Student's Journal of Health Research Africa
Vol. 4 No. 9 (2023): September 2023 Issue
https://doi.org/10.51168/sjhrafrica.v4i9.428
Original article

# A STUDY ON KNOWLEDGE, ATTITUDE AND PRACTICES TOWARDS HEPATITIS B VACCINATION AMONG PATIENTS RECEIVING MEDICAL SERVICES AT KASANGATI HEALTH CENTRE IV, WAKISO DISTRICT. A CROSS-SECTIONAL STUDY.

Ethel Maganyi*

***Medicare Health Professionals College, P.O Box 16476, Kampala, Uganda.***

## Abstract.

### Background:

Hepatitis B Virus infection is a fatal hepatocellular infection that is caused by the Hepatitis B virus in low-resource settings like Uganda with a prevalence of 4.3%, Hepatitis B virus infection. Vaccination services have been recommended by the Ministry of Health to all individuals. The objectives of the study were to determine the knowledge, attitude, and practice towards Hepatitis B vaccination among patients receiving medical services at Kasangati Health Centre IV. The purpose was to determine the knowledge, Attitude, and Practices towards hepatitis B vaccination among patients receiving medical services at Kasangati health center IV.

### Methodology:

The study was cross-sectional involving 100 patients at Kasangati Health Centre IV. Simple random sampling was used and information was collected by the researcher using the semi-structured questionnaires that sought information on respondents' social demographic data, knowledge, attitude, and practice towards Hepatitis B vaccination. Data were analyzed using Microsoft Word and Excel.

### Results:

The study findings showed that 61% of the respondents had poor knowledge about the number of doses of a complete full-dose vaccination, while 39% had good knowledge. The majority of the respondents had poor knowledge about the number of doses necessary for complete hepatitis B vaccination.

### Conclusion:

The study found that the majority of the respondents had an average knowledge of Hepatitis B vaccination. Therefore this finding clearly shows the risk of Hepatitis B infection of the respondents at Kasangati Health Centre IV in Wakiso District due to average knowledge.

### Recommendation:

The Ministry of Health through Kasangati Health Centre IV should conduct health education campaigns about Hepatitis B vaccination among the people to improve their knowledge, attitude, and practice towards Hepatitis B vaccination.

***Keywords:*** Hepatitis B Vaccination, knowledge, attitude, practices, submitted: 2023-04-13
accepted: 2023-07-29

Student's Journal of Health Research Africa
Vol. 4 No. 9 (2023): September 2023 Issue
https://doi.org/10.51168/sjhrafrica.v4i9.428
Original article

## 1. BACKGROUND OF THE STUDY.

Hepatitis refers to inflammation of the liver. Hepatitis B is a viral infection that attacks the liver and can cause both acute and chronic liver disease. (CDC, 2022). The disease has no cure, but immunizing people against it can prevent initial infection (Lirri, 2018)

The virus is most commonly transmitted from the mother to the child during birth and delivery, as well as during sex with an infected person, unsafe injections, or exposure to infected sharp instruments (M.O.H, 2019).

WHO estimates that 296 million people globally were living with chronic HBV infection in 2019, with 1.5 million new infections each year. In 2019, hepatitis B resulted in an estimated 820,000 deaths, mostly from cirrhosis and hepatocellular cancer. Hepatitis B can be prevented by a vaccine that is safe and effective. Diagnosis is not possible on clinical grounds to differentiate hepatitis B from hepatitis caused by other viral agents, hence laboratory confirmation by detection of HBsAg is essential (WHO, 2022). Thus, primary prevention by vaccination to increase herd immunity remains the main focus in controlling Hepatitis B virus infection. (Kiong, 2019).

The complete vaccination series consists of three doses of vaccine, the first two doses are given one month apart, with the third dose six months later and a complete series of immunization protects for at least 25 years (WHO, 2019). The vaccines are highly effective with a greater than 95% rate of Sero conversion (Naga, 2017).

Globally, the coverage of those who are fully vaccinated against Hepatitis B virus infection is more than 1 billion (WHO, 2019). Studies have shown that adults who are mostly at risk have low rates of Hepatitis B vaccination ranging from 25% to 44% (Corinna, 2017). According to the cross-sectional survey carried out in China to investigate the self-reported hepatitis B vaccination status among health workers, results revealed that in a total of 3,104 participants,85.88% of respondents reported having received at least one dose of the vaccine,60% reported having completed the 3 doses. Among those who had never received the vaccine, only 30% intended to be vaccinated. Conclusively the complete hepatitis B vaccination rate among Health workers in China was low. (Yuan-Ping Yan, 2019).

In Africa, studies revealed inconsistencies in the completion of hepatitis B vaccination. According to studies carried out in Ethiopia aimed to determine the attitude and vaccination status of Health workers against HBV infection, results showed a low prevalence of completion vaccination against hepatitis B virus (25.6%). The most frequently mentioned reasons for not being vaccinated were the high cost of the vaccine (41%) and the unavailability of the vaccine. (Mohammed, 2018).

