KNOWLEDGE, ATTITUDE AND PRACTICE OF YOUTH AGED BETWEEN 15-24 YEARS REGARDING HEPATITIS B INFECTION IN ADJUMANI DISTRICT

FAVOUR HARIET
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AN UNDERGRADUATE RESEARCH REPORT SUBMITTED TO THE SCHOOL OF NURSING IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A BACHELOR’S DEGREE IN NURSING OF INTERNATIONAL HEALTH SCIENCES UNIVERSITY

NOVEMBER 2016
DECLARATION

I declare that this is my original work, done by myself and has never been submitted to this institution or any other institution for any academic award or grant.

FAVOUR HARRIET

Signature..........................................

Date.....................................................
APPROVAL

I hereby declare that this research report has been done under my supervision as the institution supervisor and I approve it for submission to the school and other research committees.

MR. AFAYO ROBERT

Signature...................................................

Date........................................................
DEDICATION

This study is dedicated to the Almighty God, who has given me the knowledge and wisdom, to successfully carryout this research.
ACKNOWLEDGEMENT

First and foremost I want to give thanks to God, who kept me in perfect health throughout the study period.

Special thanks to my Parents, siblings for encouraging and supporting me throughout the period of my studies. May the almighty God bless you.

I am grateful to Mr. Mawadri Charles, who mentored and gave me enormous support throughout my education.

I also deeply appreciate my Supervisor, Mr Afayo Robert for his tireless guidance, direction throughout my study time. May God richly bless you
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## DEFINITION OF TERMS

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
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<tbody>
<tr>
<td>Knowledge</td>
<td>Information, facts, data, awareness or understanding things</td>
</tr>
<tr>
<td>Attitude</td>
<td>This is a behavior or perception of an individual towards something</td>
</tr>
<tr>
<td>Practice</td>
<td>These are acts or practices carried out regularly or repeatedly by an individual</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>Is liver inflammation caused by the Hepatitis B Virus (HBV)</td>
</tr>
<tr>
<td>Hepatitis B Vaccine</td>
<td>This is a vaccine for preventing Hepatitis B</td>
</tr>
<tr>
<td>Utilization</td>
<td>This is the act of using something</td>
</tr>
</tbody>
</table>
## LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>AIDS</td>
<td>Acquired Immune Deficiency Syndrome</td>
</tr>
<tr>
<td>CDC</td>
<td>Center for Disease Control</td>
</tr>
<tr>
<td>FGDs</td>
<td>Focus Group Discussion</td>
</tr>
<tr>
<td>HBV</td>
<td>Hepatitis B Virus</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
</tr>
<tr>
<td>UNEPI</td>
<td>Uganda National Expanded Program on Immunization</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
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ABSTRACT

Introduction: The study was carried out in Adjumani District, aimed at identifying the knowledge, attitude and practices of the youth aged 15-24 years regarding Hepatitis B prevention in Adjumani District.

General Objective: The main objective of the study was to identify the knowledge, attitude and practices of the youths aged 15-24 years regarding Hepatitis B prevention.

Methodology: The study design was cross sectional descriptive study where data was collected using self administered questionnaires given to 150 youths using random sampling and analysis carried using SPPS version 20

Results: The study was carried out in randomly selected secondary schools in Adjumani District.

The study found out that respondents were knowledgeable regarding Hepatitis B infection. For instance, 150 (100%) had ever heard of Hepatitis B Virus, 120 (80%) agreed that one could contract Hepatitis B Virus through unsafe sex, 90 (60%) agreed that one can get Hepatitis B infection by sharing tooth brushes, sharps and razors, 130 (86.7%) agreed that people with Hepatitis B infection can develop liver cancer, 100 (66.7%) agreed that there was treatment for Hepatitis B infection.

However, respondents had mostly negative attitude regarding Hepatitis B infection as 60 (40%) disagreed that Hepatitis B is not a dangerous disease, 75 (50%) strongly disagreed that Hepatitis B Virus infection can be prevented, 100 (67%) strongly agreed that they feared to get a positive result for Hepatitis B virus infection, 80 (53.3%)

Respondents had poor practices regarding Hepatitis B infection as most 100 (66.7%) had never been immunized against Hepatitis B Virus, 92 (63.1%) disagreed that one can get Hepatitis B infection from unsterile medical equipment. However, 80 (53.3%) always asked salon barbers to disinfect or replace machine blades which was a good practice which helped to prevent Hepatitis B infection.

Conclusion: The results of the study revealed that although respondents were knowledgeable regarding Hepatitis B infection, they had negative attitude and practices regarding the prevention of Hepatitis B infection.

Recommendations: There is need for immediate sensitization and health education of the community on Hepatitis B transmission and prevention aimed at changing attitude and practices of the people toward Hepatitis B prevention.
CHAPTER ONE

1.0: Introduction
This chapter describes the following contents: background to the study topic, background to the study setting, statement of the problem, general and specific objectives of the study, research questions, conceptual framework and justification of the study.

1.1 Background to the study
Hepatitis B is a life threatening viral infection caused by hepatitis B virus (HBV), a DNA virus. It is a major health concern worldwide since it could lead to chronic liver disease putting patients at risk of dying from liver cirrhosis and cancer of the liver. Hepatitis B viral infection is the major cause of morbidity worldwide with an estimated 14 to 16 million people affected yearly and it is 50 to 100 times more infectious than HIV (WHO, 2012). Also known as inflammation of the liver, hepatitis B virus is one of the five types of hepatitis and was the first to be discovered in 1964 using serological testing (hepatitis B surface antigen-HBsAg) (Weinbaun, 2009). Transmission occurred through contact with blood or body fluids. It could be through unprotected sex vaginal and anal, blood to blood contact (sharing tooth brush, razor, injection drug use, needle stick injury, ear piercing tattooing) and mother to child transmission (WHO, 2010).

Hepatitis B viral infection is found in all body fluids but only blood (and semen derived fluids), semen, saliva and vaginal fluids are infectious. This virus stays alive in the environment for one week or more. Currently, more than 240 million people all over the world are chronic carriers of hepatitis B viral infection and more than 600 million people died of chronic infection including liver cirrhosis or hepatocellular carcinoma (WHO, 2013). Most people suffering from hepatitis B viral infection are asymptomatic although some people had acute symptoms like loss of appetite, fatigue, abdominal pain, pain, jaundice, dark urine and nausea (CDC, 2006). This signs were quite common in other diseases which made it very difficult to discover the disease on time.

