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Prevalence of Hepatitis B virus infection among blood donors at Nakasero blood bank, Kampala district. A cross-sectional study.

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Abstract

Background:
Hepatitis B virus (HBV) remains a major global public health concern, causing chronic infections, cirrhosis, and hepatocellular carcinoma despite available vaccines. This study examined the prevalence of hepatitis B virus infection among blood donors at Nakasero blood bank kampala district.

Methodology:
A cross-sectional study was conducted at Uganda Blood Transfusion Services (UBTS), Nakasero, Kampala District. A total of 150 voluntary blood donors, aged 18–60 years, who consented to participate, were included. Participants were selected using purposive, simple random, and systematic sampling techniques. Data were analyzed using SPSS v20.0, with results presented as frequencies and percentages.

Results:
The overall HBV prevalence was 15% (23/150), higher among males (8.6%) than females (6.6%). Among 150 donors, 67.3% were male and 32.7% female, with the majority aged 18–25 years (51.3%). The most affected age group was 26–35 years (52%), followed by 18–25 years (29.3%). Key risk factors included alcohol use (58%), multiple sexual partners (54%), dental surgery history (38.6%), and cohabitation with an HBV-positive individual (40.6%). Knowledge about HBV transmission and prevention was moderate, with 54.7% having ever heard of HBV and 64.7% reporting vaccination.

Conclusion:
HBV remains prevalent among blood donors at Nakasero Blood Bank, with higher rates among males and specific age groups. Behavioral and knowledge-related factors contribute significantly to HBV risk.

Recommendations:
Routine and mandatory HBV screening for blood donors should be enforced. Public health campaigns to raise awareness about HBV transmission and prevention, along with expanded vaccination coverage, are essential.

Keywords: *Hepatitis B virus, blood donors, transfusion-transmissible infections, Nakasero Blood Bank.*
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Background of the study.
Viral hepatitis remains one of the world's most serious public health threats and continues to cause a heavy burden of liver-related illness and death. Hepatitis B virus (HBV) in particular is a major concern because of its ability to cause chronic infection, cirrhosis, and hepatocellular carcinoma, despite the availability of vaccines (Cooke et al., 2019). Recent WHO estimates show that as of 2022, about 254 million people are living with chronic HBV infection worldwide, with 1.3 million deaths yearly, 83% of which are attributed to hepatitis B (Huang et al., 2025). HBV spreads mainly through contact with infected body fluids, especially via transfusion of contaminated blood, unsafe injections, unprotected sexual intercourse, and mother-to-child transmission. These infections often progress silently for years, making diagnosis and treatment difficult and

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increasing long-term complications such as liver failure and cancer.

Globally, HBV remains widespread despite advancements in prevention, remaining a top cause of cirrhosis and liver cancer. A study in Pakistan highlights that the country has the second-highest HBV prevalence worldwide, with about 9 million cases out of its 232 million population and contributing to the estimated 296 million HBV cases globally and 0.82 million deaths annually (Zorob et al., 2023). Blood transfusion continues to be a major route of transmission, especially where donor screening systems are weak. Evidence from Northern India shows that among 180,477 blood donors, males (95.8%) were three times more likely to donate reactive blood than females, and replacement donors had a 2.1-times higher risk of testing positive for infectious markers compared to voluntary donors (Makroo et al., 2015).

In Africa, HBV remains a neglected but widespread infection, with more than 60 million people estimated to be chronically infected (Mohamud et al., 2024). In Ghana, despite vaccine availability, HBV remains among the leading causes of severe liver disease, with transfusion, sexual contact, and vertical transmission identified as major routes; high demand for blood due to anemia, accidents, and malnutrition increases transfusion-related risks (Dongdem et al., 2012). These consistently high rates highlight poor screening systems, limited vaccination coverage, and insufficient public awareness across many African settings.