In East Africa, particularly in Kenya, a pentavalent vaccine including the DTP, Haemophilus influenza type b, and hepatitis b virus was introduced in 2001 and strengthened immunization (Ndirittu et al, 2017). A mixed method study was carried out and among 487 respondents, of the 634 students called for the study, HBV vaccine uptake was 85.8% while the non-vaccination rate was 14.3%. Full vaccination was reported by 20.2% of respondents. The major reason for not receiving the recommended doses was the unavailability of the vaccine when the students went for it (Maina, Chebet 2020).

The government of Uganda introduced a vaccination program for adolescents and adults against hepatitis B virus infection whose prevalence stands at 4.1 %( Ampurire, 2019). About 17.6 million people out of the 42 million population have been vaccinated against HBV infection since the mass vaccination campaign was ruled out in 2015 (MOH, 2018). It was found that only 69 of 127 (54.3%) districts have been covered. (Odeyek, 2019). According to a cross-sectional study carried out to determine the knowledge, attitude, and perception of hepatitis B vaccination among non-heath workers attending selected health facilities in Mbale city Uganda, the results were that; 58.8% had moderate knowledge of HBV vaccination. There was generally good

*Corresponding author.
*Email address:* ethelmaganyi2@gmail.com (Ethel Maganyi)

attitude and perceptions on HBV vaccination. However, 62.23% believed that the HBV vaccine was not effective, 29.8% of the respondents agreed that they would go for vaccination if given an opportunity and 56.33% preferred to get them vaccinated from public health facilities, and 75.53% would recommend others to go for vaccination conclusively, more education and sensitization on the use, availability, and safety of the vaccine to the community was highly recommended. (Naziru, 2021).

The low coverage is due to low knowledge, attitude, and practices towards hepatitis B vaccination. Wakiso district has no available data on knowledge, attitude, and practices towards hepatitis b vaccination at Kasangati health center IV, thus the research tends to assess it.

## 2. METHODOLOGY.

### *2.1. Study design.*

Across sectional study design was applied to collect quantitative data from the respondents this was chosen because it would enable the researcher to get information within the shortest time possible.

### *2.2. Study Area.*

The study was conducted at Kasangati Health Centre IV found in Wakiso District in the Central region of Uganda, Kasangati town council, Wampeewo parish, Buyinja village. It is a government-aided facility offering antenatal services, maternal and child health services, immunization, and dental services.

### *2.3. Study population.*

The study population included all patients receiving medical health services at Kasangati Health Centre IV in Wakiso District.

### *2.4. Sample size determination.*

The sample size was determined using Kish and Leslie formula (1965) of sample size determination $N = (Z^2 \times PQ)/d^2$

Where N- sample size required, d- Sampling error/ degree of research was able to accept (desired precision) — 10%

P- Hepatitis B patients which is not known, in this case 50% was considered.

Z- A standard normal deviation, value set at 95% confidence interval/limit (CL) that corresponds to a level of statistical significance (1.96)

= 96.04, (96 respondents) 4 respondents will be added to make 100 respondents. Therefore, sample size will be 100 respondents.

### *2.5. Sampling technique.*

A simple random sampling technique was used to provide equal opportunities for every individual to be selected.

### *2.6. Sampling procedure.*

A convenience sampling technique was used to conduct this study within 30 days. The sample size of 100 was divided equally and respondents given equal time.

### *2.7. Study Variables.*

This study used both dependent and independent variables.

#### *2.7.1. Dependent Variables.*

These included knowledge, practices, and attitude of patients towards hepatitis B vaccination.

#### *2.7.2. Independent Variables.*

Hepatitis B vaccination among patients at Kasangati health center IV.

### *2.8. Data collection method.*

Primary data was collected using Researcher-administered four sectioned questionnaires. Those willing, personally filled out the questionnaires after the researcher's guidance whereas others orally responded to the researcher/assistant who kept filling their responses in the questionnaires.

### *2.9. Data collection tools.*

Standard semi-structured questionnaires were used in data collection; they were designed based on study objectives. Pens, Pencils, Erasers, and Inkpad were used.

### *2.10. Data collection procedures.*

A letter was given to me by the research committee of Medicare Health Professionals College, introducing me to the in-charge Kasangati health center IV. Then, questionnaires involving both closed-ended and open-ended questions were distributed among all patients receiving medical services in that period, participants not able to write and read questions were interpreted in the language that they understand and then recorded by research assistants. Each participant was given a consent form. The answers to each question were filled in the questionnaire, making sure that every question is answered. After the procedure, the researcher thanked the respondent for his/her cooperation. Feedback will be communicated to the respondents through the facility heads.

### *2.11. **Piloting the study**.*

A pilot study was carried out a week before the start of actual data collection. This involved visiting the study site, getting the average number of patients per day, and selecting a sample of patients attending Kasangati HCIV Wakiso district. These were given questionnaires to answer accordingly to find out the effectiveness of the questionnaires and to rectify any errors before the actual data collection.

### *2.12. Quality control.*

The questionnaire was pre-tested at Kasangati Health Centre IV in Wakiso district, the questions were clear and understandable, the time to be used to complete the questionnaire was approximately 15 minutes and patients involved in the pretesting were not to be allowed to participate in the study. The researcher had clear inclusion and exclusion criteria. The researcher also maintained the quality of the research by training research assistants.

