommendations and area of further research with focus on research questions identified in chapter one.

5.1 Discussion of the Findings

5.1.1 Knowledge of patients admitted at Kampala International University Teaching Hospital towards blood transfusion.

According to the study findings, it was indicated that (95%) of the respondents has ever done blood transfusion. Study findings further revealed the conditions for one to do blood transfusion, as; patients with serious injuries from car crashes or natural disasters, those with major surgical procedures, and individuals with an illness that causes anemia. These findings concur with Adekola et al, (2015) however a less percentage of only 34% of the respondents understand the benefit of blood transfusion as a means to save many lives, 52% had the general understanding of the blood transfusion and 22% knew someone who acquired TTIs through blood transfusion. This implies that patients at Kampala International Teaching hospital have knowledge about blood transfusion.

Findings from the field indicated the sources of knowledge about blood transfusion, as; (25.0%) mentioned health centre, (22.5%) television, (20.0%) newspapers, (15.0%) radios, and (10.0%)

internet. These are in agree with Davis et al (2012) in their study where they measured objective knowledge, confidence, and calibrated knowledge in 4 stakeholder groups general practitioners, anesthetists, health/lifestyle journalists, and blood donors (journalists and donors were viewed as part of the general public). Results supported Slovic's conceptual model that risk perception has very little to do with probability-based assessments and more with intuition. This implies that mass media has done a great role in changing the attitudes of the people towards blood transfusion.

The study findings also concur with Adekola et al, (2015) on Knowledge, Beliefs, Awareness and Attitudes regarding blood transfusion. Out of 500 participants, 41.3% had adequate understanding of blood transfusion in cases of Need for blood transfusion like in case of surgery, Post-partum hemorrhage (PPH), trauma and accident cases, and 40.8% had the general knowledge of the need for blood transfusion. Sources of information about blood transfusion of the 500 respondents includes; 24.5% from Doctor, 16.3% from Nurses, 24.5% from media, 24.5% from other sources such as friends and family and religious houses.

5.1.2 Attitudes of patients admitted at Kampala International University Teaching Hospital towards blood transfusion

The study findings revealed that (75%) of the respondents would accept to go for any blood transfusion in case. This implies that majority of the respondents would accept to go for any blood transfusion meaning that they are aware of how helpful it is. In addition respondents gave reasons such as treating blood loss, and replacing or supplementing blood components. These study findings are in line with as study by Oriyomi et al, (2015) about attitude, beliefs and knowledge of patients towards blood transfusion practice in Nigeria very few people (20%) which showed readiness for blood transfusion and (80%) were not ready for blood transfusion.

Study findings further indicated that there are chances of acquiring an infection through blood transfusions as it was agreed by all respondents. This means that anyone can acquire infection through if blood transfusions not properly handled. It was also found out that (62.5%) of the respondents knew persons who have ever acquired an infection through blood transfusion. Study findings indicated other factors affecting patients' perceptions towards blood transfusion, as (37.5%) of respondents who mentioned nobody have approached a patient, (30%) of the respondents who mentioned that blood is not used properly, (22.5%) who mentioned that some patients are scared and (10%) who mentioned that bad experience of others. These findings are similar to these from the study by Dhingra et al., (2009) which revealed that (68%) of the respondents in this study believe that everyone who receives blood is likely to have HIV or any TTIs. Similarly the study by Doherty & Stavropoulou (2012), found out that majority of the respondents refused blood transfusion due to the following reasons whereby (10.3%) said it is very dangerous, 80(20.5%) belief is a means of transfusing another person's life to the patient life, while others refused due to fear of infection and fear of death, (2.6%) lack of money, (12.8%) religion beliefs and (7.7%) due to ignorance.

In addition, higher perception of risk in general is evident in persons with lower education and income, as well as in women, minorities, and married persons (Galel et al., (2009). In addition, those who have not received blood transfusion are also found to have higher risk perception of transfusion. An interesting finding showed that white men have the lowest risk perception of blood transfusion and other hazards so (Carson et al, 2012).