Across East Africa, HBV prevalence also remains significant, varying widely by population groups. A Kenyan meta-analysis involving 108,448 participants reported an overall national HBV prevalence of 7.8% (Makokha et al., 2023). The highest burden—41.7%—occurred among patients with jaundice, while blood donors showed the lowest prevalence at 4.1%, indicating that many infections remain concentrated among high-risk or symptomatic groups. In Tanzania, HBV is considered endemic, with national prevalence reported at 6% in 2018 and more recent estimates ranging from 5.5% to 20% depending on region and population (Marira et al., 2024). Despite neonatal vaccination efforts, high infection rates persist due to limited adult vaccination, inadequate surveillance, and ongoing unsafe practices. These patterns show that HBV remains an important public health challenge across East Africa, contributing to chronic liver disease, premature deaths, and increased healthcare burdens.

In Uganda, HBV prevalence shows significant regional variation. A national survey conducted in 2005 had reported a prevalence of 10%, while the 2018 survey found a lower national prevalence of 4.3%, with 5.6% in men and 3.1% in women (Rugaatwa et al., 2022). The Northern region consistently reports the highest burden—4.6% in mid-North, 4.4% in the

Northeast, and 3.8% in West Nile—compared to much lower rates such as 0.8% in Southwest Uganda and 2.7% in East-Central. Previous findings from Gulu had reported that 17.6% of residents had active HBV infection, with lifetime exposure as high as 72.4% (Rugaatwa et al., 2022). Contributing factors include unsafe injections, traditional practices involving skin penetration, low vaccination uptake among adults, and high mobility across borders, which increases exposure risk. This study examined the prevalence of hepatitis B virus infection among blood donors at Nakasero blood bank kampala district.

Methodology.

Study design.

A cross-sectional survey study design was employed using a structured questionnaire. Cross sectional study was relatively easy and economical to conduct. This study measures different characteristics and determinants of HBV among donors at a certain point in time. Data was helpful in assessing the health care needs of the population, for example, the baseline data in planning to improve the health status/interventions such as mass awareness campaigns.

Study area.

The study was conducted at Uganda Blood Transfusion Services (UBTS), Nakasero. UBTS is located at Nakasero Hospital in Kampala District. The coordinates of Nakasero Hospital are 0^0 19'37.0‖ N, 32034'46.0‖ E, or latitude: 0.326944, longitude: 32.579444.

Study population.

The study population was all potential donors who visited Nakasero Blood Bank, from the 5 main divisions of Kampala District, and were eligible to donate blood.

Inclusion criteria.

150 respondents, both male and female blood donors who had consented, were included in the study.

Exclusion criteria.

All donors are already vaccinated, and those who will not consent will be excluded from the study.

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Sample size determination.

The Kish - Leslie sample size determination formula was used to determine the number of individuals who were included in the sample from a larger population for the research study. Formula:

$N = \frac{z^2 p q}{d^2}$ (*Kish*, *Leslie*. 1965)

Where N = required sample size
d = degree of accuracy/allowable error
z = confidence limits (1.96 at 95% level of confidence)
p = the prevalence.

Since the prevalence of Hepatitis B among blood donors at Nakasero blood bank is not known, a prevalence of 50% will be used.

$Q = 1-P.$

Therefore, $N = \frac{(1.96)^2 (0.5) (1-0.5)}{(0.08)^2}$

$= \frac{3.8416*0.5*0.5}{0.0064}$

$= \frac{0.9604}{0.0064}$

= 150.06 donors.

Therefore, a sample size of 150 donors was considered in the study.

Sampling Technique.

Participants were selected using a purposive, simple, random, and systematic sampling technique. Since a non-probability method was used in sample selection, a purposive sample size of 150 respondents was convenient both financially and time-wise.

Sampling procedure.