### *2.13. Inclusion Criteria.*

Clients who accepted to participate in the study.

### *2.14. Exclusion Criteria.*

Clients not willing to participate in the study and those in emergency or life-threatening situations.

### *2.15. Data analysis and presentation.*

After data collection, it was entered into Microsoft Excel and analyzed by STATA version 13.0 and the data was presented in the form of frequencies, tables, pie charts, and graphs.

### *2.16. Ethical consideration.*

An introductory letter was obtained from the Medicare health Professionals College research committee to the In-charge Kasangati H/C IV through the District Health Officer (DHO) Wakiso District to seek permission for conducting the study.

Written informed consent was obtained from each participant who participated in the study after explaining to each of them individually, the objectives and benefits of the study and the fact that their participation is voluntary. The participants were also informed of their right to refuse to enroll in the study and their right to withdraw from the study at any time without any repercussions. Strict confidentiality was maintained mainly by the use of identification numbers. Information collected will be used for the purpose of this study.

## 3. RESULTS.

### *3.1. Socio- Demographic Factors*

Table 1 indicates that the majority of the respondents 33% were between the age brackets of (32-43) years while the minority 8% were between (44-50) years. 63(63%) of the respondents where female and a 37(37%) male participated in the study. By tribe, 46(46%) respondents where Baganda, 14(14%) Basoga. Most of the respondents 29(29%) were Catholics, and the least 10(10%) were in the Advent religion. 42(42%) of the respondents where Singles, whereas 24(24%) fell among other groups. As per the education

Student's Journal of Health Research Africa
Vol. 4 No. 9 (2023): September 2023 Issue
https://doi.org/10.51168/sjhrafrica.v4i9.428
Original article

Table 1: **Shows the socio demographic factors. (n=100)**

| Respondents' characteristics | Variables | Frequency | Percentages |
|---|---|---|---|
| **Age range (yrs.)** | 16 – 20 | 28 | 28 |
| | 21 – 31 | 31 | 31 |
| | 32 – 43 | 33 | 33 |
| | 44 – 50 | 8 | 8 |
| Sex | Male | 37 | 37 |
| | Female | 63 | 63 |
| Tribe | Muganda | 46 | 46 |
| | Musoga | 14 | 14 |
| | Munyankore | 20 | 20 |
| | Others | 20 | 20 |
| Religion | Catholic | 29 | 29 |
| | Moslem | 26 | 26 |
| | Born Again | 24 | 24 |
| | SDA | 10 | 10 |
| | Others | 11 | 11 |
| Marital Status | Married | 34 | 34 |
| | Single | 42 | 42 |
| | Others | 24 | 24 |
| Education Level | Informal (didn't attend school) | 5 | 5 |
| | Primary | 31 | 31 |
| | Secondary | 40 | 40 |
| | Tertiary Institution | 24 | 24 |
| Occupation | Student | 34 | 34 |
| | Civil Servant | 9 | 9 |
| | Peasant | 4 | 4 |
| | House wife | 17 | 17 |
| | Others | 36 | 36 |

**Source: primary data (2022)**

level of the respondents, 40(40%) were of Secondary level, while 5(5%) were university graduates. The majority of the respondents 36(36%) fell into others while the minority 9(9%) were Civil servants.

### *3.2. Level of Knowledge towards Hepatitis B Vaccination.*

Figure 1 shows that majority of the respondents 64(64%) have ever heard about Hepatitis B Vaccination while 36(36%) had never heard about Hepatitis B Vaccination.

Table 2 shows that majority of the respondents 44(44%) suggested that the interval period for the first dose was zero days, 33(33%) a month and 30(30%) 6 months.

Figure 2 shows that the majority of the respondents 61(61%) never knew how many doses were required for complete protection while only 39(39%) of the respondents knew how many doses are required for a complete protection from Hepatitis B Virus.

Many of the respondents 34(34%) were of the view that Hepatitis B vaccination is slightly effective, while 16(16%) couldn't tell if it's effective or not.

Student's Journal of Health Research Africa
Vol. 4 No. 9 (2023): September 2023 Issue
https://doi.org/10.51168/sjhrafrica.v4i9.428
Original article

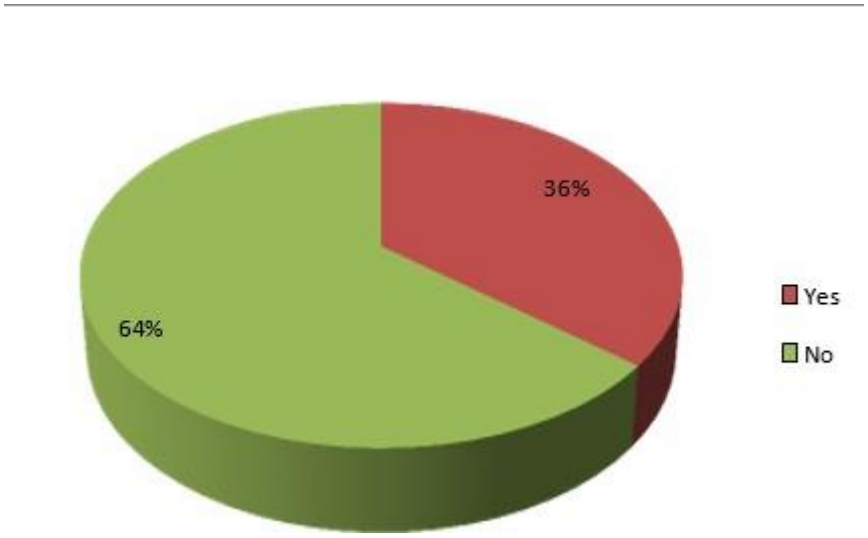


Figure 1: **Distribution of respondents by having ever heard about Hepatitis B Vaccination (n=100)**