Worldwide, an estimated two billion people had been infected with the hepatitis B virus (HBV) and more than 240 million had chronic (long-term) liver infections (WHO, 2012).
Due to the vast diversity of the African continent, the rural setting and lack of resources, it was very difficult to determine the incidence and prevalence rates of hepatitis B viral infection in this continent. This is due to ineffective data collection strategies and under reporting of cases in this continent. However, many researches had been in various parts of Africa to determine the epidemiology of hepatitis B viral infection. From the few available data, it was estimated that out of 360 million chronic carriers of hepatitis B viral infection worldwide, 65 million lived in Africa (WHO, 2012) 1.3 million deaths due to hepatitis B viral infection related causes occurred yearly of which about 250,000 came from Africa.

Hepatitis B viral chronic infection is endemic in the general population of sub-Saharan African (Mphalete et al, 2002). Around 98% of the approximately 470 million population of sub-Saharan Africa are expected to be infected at some point in their lives (Moghimi et al 2008). Chronic carriage of hepatitis B viral infection in sub-Saharan African countries ranged from 9-20% and in the whole of sub-Saharan Africa about 50 million were estimated to be lifetime carrier with an estimated 12.5 million expected to die from hepatitis B viral infection related liver diseases (Yassi et al, 2009).

In Uganda, hepatitis B viral infection was highly endemic with percentage varying across the country. The prevalence was highest in the northern part of the country with six fold difference between north east and south west. The most affected ethnic groups are the Karamojong, Acholi, and Langi (Bwogi et al, 2005). In 2005, it was estimated that 1.4million adults were living with the active disease with 1 in 10 adults carrying hepatitis B surface antigen (Bwogi et al, 2005). A national sero-survey done in 2005 revealed that the variations included north eastern with 23.9%, north central with 20%, west Nile (North West) with 18.5%, western with 10%, eastern with 7.1%, central 6.2%, east central with 6.0% and south west with 3.6% (Bwogi et al, 2009), in northern Uganda, the prevalence is high in rural areas, among the least educated, the poor and among uncircumcised men (Bwogi et al, 2009). The level of knowledge on hepatitis B viral infection prevention and transmission was not clearly known in this part of the country.

Among districts in Northwest, Adjumani district has the highest prevalence of HBV infection. Locally, the disease is perceived to the biggest threat than Human Immunodeficiency Virus (HIV) infection (Okudi et al, 2014). As a result of severe psychological stresses from HBV infection, patients have resorted to suicides (the insider,
Hepatitis B virus (HBV) infection is a significant public health problem in Adjumani district (Amacha et al, 2015).

Despite of district specific interventions to combat the HBV infection, the prevalence has risen to 11% in 2015 (Amach et al, 2015). Therefore the aim of this study is to determine the knowledge, attitude and practice of youth between 15-24 years in prevention of hepatitis B infection in Adjumani.

1.2 Statement of the problem
The Government of Uganda together with the ministry of health have put in strong measures to control hepatitis B viral infection in Uganda and in Adjumani including introduction of hepatitis B vaccines in the country from 2002 as part of the Uganda national expanded program on immunization (UNEPI), Compulsory vaccination of all health workers and medical students in all institutions has been implemented and mass immunization of members of the community. The government of Uganda earmarked approximately 11 million United States dollars for mass vaccination in 11 districts with the highest prevalence of HBV infection (Musoke et al, 2014). The districts of Gulu, Kitgum, Lira, Arua, Adjumani, Yumbe, Moyo, Kasese, Ngora, Bukedea and Amuria with prevalence rates of over 20% are beneficiaries of this fund (Musoke et al, 2014). The ministry of health was working closely with the local government to put in place effective control and preventive measures to combat hepatitis B viral infection (MoH, 2011).

Adjumani district is among the 11 districts in Uganda with high prevalence of hepatitis B virus. The prevalence of hepatitis has risen to 11% despite the districts effort to combat the infection (Martin Okudi, Daily Monitor Nov 2014). A number of people have been tested and found to be living positive with virus in the district. According to information from the District Health Office in 2011 a total of 18 people were tested and 6 tested positive with prevalence of 33.33%, in 2012 a total of 991 tested and 115 were positive with prevalence of 11%, in 2013 a total of 3969 tested with 618 positive with prevalence of 15%, in 2014 total of 11594 tested and 539 tested positive with prevalence of 4% and in 2015 from January to February a total of 219 tested and 22 tested positive with prevalence of 10.5% given the influx of the refugees. The district has put in some effort to address the issue at hand especially through health education on prevention and transmission and early screening.
The community seems ignorant about the disease, its transmission from person to person and their status. The influx of the refugees from South Sudan has made prevention and management a challenge.

If nothing is done, the high burden will continue with increase in mortality from hepatitis B viral infection and hepatocellular carcinoma. With the situation above, there is therefore need to carry the research and so forming the basis of this study to identify the knowledge, attitude and practices of the youths in prevention of hepatitis B viral infection in Adjumani district.

1.3 Study Objectives
1.3.1 General objective
To identify the knowledge, attitude and practice of youths aged 15-24 years in prevention of hepatitis B infection in Adjumani district.

1.3.2 Specific objectives
1. To determine the knowledge of youths aged 15-24 years in prevention of hepatitis B infection in Adjumani district
2. To assess the attitude of youths aged 15-24 years in prevention of hepatitis B infection in Adjumani district
3. To identify the practices of youths aged 15-24 years in prevention of hepatitis B infection in Adjumani district

1.4 Research questions
1. What is level the knowledge of youths aged 15-24 years in prevention of hepatitis B infection in Adjumani district?
2. What is the attitude of youths aged 15-24 years in prevention of hepatitis B infection in Adjumani district?
3. What are the practices of youths aged 15-24 years in prevention of hepatitis B infection in Adjumani district?
1.5 Significance of the Study/ Justification

In West Nile where Adjumani is located, majority of the community are ignorance about the hepatitis B infection transmission and its prevention. This had made the prevention of hepatitis B very hard among the knowledge poor community of Adjumani.

Increasing the populations’ knowledge about the disease is of great importance to disease transmission in Uganda. Studying knowledge and attitude factors associated with hepatitis B viral infection prevention and transmission in Adjumani district is important for understanding the challenges that hinder people from perusing effective hepatitis B viral infection prevention and treatment so that the issues are addressed in the community. Thus this study will potentially help researchers, health workers, health educator and individuals concerned or interested in hepatitis B viral infection.

The results from this study could be used by the program planners to increase the knowledge and raise awareness of the students towards hepatitis B viral infection for the primary prevention of the disease for example through sensitization, and health educational talks, vaccination program and could also help in developing intervention that are geared towards early screening and detection and treatment of identified cases. It is therefore interesting to carry out this research which aims at understanding and exploring the knowledge, attitude and practice of youth aged 15-24 years in prevention of hepatitis B infection in Adjumani district.

The study provides explanation on the prevalence of hepatitis B in Adjumani district and its impact on district, country and globally.