All study participants had the same probability of being selected, thus reducing bias in the selection of respondents to participate in the study (Oso and Onen, 2005). Therefore, a lottery method was used to select respondents since each individual had the opportunity to participate in the study. During the systematic sampling, every nth member of a population from a randomized list of the population was selected for the study (Ghaziani & Ventresca, 2005). For instance, 150 participants were selected using this technique, and the potential donor was identified by selecting those with papers bearing odd numbers

Data collection methods.

Voluntary blood donors who consented to the study were subjected to a face-to-face interview with the investigator, and the questionnaire was filled in to obtain information and relevant history.

Data collection tool(s).

The prevalence of HBV and the age group most affected by HBV data were collected using laboratory request forms, test kits, vacutainer tubes, cool boxes, etc.

The demographic factors, risk factors that contributed to the prevalence of HBV, and other clinical diagnosis data were collected using a research-administered questionnaire and donor selection cards.

Other tools that were used for data collection included pens, record books, Excel sheets, data entry forms, and computers.

Data collection procedure.

The purpose, benefits, and risks of the study were explained to the respondents to enable them to make informed consent. Data on demographic characteristics, prevalence of HBV, and the age group most affected by HBV were captured on the laboratory request forms designed for the study. About 3 mL of blood was drawn into plain vacutainer tubes, which were later taken to the laboratory and processed to generate data that determined the prevalence of HBV. Donor selection cards were used to collect all the clinical diagnosis data. All the generated data were finally entered into various statistical packages within the computer prior to analysis.

Study variables.

Independent variables.

The independent variables were age, sex, medical history, prior donation history, medical conditions, medication use, travel history, and lifestyles like smoking and alcohol consumption.

Dependent variables.

The dependent variables included screening results for infectious diseases, blood grouping and compatibility, acceptance or deferral of donation, donation practice, and donation frequency.

Quality Control.

A self-administered questionnaire was pretested among 20 respondents from Mengo Blood Bank in a similar

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environment to that of Nakasero Blood Bank. It was later analysed to completion, and any errors that were identified were corrected.

Proper training of the Research Assistants was done, educating them on the purpose of the study and how to use the tools or collect data.

Although there was an internal procedural control in the test device of the control region (C), the use of external controls confirmed the test procedure and verified proper test performance. Positive and negative controls gave the expected results. When testing the positive and negative controls, the same assay procedure was followed as that of the test. External controls that were in the study were:

Every participant was assigned a different code that was put on the consent form, blood collection tube, and records book to ensure that there was no cross-recording of data. A known positive and a negative sample were obtained from Nakasero Blood Bank to act as positive and negative controls, respectively. These were also used to control the HBsAg test kit batch. Haemolysed blood samples were avoided.

The test strips were discarded after first use. They were used on only one sample.

It was ensured that the test kit was not expired and the expiry date was noted.

Standard operating procedures were followed.

Data analysis and presentation.

Collected data were entered in Microsoft Excel, cleaned, and exported to SPSS Version 20.0 for analysis.

The analyzed data were presented in the form of percentages and frequencies in tables, pie charts, graphs, and narratives.

Ethical considerations.

A written introductory letter from the Administrator of Mildmay Institute of Health Sciences was presented to the management and staff of Nakasero Blood Bank, along with a detailed explanation of the intention of carrying out the study in the area. Another introductory letter was given to the Uganda National Council for Science and Technology to seek permission to carry out the study at Nakasero Blood Bank.

Informed consent was sought from the respondents, where the investigator introduced herself to the respondents and educated them about the purpose of the study, the safety of the whole process, and the benefits of the study.

RESULTS.

Socio- demographic characteristics of participants.

Table 1: Shows the social Demographic Characteristics of the study.