Table 2: **Distribution of the respondents by their knowledge of the interval for Hepatitis B Vaccination. (n=100)**

| Vaccination shot | Interval periods | frequencies | Percentage |
|---|---|---|---|
| $1^{st}$ shot | A month | 20 | 20% |
| | 12 weeks | 28 | 28% |
| | 0days | 44 | 44% |
| | A year | 8 | 8% |
| $2^{nd}$ shot | A month | 33 | 33% |
| | 4 month | 30 | 30% |
| | 7 days | 14 | 14% |
| | 2 years | 21 | 21% |
| $3^{rd}$ shot | 6 months | 30 | 30% |
| | 17 weeks | 40 | 40% |
| | 5 days | 3 | 3% |
| | 10 days | 27 | 27% |

**Source: Primary data (2023)**

### *3.3. Attitude towards Hepatitis B Vaccination.*

Table 3 shows that majority 76(76%) were willing to receive Hepatitis B Vaccination 20(20%) are not willing to receive Hepatitis B Vaccination and 4(4%) didn't know whether to take Hepatitis B Vaccination or not.

Figure 3 shows that out of the 100 respondents, 79(79%) were willing to recommend Hepatitis B Vaccination to friends yet 21(21%) were not willing.

Figure 4 shows majority of the respondents 72% believed that Hepatitis B vaccination is an important protective measure against Hepatitis B Virus while 28% of the respondents didn't believe that Hepatitis B Vaccination is an important protective measure against Hepatitis B Virus.

Table 4 shows that majority 83% of the respon-

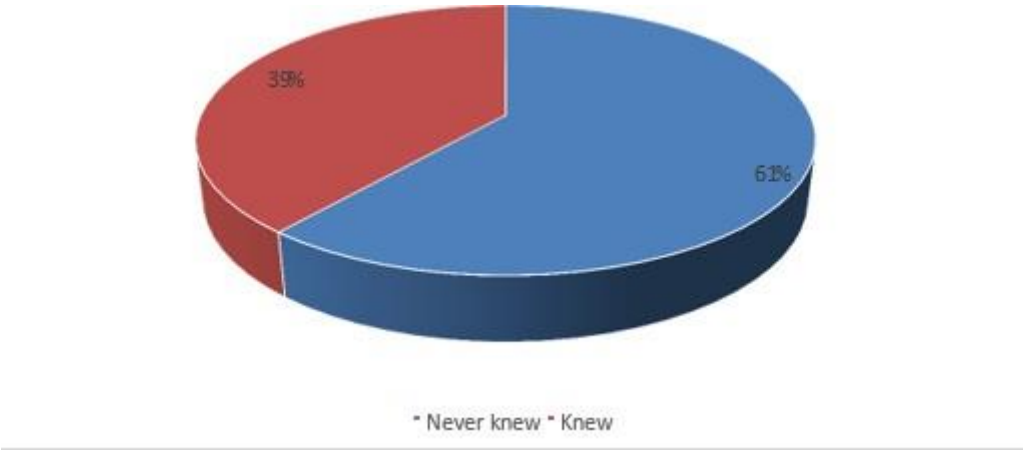


Figure 2: **Distribution respondents by the number of doses required for complete protection from HepatitisB Virus. (n=100)**

Table 3: **Distribution of the respondents by their willingness to receive Hepatitis B vaccination (n=100)**

| Willingness to receive Hepatitis B vaccination | Frequency | Percentage |
|---|---|---|
| Willing | 76 | 76% |
| Not willing | 20 | 20% |
| I don't know | 04 | 4% |

**Source: Primary data (2023)**

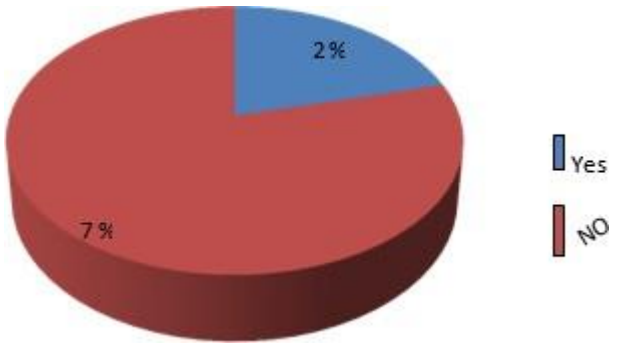


Figure 3: **Distribution of the respondents by their willingness to recommend Hepatitis B Vaccination to friends (n=100)**