The findings of the study guides the ministry of health in implementing policies on Hepatitis B vaccination strategies in the country as efforts are geared towards the prevention of HBV infection, Adjumani district, Uganda as a whole and globally.

The study provided information that can be used to improve on the strategies of hepatitis B vaccination among community.
1.6 Conceptual framework

Conceptual framework showing knowledge, attitude and practice towards hepatitis B prevention practices among youths age 15 to 25 years in Adjumani District

*Figure 1: Conceptual framework*

<table>
<thead>
<tr>
<th>KNOWLEDGE</th>
<th>ATTITUDES</th>
<th>PREVENTION PRACTICES</th>
<th>CONSEQUENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heard about HBV</td>
<td>Being at risk</td>
<td>Sharing of sharp instruments</td>
<td>Cirrhosis</td>
</tr>
<tr>
<td>Causes of HBV</td>
<td>Cultural belief</td>
<td>Protected sex</td>
<td>Liver failure</td>
</tr>
<tr>
<td>Risk factors of HBV</td>
<td>Religious beliefs</td>
<td>Contact with body fluid</td>
<td>Liver cancer</td>
</tr>
<tr>
<td>Signs and symptoms of HBV</td>
<td>Ability to seek medical help</td>
<td>Prevention of Mother to child</td>
<td>Poor drug metabolism</td>
</tr>
<tr>
<td>Infection</td>
<td>Confidence to receive the vaccine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HBV screening</td>
<td>Possibility of HBV positive result</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HBV screening</td>
<td>Cost of vaccination</td>
<td>Preventive measures</td>
<td></td>
</tr>
<tr>
<td>Mode of transmission</td>
<td>Time for vaccination</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction
This chapter presents literature reviewed in relation with the specific objectives of the study which included the knowledge, attitude and practice of youths aged 15 – 24 years regarding Hepatitis B infection. The literature was presented commencing with the knowledge of youths aged 15 – 24 years regarding Hepatitis B infection.

2.2 Knowledge of youths aged 15 – 24 years regarding Hepatitis B infection
Lavanchy (2010) in their meta-analysis study about the worldwide epidemiology of HBV infection, disease burden and vaccine prevention showed that the majority 468 (65%) of youths aged 15 – 24 years interviewed in the study did not possess sufficient knowledge regarding Hepatitis B infection, the potential causes of Hepatitis B, how it was transmitted as well as its prevention using the Hep B vaccine. They had the knowledge that Hepatitis B is a sexually transmitted disease almost found every where in the world.

Villar et al, (2015) revealed in their randomized controlled trial about an update on hepatitis B and C virus diagnosis that among the community members surveyed, the majority 300 (79%) did not possess sufficient knowledge regarding Hepatitis B as well as transmission of the disease. Results showed that only 21% of the respondents were aware that unsafe/risky sexual practices were a route of transmission of Hepatitis B virus.

Dienstag (2015) revealed in his case-control study about Acute Viral Hepatitis that the majority of respondents 230 (60%) interviewed were not knowledgeable about Hepatitis B and transmission of Hepatitis B virus. Furthermore, very few respondents were aware of how Hepatitis B virus could be prevented which was attributed to lack of sensitization and health education about the disease and its prevention.

Another systematic review study by Bernal and Wendon (2013) about Acute Liver Failure noted that the majority of respondents 420 (59%) surveyed had poor level of knowledge about Hepatitis B as most reported never having heard of it as well as how the disease was prevented. Results showed that only 34% of the respondents were able to mention being pricked with a contaminated needle as well as being in close contact with a person with HBV as ways of transmitting Hepatitis B from person to person.
However, a case-control study by Rani, Yang and Nesbit (2009) about Hepatitis B control by 2012 in the Western Pacific region revealed that the majority of community members interviewed in the study 534 (68%) were fairly knowledgeable regarding Hepatitis B and how it could be prevented. Respondents were aware that the Hep B vaccine could be used to prevent infection with the disease if it was well utilized by those at risk of the disease.

Ochola et al, (2013) revealed in their cross-sectional, population-based survey about a high burden of hepatitis B infection in Northern Uganda among 790 respondents that 139/790 (17.6%) had hepatitis B infection and the majority 572/790 (72.4%) had poor levels of knowledge and awareness regarding hepatitis B infection. Furthermore, respondents were not aware that risky sexual practices such as unprotected sex enabled the virus to move freely from one to another through bodily fluids. This demonstrated the high prevalence of Hepatitis B infection in Uganda.

2.3 Attitude of youth aged between 15 – 24 years regarding Hepatitis B infection
Zheng et al, (2011) documented in their systematic review study about how chronic hepatitis B mothers should breastfeed that the majority of respondents 320 (61%) had positive attitudes regarding the prevention of Hepatitis B infection. The positive attitudes were attributed to regular sensitization and health education of mothers about Hepatitis B and how it could be prevented through vaccination.
Villar et al, (2015) mentioned in their cohort study (prospective observational study on the update on hepatitis B and C virus diagnosis that among the 400 respondents surveyed, 341 (85.3%) had positive attitudes towards using the Hep B vaccine for the prevention of Hepatitis B. However, respondents reported unsafe sex practices which increased their risk of exposure to the infection.

Pirillo, Bassani and Elena (2007) mentioned in retrospective survey to estimate the prevalence of hepatitis B (HBV) and C (HCV) infections among HIV-infected pregnant women in Kampala, Uganda and Kigali, Rwanda that among the 247 respondents surveyed, 200 (80.9%) had positive attitudes towards using the Hep B vaccine for the prevention of Hepatitis B.
Similar findings were echoed by Nakanjako et al, (2007) in their study about the acceptance of routine testing among adult patients at the medical emergency unit at a national referral hospital in Kampala, Uganda that most respondents 360 (71.2%) had positive attitudes regarding the prevention of Hepatitis B infection although a significant number 90 (25%) reported poor practices including concurrent involvement with multiple sexual partners which increase the risk of infection by Hepatitis B by 5 times.

2.4 Practices of youth aged between 15 – 24 years regarding hepatitis B infection
An empirical study about the global impact of vaccination against hepatitis B among 500 community members noted poor practices among the youth aged between 15 – 24 years regarding Hepatitis B infection. These included low rates of vaccination as well as risky sexual practices such as oral and anal sex among others (Zanetti, Van Damme and Shouval, 2008).

Stabinski et al, (2011) reported in their cross sectional study about Hepatitis B virus and sexual behavior in Rakai, Uganda that respondents had poor practices regarding Hepatitis B as they reported having unprotected sex with infected individuals which predisposed them to the infection. Demographic data and sera from 438 adult participants of the Rakai Health Sciences Program Cohort in Southwestern Uganda revealed that 181 (41%) had prevalent HBV infection while 21 (5%) were infected chronically. The prevalence of prevalent HBV infection was 55% in adults aged >50 years old, and 11% in persons under 20 years. In multivariable analysis, older age, HIV status, and serologic syphilis were significantly associated with prevalent HBV infection. Therefore vaccination against HBV, particularly susceptible adults with HIV or at risk of HIV/STDs should be a priority.