5.1.3 Beliefs of patients admitted at Kampala International University Teaching Hospital towards blood transfusion

In relation to above sub heading, the study findings found out that (70%) of the respondents mentioned that blood transfusion help the patients in treating some diseases. This implies that blood transfusion help patients in treating some disease since majority of the respondents responded yes to the statement. Study findings further revealed that blood transfusion can be lifesaving for persons who have lost large amounts of blood because of serious accidents, new medical and surgical procedures, civil conflicts, as well as for patients who have become severely anemic because of serious hematological diseases or treatments such as cancer therapy. Similarly, the study by Dzik et al (2008) had majority 90% of the respondents with the belief that blood transfusion can save lives while 10% did not believe in blood transfusion as a procedure used to save lives. They also believed that it's expand life span of the people, reduces mortality and Four hundred and 94% of the respondents believed that proper screening prevent transfusion transmissible infections (TTIs).

Study findings further revealed the challenges associated with blood transfusion, as; - there are high risks of incidence of infections, high frequency of commercial blood donation, supply deficits, poor utilization of blood transfusions, and poor utilization of blood transfusions, fluid overload, and lung injury. The above study findings are inline with Adeniyi et al., (2015), another theory focuses on the role of culture, encompassing worldviews from different social, political, and cultural backgrounds and postulates that these additional cultural and contextual factors may drive risk perception (Adeniyi et al., 2015). Ultimately, the perception of risk is driven heavily by a combination of psychological and scientific attributes (Bashawri,et al, 2014).

In addition, according to the study by Shenga and Sengupta (2008), religion has a great influence upon one's acceptance to blood transfusion. According to Erhabor and Adias (2011), people who believe in Jehovah's Witnesses don't accept blood transfusions, they say that both the Old and New Testaments clearly command us to abstain from blood quoting the verses of (Genesis 9:4; Leviticus 17:10; Deuteronomy 12:23; Acts 15:28, 29). They further say that God views blood as representing life. (Leviticus 17:14) therefore, they avoid taking blood not only in obedience to God but also out of respect for him as the Giver of life.

5.2 Conclusions

In relation to objective one, the study findings concluded that majority of respondents has ever done blood transfusion. It was also concluded that most of the patients have done blood transfusion once. The conditions for one to do blood transfusion, as patients with serious injuries from car crashes or natural disasters, those with major surgical procedures, and individuals with an illness that causes anemia. Blood transfusion provides the part or parts of blood needed in patient's body, with red blood cells being the most commonly transfused, also blood transfusions can be a life saving measure. Majority of respondents acquired knowledge of blood transfusion as health centres, followed by television and the least mentioned internet.

In relation to objective two, the study findings revealed that majority of the respondents would accept to go for any blood transfusion in case, reasons being treating blood loss, under placing or supplementing blood components. The study also concluded that there are chances of acquiring an infection through blood transfusions. Study findings further concluded that other factors affecting patient's perceptions towards blood transfusion include; nobody have approached a patient, blood is not used properly, some patients are scared and bad experience of others.

In relation to objective three, majority of the respondents mentioned that blood transfusion help the patients in treating some diseases. Study findings further concluded that blood transfusion can be lifesaving for persons who have lost large amounts of blood because of serious accidents, new medical and surgical procedures, civil conflicts, as well as for patients who have become severely anemic because of serious hematological diseases or treatments such as cancer therapy.

5.3 Recommendations

Adequate emphasis should be given to voluntary blood donation and intensive education on the risks and means of acquiring TTIs (during such enlightenment campaigns) with a view to reversing the high dependence on commercial blood donation and reducing the high prevalence rates of TTIs.

Donor blood screening should be further strengthened and antibody screening and identification should be made routine, particularly for at-risk groups by government

The government should encourage the use of autologous blood transfusion and erythropoietin could go a long way in reducing overdependence on homologous blood transfusion (along with the potential risks it possesses) and the frequency of transfusions in Uganda.

5.4 Implication to nursing practice

The study findings will help the management of the hospitals and the in-charge to understand the patients' perceptions towards blood transfusion.

The study will also help the Hospital administrators and Ministry of Health understand the factors leading to poor patients' attitudes towards blood transfusion which will be used to draw clear guidelines to follow during blood transfusion.

The study findings will also help Ministry of Health understand the existing sources of knowledge to the patients which can be utilized to create mass sensitization to the public to change their attitude towards blood transfusion.

5.5 Areas for further research

According to the study findings, further research should be done on the following areas;

1. There should be a study to find out the factors affecting people from doing blood donations.
2. A study should also be done to find out the health system factors limiting people from doing blood transfusion.

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APPENDICES

APPENDIX I: CONSENT FORM

I am **Apili Norah**, a student of Kampala International University pursuing a Diploma in Nursing.