Table 4: **Distribution of the respondents by their willingness to be screened for Hepatitis B Virus (n=100)**

| Willingness to screen for Hepatitis B Virus | frequency | Percentage |
|---|---|---|
| Weren't willing | 83 | 83% |
| Weren't willing | 17 | 17% |

**Source: primary data (2023)**

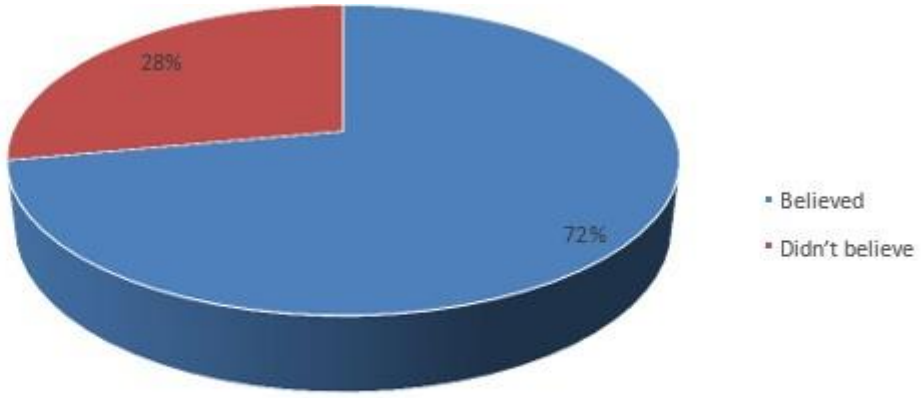


Figure 4: **Distribution of respondents by their belief of whether Hepatitis B Vaccination is an important protective measure against Hepatitis B Virus perceived themselves to be at risk of Hepatitis B virus (n=100)**

dents were willing to be screened for Hepatitis B Virus while minority 17% were not willing to be screened for Hepatitis B Virus.

### *3.4. Level of practice towards Hepatitis B Vaccination.*

Table 5 shows that the majority of the respondent57% were vaccinated yet minority35% where not and 8% didn't know if they were vaccinated.

Figure 5 shows that the majority of the respondents 63(63%) had taken the first shot, 25(25%) took the second shot and minority only 12 (12%) of the respondents had acquired the full dose.

## 4. DISCUSSION.

### *4.1. Knowledge of Hepatitis B Vaccination.*

This study revealed that the majority of the respondents had an average knowledge of Hepatitis B vaccination as 64% of them had ever heard of it while 36% of respondents had never heard of it. This could have been due to low sensitization among the respondents of this study; however, this was in slight disagreement with the results from the study done by (Chinwe, 2017) which showed that 86.6% of respondents had ever heard about Hepatitis B Vaccination.

This study revealed that most of the respondents had average knowledge about the interval for Hepatitis B Vaccination as a total of 56% of the respondents knew it where 44% suggested that the first shot is taken at zero days, 33% suggested that the second shot is taken after a month from the first shot and 30% suggested that the third shot is taken six months from the second shot. These results could have been due to inadequate health education among the individuals. This is in agreement with the results from the study done by (Shahabe, 2019) where half of the respondents knew the interval for Hepatitis B Vaccination though they didn't discuss details of the respondents for each interval.

This study revealed that most respondents had poor knowledge about the number of doses of a complete full dose of vaccine for protection from Hepatitis B Virus as 61% of the respondents didn't know it while 39% of the respondents knew it. The difference in these results could have been due to low sensitization of people about hepatitis B vaccination, however, these results disagree with the results from the study done by (Ayalew, 2017) where 21.5% of the respondents didn't know the number of doses of a complete full dose of vaccine for protection from Hepatitis B Virus.

Student's Journal of Health Research Africa
Vol. 4 No. 9 (2023): September 2023 Issue
https://doi.org/10.51168/sjhrafrica.v4i9.428
Original article

Table 5: **Distribution of the respondents of whether they are vaccinated or not (n=100)**

| Whether vaccinated or not | Frequency | Percentage |
|---|---|---|
| Vaccinated | 57 | 57% |
| Not vaccinated | 35 | 35% |
| I don't know | 8 | 8% |

**Source; primary data (2023)**

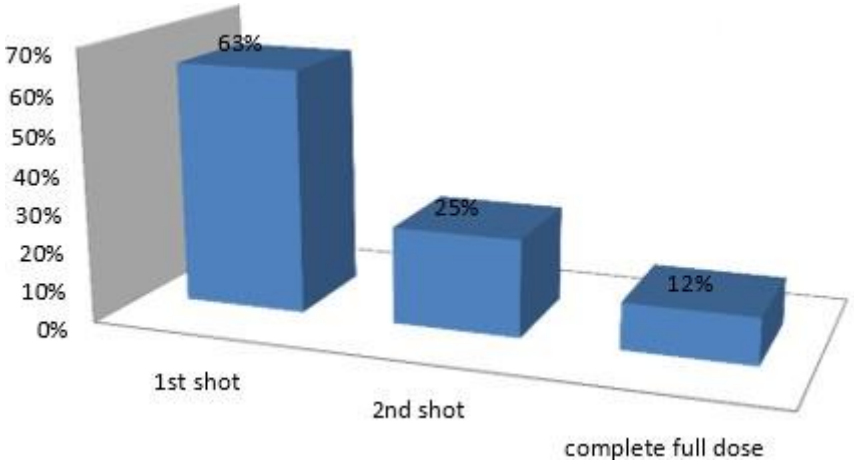


Figure 5: **Distribution of the respondents by how many doses of Hepatitis B Vaccination acquired (n=100)**