Variables	Response	Frequency (N) Male	Female	Percentage (%) Male	Female	Total Frequency (N)	Percentage (%)
Age group	18-25	54	23	36	15.3	77	51
	26-35	30	15	20	10	45	30
	36-45	10	6	6.6	4	16	11
	46-60	7	5	4.6	3.3	12	8
Total		**101**	**49**	**67.2**	**32.5**	**150**	**100**
Gender	Male	101	_	67.3	_	101	67.3
	Female	_	49		32.6	49	32.7
Total		**101**	**49**	**67.3**	**32.6**	**150**	**100**

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Marital status	Married	45	23	30	15.3	68	45
	Single Divorced	34	15	22.6	10	49	32
	Widow/widower	16	6	10.6	4.6	23	15
		5	4	3.3	2.6	9	6
	No response	1	3	0.6	2	4	2
Total		**101**	**49**	**67.1**	**32.6**	**150**	**100**
Religion	Catholic	43	20	28.6	13.3	63	42
	Protestant	23	12	15.3	8	35	23.3
	Moslem	31	15	20.6	10	46	30.7
	Others	4	2	2.6	1.3	6	4
Total		**101**	**49**	**67.1**	**32.6**	**150**	**100**
Education level	Primary	8	5	2	11	13	8.7
	Secondary	37	15	15	37	52	34.7
	Tertiary	55	26	5	76	81	54
	No response	1	3	1	3	4	2.6
Total		**101**	**49**	**23**	**127**	**150**	**100**

The study involved 150 respondents, of whom 67.3% (102) were male, and 32.6% (49) were female. Most participants were aged between 18 and 25 years (51.3%), followed closely by 26 and 35 years (30%), while 11.3% was for those aged between 36 and 45 years, and 7.3% for those aged between 46 and 60 years. Regarding the marital status, the majority of the participants, 45% (68), were married, followed by singles, 32 % (49), the divorced participants were 15 % (23), and the least were widows or widowers with 6 % (9)

For education level, the tertiary educated participants were 54% (81), followed by those with a secondary education, 34.7% (52), while those with primary education were 8.7% (13).

Prevalence of Hepatitis B virus among blood donors according to gender.

Table 2: Prevalence of Hepatitis B according to Gender.

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Variables	Response	Frequency (N) Male	Female	Positive	Negative	Total Frequency (N)	Percentage (%)
Prevalence of Hepatitis B by	Positive	13	10	23	_	23	15
gender	Negative	88	39	_	127	127	85
Total		**101**	**49**	**23**	**127**	**150**	**100**
	18-25	54	23	6	38	44	29.3
Prevalence of Hepatitis B by Age Group	26-35 36-45	30 10	15 6	8 5	70 16	78 21	52 14
	46-60	7	5	4	3	7	4.7
Total		**101**	**49**	**23**	**127**	**150**	**100**
	Married	45	23	3	65	68	45
Prevalence of	Single	35	15	13	37	50	33
Hepatitis B by Marital status	Divorced	16	7	5	18	23	15
	Widow/widower	5	4	2	7	9	6
Total		**101**	**49**	**23**	**127**	**150**	**100**
	Primary	8	5	2	11	13	8.7
Prevalence of Hepatitis B by education	Secondary Tertiary	37 55	15 26	15 5	37 76	52 81	34.7 54
level	No response	1	3	1	3	4	2.6
Total		101	49	23	127	150	100
	Catholic	43	20	8	55	63	42
Prevalence of Hepatitis B by religion	Protestant Moslem	23 31	12 15	3 11	32 35	35 46	23.3 30.7
	Others	4	2	1	5	6	4
Total		**101**	**49**	**23**	**127**	**150**	**100**

Findings on the prevalence of Hepatitis B according to gender showed that 15% were males and 84. % were females. Regarding the age group, 51.3 % were aged between 18-25 years, 30% were aged between 26-35 years, 11.3% were aged between 36-45 years, and 7.3% were aged between 46-60 years old. Prevalence of HBV by marital status, 45% (68) were married, 33% (50) were singles, while 15% (23) were divorced, and 6% (9) were widows or widowers.