Dwivedi, Misra and Mishra (2011) revealed in a cross sectional study about sero-prevalence of hepatitis B infection during pregnancy and risk of perinatal transmission among 4000 pregnant women in Utter Pradesh, India that most respondents had poor practices which predisposed them to Hepatitis B infection. Among these practices included sharing of used needles, unprotected sexual intercourse among other practices. It was also noted in the study that the presence of other diseases such as chronic liver disease as well as kidney disease also promoted Hepatitis B.
Wiersma et al, (2011) documented in their multivariate study in Mexico about the treatment of chronic hepatitis B virus infection in resource-constrained settings among 550 respondents that most respondents had poor practices regarding Hepatitis B. This was evidenced by the fact that 34% reported injectable drug use, 42% reported having ever had unprotected sexual intercourse while HBV immunization was low at only 19%.

Mansour, Malick and Sidiya (2012) reported in their cross sectional study about the risk factors, and molecular epidemiology of hepatitis B and hepatitis delta virus among one thousand twenty pregnant women and 946 patients visiting for routine checkups were screened for HBV and HDV infection. In the pregnant women and patients cohorts, respectively, the prevalence of HBsAg (10.7% and 18.3%) and anti-HBcAb (66.3% and 76.5%) indicated high HBV endemicity. In multivariate analysis, exposure to HBV was significantly correlated with gender (males), and HDVAb positivity with age, gender and poor safety measures and practices while in pregnant women, exposure to HBV was significantly associated in multivariate analysis with education level, ethnicity, blood transfusion, and occupation.

Khamduang, Ngo-giang-huong and Gaudy-graffin (2013) mentioned in their cross sectional study about the prevalence, risk factors, and impact of isolated antibody to hepatitis B core antigen and occult hepatitis B virus infection among 1812 HIV-infected pregnant women in Thailand, logistic regression analysis was used to identify poor practices which predisposed to Hepatitis B infection. Results obtained showed that practices such as having multiple concurrent sexual partners as well as oral and unprotected vaginal and anal sex were all found to be factors contributing to Hepatitis B infection.

Rujumba and Kwiringira (2010) documented in their cross sectional qualitative study about the interface of culture, insecurity and HIV and AIDS: lessons from displaced communities conducted in four sub-counties of Pader district Uganda including (Pajule, Acholi Bur, Awere and PaderKilak) among 12 focus groups (FGDs) held separately; 2 FGDs with men, 6 FGDs with women, and 4 FGDs with the youth (2 for each sex) as well as 15 key informant interviews with; 3 health workers, 4 community leaders at village and parish levels, 3 persons living with HIV and 5 district officials, most respondents had poor practices regarding hepatitis B. It was noted that the majority of respondents 65% did not ensure safe sex practices. Researchers further noted that most community members did not take Hepatitis B and HIV/AIDS with most reporting that their main concerns in the returnee villages were lack of water, seeds, latrines and fear that insecurity re-occurred but not these diseases.
CHAPTER THREE: METHODOLOGY

3.1 Introduction
The methods that were used to carry out this study including the study design, the study setting, population, inclusion and exclusion criteria, sample size estimation, variables, data collection, data management and analysis, quality control and ethical considerations are described in this chapter. The practical procedures for carrying out the study. It gave details of the research methods adopted, including the research design, study population, sampling procedure, sample size, data sources, data collection methods, data processing, data analysis and presentation of findings.

3.2 Study Design
This is a cross sectional descriptive study that will rely on quantitative methods of data collection. This design was chosen because data will be collected at one point in time due to the time constraint. This study will be carried out in Adjumani District in August 2016. The study will be conducted in three randomly selected sub-counties. The study will be carried out in three secondary schools and one school per sub-county. Names of sub-counties will be written on pieces of paper and put in a box shaken well and then papers from the box picked randomly three times, the names of the sub-counties picked randomly will be the ones in which the study is carried out.

3.3 Data sources
3.3.1 Primary sources of data
Primary data was collected using questionnaires from respondents that were students from 3 selected secondary schools in Adjumani District. This enabled them to reveal their knowledge, attitude and practice of youth aged between 15 – 24 years regarding Hepatitis B infection.

3.4 Population
3.4.1 Target population
The population included all youths aged 15-24 years Adjumani district.
3.4.2 Accessible population
Secondary school students of the selected schools of Adjumani district
3.4.2 Study population
The study population were students of Adjumani district who met the inclusion criteria of this study.

3.5 Sample Size Determination
The size of the sample employed in this research was adopted from the formula of Kish and Leslie to calculate the number of the research participants.

\[ n = \frac{z^2 p (1-p)}{e^2} \]

Where;
\( n \): is the sample size required
\( z \): is the confidence interval at 95% (statistical value = 1.96)
\( p \): is the prevalence of HBV infection in Adjumani district 11% (0.11)
\( e \): is the marginal errors at 5% (0.05)
\[ n = \frac{1.96^2 \times 0.11 \times (1-0.11)}{0.05^2} \]
\[ n = 150.43704 \]
\[ n = 150 \]
Therefore the sample size was 150 participants

3.6 Sampling Technique
The study was conducted using purposive sampling technique because this technique was cheap to apply and allows random selection of respondents basing on their accessibility, then simple random sampling technique.

3.7 Eligibility criteria
3.7.1 Inclusion criteria
The research included all the secondary school students aged 15-24 years in Adjumani district who consented to take part in the study and were attending the selected schools

3.8 Sampling Procedure
The researcher will use simple random sampling technique to carry out the study. The study will be conducted in three randomly selected sub-counties. The study will be carried out in three secondary schools. One school per sub-county. to select 50 participants per school to
participate in the study. The researcher will write all the names of the schools in each sub-county put them in a box, shake the box well, randomly pick papers with names, and the name of the schools picked will be chosen to participate in the study. Words will be written on paper indicating YES and NO, each respondent picks one paper from the enclosed box and the respondent who picks a paper with the word YES will be requested to participate in the study. This will continue until the required number of participants are achieved.

**3.8.1 Eligibility criteria**

Inclusion criteria, The researcher included all the secondary school student aged 15-24 year in Adjumani District consented to take part in the study are attending in the selected schools. All the students who were found sick on that day did not take part in the study.