This study revealed that some of the respondents described Hepatitis B Vaccination as very effective and not effective in the prevention of hepatitis B infection, as each variable was represented separately by 21%respondents, 34%0respondents as slightly effective and 16% didn't know whether the vaccination is effective or not, these results relate to the poor health education initiatives done towards hepatitis B hence lack of knowledge among the respondents .however these results disagree with the result from the study done by (Chinwe,2017) where 62.9% respondents described Hepatitis B Vaccination as very effective.

### *4.2. Attitude towards Hepatitis B Vaccination.*

This study revealed that the majority of the respondents had a positive attitude towards Hepatitis B Vaccination as 76% were willing to receive it,20% were not willing to receive it and 16% didn't know whether to receive it or not. This could be attributed to the information they had about hepatitis B vaccination which enhanced their understanding and attitudes. However, these results are in agreement with those from the study done by (Naziru,2021) where 75% were willing and believed that they needed to receive Hepatitis B Vaccination.

This study revealed that the majority of the respondents had a high attitude towards Hepatitis B Vaccination as 79% of respondents were willing to recommend it to friends while 21% were not willing to recommend it. This could be attributed to the information they had about hepatitis B vaccination which enhanced their understanding and attitudes. However, these results slightly agree with the results from the study by (Shrestha et al, 2020) where 39.2% were not willing to recommend it to their friends who have not had it.

This study revealed that the majority of the respondents had a good attitude towards hepatitis B vaccination as 71.3% of them believed that Hepatitis B Vaccination is an important protective measure against Hepatitis B Virus while 28.7% of

the respondents didn't believe it. This could be attributed to the health education campaigns conducted by the Ministry of Health, about hepatitis B. However, this was in agreement with the results from the study done by (Sanaa,2019) which showed that 82.7% of respondents believed that Hepatitis B Vaccination is an important protective measure against Hepatitis B Virus.

This study revealed an average attitude towards Hepatitis B vaccination as 50% of the 100% respondents perceived themselves as being at risk of Hepatitis B Virus if not vaccinated while the other 50% didn't perceive themselves as at risk of Hepatitis B virus infection. This could probably be because of the inadequate health education about hepatitis B vaccination by the respondents of the study. However, this was in slight disagreement with the results from the study done by (Bahadur et al, 2020) which showed that 39.2% of the respondents didn't perceive themselves as at risk of Hepatitis B virus though not vaccinated.

This study revealed that most respondents had an average attitude towards Hepatitis B vaccination as 83% of the respondents accepted to be screened for Hepatitis B Virus while only 17% of respondents never wanted to be screened for Hepatitis B Virus. This could probably be because the screening was free and it could be accessed by the respondents at any time, however, these results correspond with the results from the study done by (Han, 2017) which showed that 83.3% of respondents believed that it is important to screen for Hepatitis B Virus.

### *4.3. Practice towards Hepatitis B Vaccination.*

The study objective was to determine the practice towards Hepatitis B Vaccination. Data analysis and interpretation revealed the following major finding under this objective.

This study revealed a poor practice towards Hepatitis B Vaccination among respondents as 35% of the respondents were not vaccinated while 57% were vaccinated and 8% didn't know whether they were vaccinated. The low sensitization in communities about hepatitis B vaccination could be the cause for this, however, those results disagree with the results from the study done by (Bahadur et al, 2020) where 37% were vaccinated and 39.2% didn't take Hepatitis B Vaccination.

This study revealed that there is a poor practice towards Hepatitis B Vaccination of the 100% of respondents who had taken the Vaccination only 32% of the respondents had acquired the recommended 3 doses, 63% took the first shot and 25% took the second dose. This could probably be because of a loss to follow up for the second and third doses. However, these results slightly disagree with the result from the study done by (Shrestha et al, 2020) which showed that of the 74.6% of respondents who had taken Vaccination only 37% of the vaccinated respondents had completed the recommended 3 doses.

## 5. CONCLUSION.

This study specifically sought to determine the level of Knowledge, Attitude, and Practice towards Hepatitis B Vaccination. The study established that 64% of the respondents have ever heard about Hepatitis B Vaccination while 36% of the respondents have never heard about Hepatitis B Vaccination, 76% of the respondents were willing to receive Hepatitis B

Vaccination while 16% didn't know if to take Hepatitis B Vaccination or not and also only 57% of the respondents had been vaccinated against Hepatitis B Virus with numbers for return shots dropping.

Given these findings, the majority of the respondents had a high attitude towards Hepatitis B Vaccination but with an average knowledge and poor practice towards Hepatitis B Vaccination. Therefore, these findings clearly show the risk of Hepatitis B infection of the respondents in Wakiso district due to the poor practice and an average knowledge of Hepatitis B Vaccination. And also, these show the government and the Ministry of Health that the reasons for the poor practice and average knowledge of Hepatitis B Vaccination should be the areas of concentration during the vaccination campaign.