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For education level, respondents with primary education were 8.7% (13), 34.7% (52) had secondary education, while 54% (81) had tertiary education. For religious affiliation, Catholics were 42% (63), Protestants were 23.3% (35), while Muslims were 30.6% (46).

Age group most affected by the Hepatitis B virus among blood donors according to gender.

Table 3: Prevalence of the most affected age group among blood donors according to Gender.

Age group	Response	Frequency (N)		Percentage (%)		Total	
		Male	Female	Male	Female	Frequency (N)	Percentage (%)
Age group	18-25	54	23	36	15.3	77	51.3
	26-35	30	15	20	10	45	30
	36-45	10	6	6.7	4	16	10.7
	46-60	7	5	4.7	3.3	12	8
Total		**101**	**49**	**67.4**	**32.6**	**150**	**100**

According to the study findings the most affected age group was 26-35 years with a prevalence 52% (78) where Males were 20% (30) and females 15% (10) followed by 18-25 years with 29.3% (44), Males 54% (36) and Females 15.3% (23), 36-45 years 14% (21), Males 6.7% (10), Females 4% (6) least among 46-50 years with a prevalence 4.7% (7), males 4.7% (7), females 3.3% (5).

Risk factors that contributed to the prevalence of the Hepatitis B virus among blood donors.

Table 4: Shows the risk factors associated with the prevalence of Hepatitis B.

Variables	**Response**	**Frequency (N)**		**Percentage (%)**			**Total Percentage (%)**
		Male	**Female**	**Male**	**Female**	**Frequency (N)**	
Ever heard	Yes	58	24	38.7	16	82	54.7
of Hepatitis	No	43	25	28.7	16.6	68	45.3
B before?	Not sure	0	0	0	0	0	0
Total		**101**	**49**	**67.4**	**32.6**	**150**	**100**
Vaccinated	Yes	65	32	43.3	21.3	97	64.7
against	No	36	17	24	11.3	53	35.3
Hepatitis B?	Not sure	0	0	0	0	0	0

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Total		**101**	**49**	**67.3**	**32.6**	**150**	**100**
Do you have a	Yes	32	14	21.3	9.3	46	30.7
history of	No	69	35	46	23.3	104	69.3
street drug use?	Not sure	0	0	0	0	0	0
Total		**101**	**49**	**67.3**	**32.6**	**150**	**100**
Tattooing	Yes	40	15	26.6	10	55	36.7
and	No	61	34	40.6	22.6	95	63.3
accidents	Not sure	0	0	0	0	0	0
Total		**101**	**49**	**67.2**	**32.6**	**150**	**100**
Dental surgery	Yes No Not sure	45 56 0	13 36 0	30 0.4 0	8.6 24 0	58 92 0	38.7 61.3 0
Total		**101**	49	30.4	32.6	150	100
	Yes	56	31	37.3	20.6	87	58
Alcohol use	No	45	18	30	12	63	42
	Not sure	0	0	0	0	0	0
Total		**101**	**49**	**67.3**	**32.6**	**150**	**100**
Do you have	Yes	66	15	44	10	81	54
multiple	No	35	34	23.3	22.6	69	46
sexual partners?	Not sure	0	0	0	0	0	0
Total		**101**	**49**	**67.3**	**32.6**	**150**	**100**
Have you ever	Yes	56	24	37.3	16	80	53.3
received a blood	No	45	25	30	16.6	70	46.7
transfusion ?	Not sure	0	0	0	0	0	0
Total		**101**	**49**	**67.3**	**32.6**	**150**	**100**
Do you							
think Hepatitis B	Yes	54	30	35.3	20	84	56
can be							
transmitted							
from one	No	40	12	27.3	8	52	34.7
person to another	Not sure	7	7	4.6	4.7	14	9.3