Variables

Independent variables

Knowledge on

Heard about hepatitis virus

Causes of hepatitis B virus

Risk factors of Hepatitis B virus

Signs and symptoms of HBV

Hepatitis B virus screening

Preventive measures

Mode of transmission

Attitude on

Being at risk

Cultural beliefs

Religious beliefs

Ability to seek medical help

Confidence to receive the vaccine

Possibility of the HBV positive results

Cost of vaccination

Dependent Variable

Prevention Practices on;

Sharing of sharps/injection instruments
Protected sex
Contact with body fluids
Prevention of mother to child transmission
Post exposure prophylaxis
Immunization

3.9 Data collection methods
3.9.1 Data collection tool
The researcher collected quantitative primary data obtained from the respondents using a semi structured self-administered questionnaires.

3.9.2 Describe tool
Interview were conducted using Semi structured self-administered questionnaires to obtain the quantitative data. This tool contained closed ended questions that respondents filled.
Research assistants
The researcher conducted this research assisted by the research assistants who participated in the data collection. The research assistants will be recruited basing on their academic qualifications specifically advanced level for this study and trained to an able them acquire skills in order to appropriately administer the questionnaires that will be designed.

3.9.3 Pretesting of tools
The semi structured questionnaires will be pretested in the sub county bordering the study areas since it consist of people of similar character with those in who will participate in the study which is Ofua sub-county and the student who will participate will be students of Ofua SS. A total of 15 respondents will be interviewed during pretesting of the tool. The purpose of pretesting the tool is to ensure accuracy of the data collected and minimizing the errors as these checks for validity of the data.
3.10 Data management methods
The questionnaires were checked after data collection by researcher assisted and research assistants to ensure that all questionnaires have been answered well and properly kept. The data was coded to increase accuracy. Data entry and analysis was carried out using SPSS version 20. Descriptive summary, statistics such as univariate, bivariate and multivariate analysis was done and social demographic data was computed for percentages and compared.

3.11 Data Analysis plan
Data will be entered into SPSS version 20 for data analysis after which the analyzed data will be transferred to Microsoft Excel version 2010 for presentation of results in graphs and tables.

3.12 Quality control method
Quantitative data using semi structured questionnaire which will be collected will be not translated to the local languages because the participants in secondary school students who understood the language used in the questionnaire.

The questionnaire will be pretested in the nearby sub country to ensure accuracy of the data collected and minimizing the error. Research assistants will be trained to acquire skills on how to conduct the interview. Data quality will be ensured by giving identification codes during data entry.

3.13 Ethical considerations
Approval for study will be got from the school of Nursing of IHSU, from the District Health Office, Adjumani, District Education Office, Adjumani district, Head teacher of respective schools followed by informed consent from all participants. Confidentiality of information, ability to withdraw from the study and privacy will be maintained at all levels. The consent of the respondents will be obtained after the purpose and objectives of the study has been identified and well explained to the respondents. The study is intended purely to be for academic purposes and all the information given will be treated with confidentiality and numbers instead of names will be used to identify the respondents.
3.14 Dissemination of findings

After completion of the study, the findings were made into 5 copies of the report and were disseminated as follows:

- Two copies will be given to IHSU
- A copy will be given to the administrations of the schools
- The DHO of Adjumani District
- The researcher
CHAPTER FOUR: RESULTS

4.1 Introduction
This chapter presented results from the field from a sample size of 150 respondents. The researcher gathered data using self-administered questionnaires. The findings were analyzed and presented in form of frequency tables, graphs and plain text. The findings were in reference to the research objectives and questions and it is presented commencing with the demographic and social characteristics of respondents.

4.2 Socio demographic characteristics

Table 1: Socio demographic characteristics of respondents

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>FREQUENCY (N=150)</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents Religion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protestant</td>
<td>40</td>
<td>26.7</td>
</tr>
<tr>
<td>Catholic</td>
<td>80</td>
<td>53.3</td>
</tr>
<tr>
<td>Moslem</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Place of residence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>Urban</td>
<td>90</td>
<td>60</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>90</td>
<td>60</td>
</tr>
<tr>
<td>Female</td>
<td>60</td>
<td>40</td>
</tr>
</tbody>
</table>

Results showed that 80 (53.3%) were Catholic, 40 (26.7%) were Protestant. The majority of respondents 90 (60%) resided in urban areas and most respondents 90 (60%) were male as noted in the table above.
### 4.3 Knowledge of youth aged 15 – 24 years regarding Hepatitis B infection

Table 2: Knowledge of youth aged 15 – 24 years regarding Hepatitis B infection

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>FREQUENCY (N=150)</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever heard of Hepatitis B Virus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>150</td>
<td>100</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Whether one could conduct Hepatitis B Virus through unsafe sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>120</td>
<td>80</td>
</tr>
<tr>
<td>No</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Whether one can get Hepatitis B infection by sharing tooth brushes, sharps and razors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>90</td>
<td>60</td>
</tr>
<tr>
<td>No</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>Whether newborn baby can get Hepatitis B infection from their mothers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>90</td>
<td>60</td>
</tr>
<tr>
<td>No</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>Whether one can get Hepatitis B infection by sharing food plus drinks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>95</td>
<td>63.3</td>
</tr>
<tr>
<td>No</td>
<td>65</td>
<td>36.7</td>
</tr>
<tr>
<td>Whether one can get Hepatitis B infection from unsterile medical equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>58</td>
<td>38.7</td>
</tr>
<tr>
<td>No</td>
<td>92</td>
<td>61.3</td>
</tr>
<tr>
<td>Whether one can get Hepatitis B infection by shaking hands</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>50</td>
<td>33.3</td>
</tr>
<tr>
<td>No</td>
<td>100</td>
<td>66.7</td>
</tr>
<tr>
<td>Whether people with Hepatitis B infection develop liver cancer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>130</td>
<td>86.7</td>
</tr>
<tr>
<td>No</td>
<td>20</td>
<td>13.3</td>
</tr>
<tr>
<td>Whether people could have Hepatitis B infection for life</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>110</td>
<td>73.3</td>
</tr>
<tr>
<td>No</td>
<td>40</td>
<td>26.7</td>
</tr>
<tr>
<td>Whether people with Hepatitis B infection develop liver disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>97</td>
<td>64.7</td>
</tr>
<tr>
<td>No</td>
<td>53</td>
<td>35.3</td>
</tr>
<tr>
<td>Whether someone with Hepatitis B infection looked and felt healthy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>No</td>
<td>90</td>
<td>60</td>
</tr>
<tr>
<td>Whether there was any treatment for Hepatitis B infection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>100</td>
<td>66.7</td>
</tr>
<tr>
<td>No</td>
<td>50</td>
<td>33.3</td>
</tr>
</tbody>
</table>
All of the respondents 150 (100%) had ever heard of Hepatitis B Virus. The majority of respondents 120 (80%) agreed that one could contract Hepatitis B Virus through unsafe sex while the least 30 (20%) disagreed.