## 6. RECOMMENDATIONS.

The Ministry of Health through Kasangati health center IV should conduct health education activities in community outreaches, schools, churches, and the facility itself so that individuals are provided with the vast knowledge required about hepatitis B vaccination, hence improving their knowledge, attitude, and practice about hepatitis B vaccination.

The Ministry of Health and the District Health Team of Wakiso district should address the average knowledge of Hepatitis B Vaccination by strengthening and increasing repetitive Public sensitization and Health Education to increase awareness towards Hepatitis B Vaccination through targeting media e.g. TVs and radio stations, schools, workplaces and health centers of both private and public.

The Ministry of Health and the District Health Team of Wakiso district should confront poor practices towards Hepatitis B Vaccination by making Hepatitis B Vaccination easy to access whereby it's near the person to get it, is available and it's for free in both private and public health centers. And also, follow-ups should be made to all individuals who have taken the 1st and 2nd shots so that the number of those receiving the 3rd shot increases.

## 7. ACKNOWLEDGEMENT.

First and foremost, I would like to thank the Almighty for giving me strength and his grace throughout the entire study.

I acknowledge the support and guidance I received from my supervisor Mr. Onyango Richard, thank you for being patient with me.

My loved parents Mr. and Mrs. Lukwaya for their prayers, unending support, and encouragement.

I owe you all my deepest gratitude, am tremendously appreciative of the support you gave me.

May God bless you!

## 8. LIST OF ABBREVIATIONS.

**AIDs :** Acquired Immune Deficiency Syndrome
**CDC** : Centre for Disease Control
**DHO :**District Health Officer
**HBV :**Hepatitis B Virus
**HC :** Health Center
**HIV :** Human Immune Virus
**HPV :** Human Papilloma Virus
**KIIs :**Key Information Interviews
**MOH :**Ministry Of Health
**SPSS :**Statistical Package for Social Sciences
**STDs :**Sexually Transmitted Diseases
**UAHEB :** Uganda Allied Health Examinations Board
**UNAIDS:** United Nations Program on HIV/AIDS
**UTIs** :Urinary Tract Infections
**WHO :**World Health Organization

## 9. Publisher details:

**Publisher: Student's Journal of Health Research (SJHR)**
**(ISSN 2709-9997) Online**
**Category: Non-Governmental & Non-profit Organization**
**Email: studentsjournal2020@gmail.com**
**WhatsApp: +256775434261**
**Location: Wisdom Centre, P.O.BOX. 148, Uganda, East Africa.**

## 10. REFERENCES.

1. Abdnur. A., Woldu. B., and Tekalign,D.(2018). Assessment of Knowledge, Attitude Practice towards Prevention

of Hepatitis B Virus Infection in Northwest Ethiopia, BMC Research Notes Article Number 410(2018).*Bmcresnotes. Biomedcentral Com/Articles10.11861s13104-016-2216.*

2. Abeje. (2020). Hepatitis B vaccine knowledge and vaccination status among health care workers of Bahir Dar City Administration, Northwest Ethiopia: a cross sectional study. *BMC Infectious Diseases*.
3. Abiiro. (2021). Knowledge, attitude and practice of hepatitis B infection prevention among nursing students in the Upper West Region of Ghana: A cross-sectional study. *Plos one*.
4. Ampurire, P. (2019).Hepatitis B Vaccination health Ministry Reports significant drop in coverage of following up dose. www.softpower.g/hepatitis.b. Vaccination health ministry reports-significant drop in coverage of follow up doses.
5. Ayalew .P. Horssa .B. Getachew .N.A., and Getnet, A, (2017) .Knowledge and Attitude
6. *CDC Hepatitis*. (2022). Retrieved from Centres for Disease Control and prevention.
7. Chinwe .L.O., and Caryl .M .B. (2017). Hepatitis B Vaccination Coverage, Knowledge and Socio demograph Determinants in Kaduna State, *Nigeria Public Health Research Volume 7 Isue 5bmj*.
8. Chinwe L. O, and Caryl. M.B. (2017). Hepatitis B Vaccination Coverage, Knowledge and Socio *demography Determinants in Kaduna state, Nigeria Public health Research Volume 7 ISUE 5bmj*.
9. Dhan. (2020). Hepatitis B vaccination status and knowledge, attitude, and practice regarding Hepatitis B among preclinical medical students of a medical college in Nepal. *Pub Med.*
10. Evely .L, (2018).Why Uganda war against hepatitis B is not won yet. *The East African. WWW. The east Africa .co.ke/science and health /Uganda war –against hepatitis B is not won yet/3073694-4703496-pioyx1z/index.html.*
11. Garba. (2020). Hepatitis B vaccine knowledge and self-reported vaccination status among healthcare workers in a conflict region in northeastern Nigeria. *Pub Med.*
12. HangphamT.T.,Thug,X.L.,Dong,T.N,Chau,M.L.,Ba (2019). Knowledge, Attitude and Practice of Hepatitis B Prevention and *Immunization among adults in Northern Vietnam. Plos One.*
13. *Health topics/Hepatitis*. (2021). Retrieved from World Health Organisation.:
14. *Health.* Retrieved from https://www.sciencepublishinggroup.com/journal/paperinfo?journalid=287&doi=10.11648/j.wjph.20210604.12
15. Hepatitis B Foundation. (2019).*The Global Need for Hepatitis B Immunistion. Hepbtalk*, retrieved from http://www.hepb.org/blog/global-need-hepatitis-b-immunisation/
16. https://www.cdc.gov/hepatitis/abc/index.htm
17. https://www.who.int/health-topics/hepatitis#tab=tab_1
18. Kato. (2021, February 23rd). Hepatitis B prevalence and incidence in the fishing communities of Lake Victoria, Uganda: a retrospective cohort study.
19. Kumah. (2021). Knowledge, Attitude and Practices towards Hepatitis B Infection and Vaccination among Public Health Students in Ghana. *Open journal of preventive medicine*.
20. Kumah. (2021, October). Knowledge, attitude and practice of hepatitis B infection prevention among nursing students in the Upper West Region of Ghana: A cross-sectional study. *Plos one, peer reviewed.*
21. Lui, Y. (2018). Knowledge Attitude and Practice Regarding Hepatitis B Vaccination Among *In China. PubMed Www.Nchi.Nlm.Nih.Govlm/Pub/29567035/*
.
22. Maina, A.N, Bii, L.C. Factors affecting HBV vaccination in a medical training college in Kenya; A mixed methods study. *BMC Public health 20, 48 (2020) Https;// do i. or /10.1186 /s 12889-020-8158-2*.
23. MoH Hepatitis B and C guidelines. (2019). *UGANDA GUIDELINES FOR PREVEN-*