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Total		**101**	**49**	**67.3**	**32.7**	**150**	**100**
Are you							
aware of any	Yes	63	22	42	14.6	85	56.7
preventive measures of	No	31	21	20.6	14	52	34.7
HBV?	Not sure	7	6	4.7	4	13	8.6
Total		**101**	49	67.4	32.6	150	100
Do you know any	Yes	41	15	27.3	10	56	37.3
transmissio n modes of	No	54	31	36	20.6	85	56.7
HBV?	Not sure	6	3	4	2	9	6
Total		101	**49**	**67.3**	**32.6**	**150**	**100**
Have you							
ever lived with	**Yes**	46	15	30.7	10	61	40.7
someone who has	**No**	55	34	36.6	22.6	89	59.3
HBV?	**Not sure**	0	0	0	0	0	0
Total		**101**	**49**	**67.3**	**32.6**	**150**	**100**

The current study findings show that 54.6% (82) of respondents had ever heard of Hepatitis B, while 45.3% (68) of respondents had never heard of it; and regarding vaccination, 64.6% (97) of participants were vaccinated against Hepatitis B virus, while 35.3% (53) were not vaccinated against HBV. In addition, respondents having a history of street drug use were 30.7% (46), whereas 69.3% (104) never had any history of it. 36.7% (55) of respondents had a history of tattooing and accidents, whereas 63.3. % (95) participants never had any history. Those who had a dental surgery were 38.7 % (58), while 61.3% (92) never had it.

Respondents who had a history of alcohol use were 58% (87), and those who didn't have a history of alcohol use were 42% (63). Regarding the history of multiple sexual partners, those who had one partner were 46% (69) compared to those who had multiple sexual partners, 54% (81).

Among those who had ever received a blood transfusion were 53.3% (80), and 46.7 % (70) had never received a blood transfusion. Among those who had knowledge of how Hepatitis B can be transmitted from one person to another were 56% (84), while those who didn't have a clue on how HBV can be transmitted were 34.7% (52), and 9.3% (14) were not sure on how

Hepatitis B can be transmitted. Fifty-six-point seven percent (85) knew the preventive measures of Hepatitis B, whereas 34.7% (52) didn't know the preventive measures, and 8.6% (13) were not sure of the HBV preventive measures.

Out of 150 respondents, 37.3% (56) respondents knew the transmission modes of HBV, 56.7% (85) respondents had no idea of its transmission modes, yet 6% (9) respondents were not sure of the transmission modes. Forty-six percent of respondents had ever lived with someone who has Hepatitis B, while 59.3% had never lived with somebody who has HBV.

Discussions of the findings.

Prevalence of Hepatitis B virus among blood donors according to gender.

The overall prevalence in this study was 15% for the positives and 85% for the negatives. Once the population of

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15% HBV positive respondents among blood donors is extrapolated to the entire 49.28 million people in Uganda, it means that 7.38 million people are HBV-positive. The majority of the HBV-positive respondents were reported to be males (8.6%), and the minority were females (6.6%). This is probably because of the sexual lifestyles of men having many sexual partners. The findings are in agreement with a study carried out in Ethiopia, a cross-sectional study by Kebede showed that there was a higher prevalence among males (8.2%) than females (4.5%) (Kebede *et al.,* 2025). The findings are also in agreement with (Okoroiwo *et al*., 2018), who showed that male dominated donor pool (98.7%) had a higher prevalence (4.2%) of transfusion-transmissible infections than in female donors (0.0%). These TTIs may have included HBV.

The age group most affected by the Hepatitis B virus among blood donors, according to gender.

The study findings showed that the highest prevalence was found in the age group of 26-35 years with a prevalence of 52% (78) where males were 20% (3), females 10%(15) and the least affected age group was 46-50 years with a prevalence of 4.7%, males 4.7% (7), and females 3.3 (5%). This is in conflict with a study done by (Wang, *et al*., 2016) where he proposed that the prevalence of HBsAg was found significantly higher in younger donors aged 18–25 years (2.73 %) than in those 26–35 years (2.13 %), 36–45 years (2.03 %) and 46– 58 years (1.71 %). This could be due to the high number of young adolescents who appeared during the study period.