Most respondents 90 (60%) agreed that one can get Hepatitis B infection by sharing tooth brushes, sharps and razors. Results showed that 90 (60%) respondents agreed that newborn baby can get Hepatitis B infection from their mothers.

The majority of respondents 92 (63.1%) disagreed that one can get Hepatitis B infection from unsterile medical equipment.

Most respondents 100 (66.7%) disagreed that one can get Hepatitis B infection by shaking hands. The majority of respondents 130 (86.7%) agreed that people with Hepatitis B infection can develop liver cancer.

Results showed that 110 (73.3%) respondents agreed that people could have Hepatitis B infection for life. The majority of respondents 97 (64.7%) agreed that people with Hepatitis B infection can develop liver disease.

The majority of respondents 90 (60%) disagreed that someone with Hepatitis B infection looked and felt healthy. Most respondents 100 (66.7%) agreed that there was treatment for Hepatitis B infection.
### 4.4 Attitude of youth aged 15 – 24 years regarding Hepatitis B infection

*Table 3: Attitude of youth aged 15 – 24 years regarding Hepatitis B infection*

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>FREQUENCY (N=150)</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Whether Hepatitis B is not a dangerous disease</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>20</td>
<td>13</td>
</tr>
<tr>
<td>Agree</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Disagree</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>40</td>
<td>27</td>
</tr>
<tr>
<td><strong>Hepatitis B Virus infection can be prevented</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>75</td>
<td>50</td>
</tr>
<tr>
<td>Disagree</td>
<td>35</td>
<td>23.3</td>
</tr>
<tr>
<td>Agree</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>10</td>
<td>6.7</td>
</tr>
<tr>
<td><strong>Whether respondents can’t be protected from Hepatitis B infection through Hepatitis B vaccine</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>50</td>
<td>33.3</td>
</tr>
<tr>
<td>Disagree</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>Agree</td>
<td>10</td>
<td>6.7</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td><strong>Whether it is expensive to get Hepatitis B vaccine</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disagree</td>
<td>10</td>
<td>6.7</td>
</tr>
<tr>
<td>Neutral/Not sure</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Agree</td>
<td>20</td>
<td>13.3</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>90</td>
<td>60</td>
</tr>
<tr>
<td><strong>Whether respondents feared to get a positive result for Hepatitis B virus infection</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly agree</td>
<td>100</td>
<td>67</td>
</tr>
<tr>
<td>Disagree</td>
<td>20</td>
<td>13</td>
</tr>
<tr>
<td>Agree</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td><strong>Whether respondents did not have time to go for Hepatitis B virus screening</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>10</td>
<td>6.7</td>
</tr>
<tr>
<td>Disagree</td>
<td>40</td>
<td>26.7</td>
</tr>
<tr>
<td>Agree</td>
<td>80</td>
<td>53.3</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>20</td>
<td>13.3</td>
</tr>
<tr>
<td><strong>Whether respondents perceived themselves to be at risk of Hepatitis B virus infection</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>90</td>
<td>60</td>
</tr>
<tr>
<td>Disagree</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Neutral/Not sure</td>
<td>10</td>
<td>6.7</td>
</tr>
<tr>
<td>Agree</td>
<td>20</td>
<td>13.3</td>
</tr>
</tbody>
</table>

Most respondents 60 (40%) disagreed that Hepatitis B is not a dangerous disease. Half of the respondents 75 (50%) strongly disagreed that Hepatitis B Virus infection can be prevented.
Results showed that 60 (40%) disagreed that they can’t be protected from Hepatitis B infection through Hepatitis B vaccine, 50 (33.3%) strongly disagreed, 30 (20%) agreed while the least 10 (6.7%) were neutral/not sure.

The majority of respondents 90 (60%) strongly agreed that it was expensive to get Hepatitis B vaccine. Most respondents 100 (67%) strongly agreed that they feared to get a positive result for Hepatitis B virus infection.

Findings showed that 80 (53.3%) agreed that they did not have time to go for Hepatitis B virus screening. The majority of respondents 90 (60%) strongly disagreed that they perceived themselves to be at risk of Hepatitis B virus infection.

### 4.5 Practices of youth aged 15 – 24 years regarding Hepatitis B infection

*Table 4: Practices of youth aged 15 – 24 years regarding Hepatitis B infection*

<table>
<thead>
<tr>
<th>Variables</th>
<th>FREQUENCY (N=150)</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever been immunized against Hepatitis B Virus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>50</td>
<td>33.3</td>
</tr>
<tr>
<td>No</td>
<td>100</td>
<td>66.7</td>
</tr>
<tr>
<td>Ever been screened for HBV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>No</td>
<td>135</td>
<td>90</td>
</tr>
<tr>
<td>Number of doses respondents received</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 dose</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>2 doses</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td>Ever had unprotected sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>90</td>
<td>60</td>
</tr>
<tr>
<td>No</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>Whether respondents always asked saloon barbers to disinfect or replace machine blades</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>80</td>
<td>53.3</td>
</tr>
<tr>
<td>No</td>
<td>70</td>
<td>46.7</td>
</tr>
<tr>
<td>Ever practiced any form of body scarification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>85</td>
<td>56.7</td>
</tr>
<tr>
<td>No</td>
<td>65</td>
<td>43.3</td>
</tr>
<tr>
<td>Ever shared a razor blade with any family members</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>120</td>
<td>80</td>
</tr>
<tr>
<td>No</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Ever shared bathing towels or handkerchiefs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>90</td>
<td>60</td>
</tr>
<tr>
<td>No</td>
<td>60</td>
<td>40</td>
</tr>
</tbody>
</table>

The majority of respondents 100 (66.7%) had never been immunized against Hepatitis B Virus. The majority of respondents 135 (90%) had never been screened for HBV. Out of the 50 respondents who had ever been immunized against Hepatitis B Virus, most 30 (60%) reported receiving 2 doses.
Most respondents 90 (60%) had ever had unprotected sex. More than half of the respondents 80 (53.3%) always asked saloon barbers to disinfect or replace machine blades.

The majority of respondents 85 (56.7%) had ever practiced some form of body scarification. Results showed that 120 (80%) had ever shared a razor blade with family members. The majority of respondents 90 (60%) had ever shared bathing towels or handkerchiefs.
CHAPTER FIVE: DISCUSSION OF RESULTS

5.1 Introduction
This chapter presented the discussion of findings, conclusions and recommendations of the study which were obtained after data analysis.

5.1.1 Discussion

5.1.2 Knowledge of youth aged 15 – 24 years regarding Hepatitis B infection
Generally the youths had knowledge on Hepatitis B viral infection, all of the respondents had ever heard of Hepatitis B Virus which demonstrated that all were fully aware of the disease and hence greatly placed to give good answers to the questions asked during the study.