You have been selected to participate in my study. The purpose of the study is to “*Assess the knowledge, attitudes and beliefs of patients admitted towards blood transfusion in KIU-TH, Bushenyi District*”. All the information you will give will be kept confidential and the information will only be used for academic purposes.

You are requested to participate in the study by giving your response to the questions asked in the questionnaire and will require some of your time. Your participation is voluntary, you have a right to choose to participate or not. If you chose to participate and later change your mind, you also have a right to withdraw from this study at any time, if you so wish. Your participation is highly appreciated. Thank you for your cooperation.

Declaration of the respondent

I have understood the purpose, I realized that I might contact again if need be. I have read the above information (or it has been read to me). I have had the opportunity to ask about it and any question that I have asked has been answered that I have the right to withdraw from the study at any time without in any way affecting my further medical care at the facility.

.....

Participant's signature

Date:

.....

Researcher's signature

Date:

APPENDIX II: BUDGET

Activity / Item	No. of items	Costs per item	Total cost
Transport			80,000/=
Lunch		1,000 per meal	60,000/=
Typesetting		500 per page	40,000/=
Printing	8 Reams of papers	13,000 per ream	104,000/=
Binding	4 Copies	10,000/=per copy	40,000/=
Photocopying	100 per page		
Internet costs		2,000 per hour	30,000/=
Miscellaneous			30,000/=
Grand total in UG Shillings			400,000/=

APPENDIX III: WORK PLAN

Research Activity	2017					
	May.	June.	July.	August.	Sept	Oct
Submission of the concept note						
Proposal writing.						
Proposal presentation						
Data Collection.						
Data Analysis and Report writing						
Submission of the final Report						

APPENDIX IV: QUESTIONNAIRE FOR PATIENTS

Dear Respondent,

I am **Apili Norah** student from Kampala International University carrying out research to *“Assess the knowledge, attitudes and beliefs of patients towards blood transfusion in KIU-TH, Bushenyi District”*. I am requesting you kindly to provide me with answers to the following questions to which will assist me to accomplish my research. This study is purely for academic purposes and the researcher promises to give your views utmost confidentiality.

Section A: Biographic Data

1.Name (optional)

2. Age of the respondent

(a) Below 15 ☐ (c) 20-25 ☐

(b). 15 – 20 ☐ (d) 25 and above ☐

3. Sex: a) Male ☐ (b) Female ☐

4. Parents' occupation

(a) Peasant ☐ (b) Civil servant ☐

(d) Others specify

5. Marital status

a. Married ☐ b) Single ☐

c) Divorced ☐ d) Widow/ Widower ☐

Section B: Knowledge of patients at Kampala International University Teaching Hospital towards blood transfusion.

6. Have you ever done blood transfusion?

a) Yes ☐ b) No ☐

7. If yes, how many times?

8. Under what conditions does one do blood transfusion?

.....

.....

.....

.....

9. Is blood transfusion helpful?

b) Yes ☐

b) No ☐

10. How is blood transfusion helpful to the patients?

.....

.....

.....

.....

11. Which patients are mostly put on blood transfusion?

.....

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.....

12. Where did you get knowledge about blood transfusion?

.....

.....

.....

Section C: Attitudes of patients admitted at Kampala International University Teaching Hospital towards blood transfusion.

13. Would you accept to go for blood transfusion in any case?

c) Yes ☐

b) No ☐

14. Give reasons for your answer?

.....

.....

.....

.....

15. Is there any chance of one acquiring an infection through blood transfusions?

d) Yes ☐

b) No ☐

16. Is there any person you know that has ever acquired an infection through blood transfusion?

e) Yes ☐

b) No ☐

17. What could be the other factors affecting patients' perceptions towards blood transfusion?

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Section D: Beliefs of patients admitted at Kampala International University Teaching Hospital towards blood transfusion.

18. Does blood transfusion help the patients in treating some diseases?

f) Yes ☐

b) No ☐

19. What is the importance of blood transfusion?

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20. What are the challenges associated with blood transfusion?

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Thank you for your response

APPENDIX V: A MAP OF UGANDA SHOWING BUSHENYI DISTRICT



KEY


BUSHENYI DISTRICT

APPENDIX VI: A MAP OF BUSHENYI DISTRICTS SHOWING THE LOCATION OF KIU-TH



KEY

 KIU-TH