*TION, TESTING, CARE AND TREATMENT OF HEPATITIS B AND C VIRUS INFECTION*. 15.

24. MOH. (2023).
25. Mohammed, A. (2018). Attitude and Vaccination Status of Healthcare Workers against Hepatitis B Infection in a Teaching Hospital, Ethiopia. *National Library of Medicine*.
26. Naziru, Z. S. (2021). Knowledge, Attitude, and Perception on Hepatitis B Vaccination among Non-health
27. *New Vision, p.1.retrieved from http:/www.newvision.co.ug/newvision/new/1494036*
28. Ngmenemandel. (2021.). Knowledge, attitude and practice of hepatitis B infection prevention among nursing students in the Upper West Region of Ghana: A cross-sectional study. *PLOS ONE*.
29. Nkurunziza. (2021). Knowledge, attitudes, and practices towards hepatitis B virus. *Research Journal of Health Sciences*, 44-51.
30. Odyek .J. (2019, February 12$^{th}$).Ugandans not completing hepatitis B Vaccine injections. *The*
31. Opendi .S. (2018).Press statement on the progress of implementation of hepatitis B
32. Opendi .S. (2019).Government on course with Hepatitis B Vaccination. Retrieved from http://www.paliament.go.ug/news/3031.
33. Regarding Hepatitis B Virus Infection And Its Vaccination, *University Of Gondar Hospital,Ethiopia. Https://Doi.Org//0.2147/HMER.S120477*.
34. Sanaa .M. M. M., Sagad .O. O. M. (2019).*Knowledge Attitude and Pratice towards hepatitis b vaccination among participants in a maternity hospital in Khartoum sudan. BMC public health 19 article number: 1597.*
35. Saquibs, Ibrahim .W., Othman .A., Alshahri .H., Alqarni .A., Exploring et al.(2019) The Knowledge, Attitude And Practice Regarding Hepatitis B Infection Among respondents In Saudi Arabia: *Across Sectional Study,Open Acess Maced J Med Sci. Https://Doi.Org/10.3889/Oamjms.2019.///*
36. Singh. (2018). Assessment of knowledge, attitude, and practices toward prevention of hepatitis B infection among medical students in a high-risk setting of a newly established medical institution. *Journal of Laboratory Physicians*.
37. Vaccination among patients at two neighbor hospitals in Malaysia: *Atwo hospital Based Cross Sectional Survey, BMC Public Health 19, Article Number: 47(2019).*
38. Vaccination program in Uganda. *World Hepatitis Day 2018.Retrieved from reliefweb.int/report/Uganda/world-hepatitis-day-2018pressstatement.*
39. *WHO*. (2022, June 24th). Retrieved from World Health Organization.: https://www.who.int/newsroom/fact-sheets/detail/hepatitis-b
40. Workers Attending Selected Health Facilities in Mbale City, Uganda. *World Journal of Public*
41. World Health Organization. (2019).*Uganda hosts Inaugural African hepatitis summit Retrieved from reliefwebint/report/world/Uganda.hosts african-hepatitissummit.*
42. *Www.Ncbi.Nlm.Nih.Govlm/Pubmed/30969972/*
43. Yogambigai .R. Niazlin .M. T., Aye .A. (2019).Knowledge And Awareness of Hepatitis B
44. Yuan-Ping Yan, H.-X. S.-H.-J.-S. (2019). Epidemiology of Hepatitis B Virus Infection in China: Current Status and Challenges. *XIA & HE Publishing Ltd.*