The majority of respondents agreed that one could contract Hepatitis B Virus through unsafe sex which implied that respondents were knowledgeable and aware of one of the primary routes of Hepatitis B transmission. This study was contrary to Lavanchy (2010) whose meta-analysis study about the worldwide epidemiology of HBV infection, disease burden and vaccine prevention that the majority 468 (65%) of youths aged 15 – 24 years interviewed in the study did not possess sufficient knowledge regarding Hepatitis B infection, the potential causes of Hepatitis B, how it was transmitted as well as its prevention using the Hep B vaccine. This could be due to lack of interest of the youth in further researching more on health related issues.

Most respondents agreed that one can get Hepatitis B infection by sharing tooth brushes, sharps and razors which implied that since most respondents were aware of the risks of these practices, they would put in place measures to ensure they avoid these practices. This study was in line with Villar et al, (2015) who revealed in their randomized controlled trial about an update on hepatitis B and C virus diagnosis that among the community members surveyed, the majority 300 (79%) did not possess sufficient knowledge regarding Hepatitis B as well as transmission of the disease. Results showed that only 21% of the respondents were aware that unsafe/risky sexual practices were a route of transmission of Hepatitis B virus.

Results showed that most of the respondents agreed that newborn baby can get Hepatitis B infection from their mothers. This study was in line with Mansour, Malick and Sidiya (2012) who reported in their cross sectional study about the risk factors, and molecular epidemiology
of hepatitis B and hepatitis delta virus among one thousand twenty pregnant women and 946 patients visiting for routine checkups were screened for HBV and HDV infection. In the pregnant women and patients cohorts, respectively, the prevalence of HBsAg (10.7% and 18.3%) and anti-HBcAb (66.3% and 76.5%) indicated high HBV endemicity. In multivariate analysis, exposure to HBV was significantly correlated with gender (males), and HDVAb positivity with age, gender and poor safety measures and practices while in pregnant women, exposure to HBV was significantly associated in multivariate analysis with education level, ethnicity, blood transfusion, and occupation. The finding in he male participants could be due to male involvement in homosexual act, in pregnant woman could be due to failure attend ante-natal care clinics and there do not access information on Hepatitis B.

A third of the respondents disagreed that one can get Hepatitis B infection from unsterilized medical equipment. This demonstrated that most respondents were aware of the various ways through which Hepatitis B was spread/transmitted. This study was in agreement with another systematic review study by Bernal and Wendon (2013) about Acute Liver Failure noted that the majority of respondents 420 (59%) surveyed had poor level of knowledge about Hepatitis B as most reported never having heard of it as well as how the disease was prevented. Results showed that only 34% of the respondents were able to mention being pricked with a contaminated needle as well as being in close contact with a person with HBV as ways of transmitting Hepatitis B from person to person.

Most respondents disagreed that one can get Hepatitis B infection by shaking hands which demonstrated that respondents were aware of the various ways Hepatitis was transmitted and hence did not consider shaking of hands as a way of transmitting the disease. This study finding was opposed by Dienstag (2015) who revealed in his case-control study about Acute Viral Hepatitis that the majority of respondents 230 (60%) interviewed were not knowledgeable about Hepatitis B and transmission of Hepatitis B virus. Furthermore, very few respondents were aware of how Hepatitis B virus could be prevented which was attributed to lack of sensitization and health education about the disease and its prevention.

Almost all the agreed that people with Hepatitis B infection can develop liver cancer and also agreed that people with Hepatitis B infection can develop liver disease which demonstrated that respondents were fully aware of the potential dangers of Hepatitis B infection.

A third of respondents agreed that people could have Hepatitis B infection for life, however, most respondents disagreed that someone with Hepatitis B infection looked and felt healthy
which implied that although respondents were aware that an individual may have Hepatitis B infection for a long time, they would not look and feel healthy. However, these faulty misconceptions about the disease could increase respondents’ exposure to the disease. Most respondents agreed that there was treatment for Hepatitis B infection which demonstrated that respondents were fully aware of the availability of the Hepatitis B vaccines which could improve uptake of the vaccines. The fact that the respondents were knowledgeable of hepatitis B and its transmission indicated that they had access to information on hepatitis B. The health workers should therefore keep up and continue with health education on Hepatitis B because its a preventable disease.

5.1.3 Attitude of youth aged 15 – 24 years regarding Hepatitis B infection

Generally the respondents had poor attitude towards Hepatitis B prevention. The study found out that Less than half of the respondents disagreed that Hepatitis B is not a dangerous disease, which implied that respondents were fully aware of the dangers and risks posed by the disease but just had poor attitude towards its prevention. and would hence put in place measures to ensure the prevention of this disease if more effort

Half of the respondents strongly disagreed that Hepatitis B Virus infection can be prevented which demonstrated that respondents had negative attitudes regarding the prevention of Hepatitis B infection. This study finding was contrary to findings by Nakanjako et al, (2007) whose study about the acceptance of routine testing among adult patients at the medical emergency unit at a national referral hospital in Kampala, Uganda that most respondents 360 (71.2%) had positive attitudes regarding the prevention of Hepatitis B infection although a third of respondents reported poor practices including concurrent involvement with multiple sexual partners which increase the risk of infection by Hepatitis B by 5 times. This contrast could be due the difference in location of the respondents. The respondents in the study are located in a rura town while those in Nakanjakos study are located in capital city

Results showed that a quarter of respondents disagreed that they can’t be protected from Hepatitis B infection through Hepatitis B vaccine, which demonstrated that most respondents remained unaware of the efficacy of the Hepatitis B vaccine and this may also affect uptake of the vaccines. This study was in contrast with a case-control study by Rani, Yang and Nesbit (2009) about Hepatitis B control by 2012 in the Western Pacific region revealed that
the majority of community members interviewed in the study 534 (68%) were fairly knowledgeable regarding Hepatitis B and how it could be prevented. Respondents were aware that the Hep B vaccine could be used to prevent infection with the disease if it was well utilized by those at risk of the disease.

Three quarters of respondents strongly agreed that it was expensive to get Hepatitis B vaccine, strongly agreed that they feared to get a positive result for Hepatitis B virus infection, agreed that they did not have time to go for Hepatitis B virus screening all of which demonstrated negative attitudes towards the prevention of Hepatitis B and also greatly predisposed respondents to the risk of Hepatitis B infection.

More than half of the respondents strongly disagreed that they perceived themselves to be at risk of Hepatitis B virus infection, which demonstrated that most respondents had wrong perceptions about their exposure to Hepatitis B infection yet most were sexually active and had ever had unprotected sex. This study was opposed by Villar et al, (2015) who mentioned in their cohort study (prospective observational study on the update on hepatitis B and C virus diagnosis) that among the 400 respondents surveyed, 341 (85.3%) had positive attitudes towards using the Hep B vaccine for the prevention of Hepatitis B. However, respondents reported unsafe sex practices which increased their risk of exposure to the infection. The implication of the negative attitude toward Hepatitis B prevention could influence decision making in matters concerning hepatitis B virus prevention practices. Therefore the health worker should put more effort in changing the attitude of the people toward Hepatitis B prevention in the community.