Also, the study findings showed a disagreement with a similar study conducted in Pakistan by Zorob *et al. (*2023), which showed that the demographic distribution of the donors showed that the maximum number of donors (44%) belonged to the age group 18 to 27 (n = 6704). The frequency and percentage for the age group 28–37 was 36% (n = 5482), 38 to 47 was 14% (n
= 2209), 48–57 was 5% (n = 724), and the least number of donors was reported in the age group 58 to 67, which was 2% n = 286). This could be due to low awareness and education, and also the screening bias. Another study that was in conflict with the study findings done by (Osei *et al.*, 2017) showed that the prevalence 8.9% was highest among donors between 30 and 39 years old. This might be due to the fact that people aged 30 to 39 years old may have missed the childhood HBV vaccination compared to the younger donors who were vaccinated as infants.

Risk factors that contributed to the prevalence of the Hepatitis B virus among blood donors.

In consideration of the risk factors that contributed to the Hepatitis B virus, it was noted that the prevalence of Hepatitis B virus infection was high among respondents that had a history of alcohol use with a prevalence of 58% (87/150) followed by those who had multiple sexual partners with a prevalence of 54% (81/150), the study findings are in disagreement with a study done in Kenya by (Awili, *et al.,* 2020) who found out that the prevalence among respondents who had multiple sexual partners had a prevalence of 3.4%. This shows that there is a great disparity between the two studies' prevalence. This could be due to variation in levels of awareness of HBV.

Regarding the history of dental surgery, 38.6% of the respondents had dental surgery, while those who lived with someone who was HBV positive were 40.6%. This is in disagreement with a study done in East Africa, Somalia, conducted by Mohamud, which presented that 20.0% had a history of tooth extraction in the last two years and 17.0% had an HBV-infected family member (Mohamud *et al.,* 2024). This is due to poor infection control in dental settings and also low awareness in homes.

Findings also indicated a prevalence of 45.3% among those who were ignorant about Hepatitis B infection. This disagrees with a study by Hussein *et al. (*2017) that showed a prevalence of 90.5%. This could be due to a lack of knowledge about the transmission risks and misconceptions of the disease.

Conclusions.

The study assessed the pervasiveness of the Hepatitis B virus among blood donors with a focus on gender, age distribution, and associated risk factors. The findings revealed that HBV prevalence varied between male and female donors, indicating that gender plays a role in susceptibility to the infection. The results also showed that certain age groups were more affected than others, suggesting that exposure risk increases with age-related behaviors or lifestyle factors.

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Study limitations.

The time duration given for this study was limited, which didn't give the real picture of the intensity of prevalence of hepatitis B among donors. The sample size of 150 was not a true representation of Kampala District, hence the study may be biased.

Recommendations.

A nationwide study should be conducted to establish the actual prevalence of HBV infection. The Ministry of Health should sensitize the public about the dangers of the Hepatitis B virus, and also increase the immunization campaigns. The blood donors should be mandatorily and routinely screened for Hepatitis B to minimize the risk of transfusion of HBV infection to recipients and increased availability of health care facilities for early detection. This will go a long way in reducing HBV.

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List of abbreviations.

HBV – Hepatitis B Virus
HBsAg – Hepatitis B Surface Antigen
UBTS – Uganda Blood Transfusion Services
WHO – World Health Organization
SPSS – Statistical Package for Social Sciences
HIV – Human Immunodeficiency Virus
TTIs – Transfusion-Transmissible Infections
N/A – Not Applicable

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There is no conflict of interest.

Availability of data.

Data used in this study are available upon request from the corresponding author.

Authors contribution.

RN designed the study, conducted data collection, cleaned and analyzed data, and drafted the manuscript.
EK supervised all stages of the study from conceptualization of the topic to manuscript writing and submission.
FA supervised the research process.
HN supervised the research process.
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