5.1.4 Practices of youth aged 15 – 24 years regarding Hepatitis B infection

This study revealed poor practices toward Hepatitis B prevention among the youths. The majority of respondents had never been immunized against Hepatitis B Virus which implied that due to lack of immunization against this disease, respondents' bodies would not be protected and able to fight against the disease. This study was in line with Ott, Stevens and Wiersma (2012) who noted in their empirical study in Brazil about the risk of perinatal hepatitis B virus transmission: hepatitis B e antigen (HBeAg) prevalence estimates for all world regions that respondents had poor practices regarding Hepatitis B infection. The researchers observed that lack of access to health facilities and screening services, older age, incomplete immunization and unsafe sex with infected partners all contributed to Hepatitis B infection.
The majority of respondents 135 (90%) had never been screened for HBV which implied that many respondents may unknowingly be carriers of the disease due to poor use of screening services. This study was in line with an empirical study about the global impact of vaccination against hepatitis B among 500 community members noted poor practices among the youth aged between 15 – 24 years regarding Hepatitis B infection. These included low rates of vaccination as well as risky sexual practices such as oral and anal sex among others (Zanetti, Van Damme and Shouval, 2008).

More than half of the respondents had ever had unprotected sex which implied that due to the high prevalence of unsafe sex practices such as unprotected sex, respondents were greatly exposed to the risk of Hepatitis B infection. This study was in line with Ochola et al, (2013) revealed in their cross-sectional, population-based survey about a high burden of hepatitis B infection in Northern Uganda among 790 respondents that 139/790 (17.6%) had hepatitis B infection and the majority 572/790 (72.4%) had poor levels of knowledge and awareness regarding hepatitis B infection. Furthermore, respondents were not aware that risky sexual practices such as unprotected sex enabled the virus to move freely from one to another through bodily fluids. This demonstrated the high prevalence of Hepatitis B infection in Uganda.

More than half of the respondents always asked saloon barbers to disinfect or replace machine blades which was a good practice as it helped prevent transmission of Hepatitis infection from the sharp equipment used in the salons.

The majority of respondents had ever practiced some form of body scarification which implied that respondents who indulged in this were at greater risk of exposure to the infection especially due to the use of unsterilized sharp equipment used on multiple customers.

Results showed that most respondents had ever shared a razor blade with family members. This implied that if one family member had Hepatitis B Virus, then other family members who shared with them razor blades and other sharp objects stood a high risk of exposure to Hepatitis B infection. This study finding was consistent with Mbaawuaga, Enenebeaku and Okopi (2008) who revealed in their study about Hepatitis B virus (HBV) infection among three hundred (300) pregnant women in Makurdi, Nigeria aged 18 to 49 years, results showed that most respondents 69% had poor practices regarding Hepatitis B infection. It was noted
that some of the poor practices included sharing of used needles, razors and other sharp objects with infected people which predisposed to the infection.

Most respondents had ever shared bathing towels or handkerchiefs. This implied that respondents were exposed to the risk of Hepatitis B infection through these practices. This study was in line with Mbaawuaga, Enenebeaku and Okopi (2008) revealed in their study about Hepatitis B virus (HBV) infection among three hundred (300) pregnant women in Makurdi, Nigeria aged 18 to 49 years, results showed that most respondents 69% had poor practices regarding Hepatitis B infection. It was noted that some of the poor practices included sharing of used needles, razors and other sharp objects with infected people which predisposed to the infection.

The implication of poor practices towards Hepatitis B prevention is that there will be increase in Hepatitis B prevalences in the District and more people could suffer from the disease in the District. Therefore the health care providers, the District leaders, and the community leaders at large should put in more effort and work together, give information on good practices towards Hepatitis B prevention to individuals, families, and the community members so as prevent Hepatitis B Virus spread in the District.
CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusion
Generally the respondents had good knowledge on Hepatitis B viral infection and its primary modes of transmission. The study found out that respondents were knowledgeable regarding Hepatitis B infection.

However, respondents had poor attitude towards Hepatitis B prevention some of the respondents expressed fear for positive results therefore could not go for Hepatitis B tests, others claimed Hepatitis vaccine was expensive to afford ,others just had no time to go to the health facility for checkup and others and others stated cultural and religious barriers as limitations to Hepatitis B infection prevention.

The study also found that the respondents had very poor practices regarding Hepatitis B infection indicated by high levels of unsafe sex practices, common scarification practices, sharing of sharps low uptake of immunization against Hepatitis B and having contact with body fluids.

6.2 Recommendations
6.2.1 Recommendations to the health workers in Adjumani District
Health workers in the district should endeavor to sensitize and health educate youth about the potential dangers of Hepatitis B infection as well as what they could do to avoid it.
Health workers should further sensitize youths about the importance and need for regular screening for Hepatitis B as well as the importance of getting immunized with the HBV vaccine.
There is also need to sensitize and health educate youths about the importance of ensuring safe sex, avoiding body scarring and sharing of sharp objects which exposes one to Hepatitis B infection

6.2.2 Recommendations for youth in and the community of Adjumani District
Youths in Adjumani who are sexually active should ensure that they avoid unsafe sex practices in an effort to avoid infection with Hepatitis B as well as other sexually transmitted diseases.
Youths should endeavor to listen to and take part in health talks in the community on Hepatitis B on radio and television programs regularly to get information on Hepatitis B infection transmission and prevention.
Youths should also ensure that they get fully immunized with the HBV vaccine as this reduces their risk of exposure to Hepatitis B infection.

6.3 Further areas of researcher
More should be researched on knowledge, attitude and practices of the youths in Hepatitis B prevention and studies on factors influencing uptake of Hepatitis B prevention practices should be done in the Northern Region.
REFERENCES


APPENDIX I: CONSENT FORM

My name is Favour Harriet, a student of International Health Sciences University and I am carrying out a study to assess the knowledge, attitude and practice of youth aged between 15-24 years regarding Hepatitis B infection in Adjumani District. You have voluntarily consented to participate in the study and all the information you give will be kept confidential. You are under no obligation to participate in the study, and refusal to participate will not affect you in any way.
APPENDIX II: QUESTIONNAIRE

Instructions
Please endeavor to respond to all questions asked
Please answer as accurately as possible to enhance data quality

SECTION A: Social Demographic factors
3. What is your religion?
   Protestant ☐ Catholic ☐ Moslem ☐
   Others (Specify)………………………………………..

4. Place of residence Rural ☐ Urban ☐

5. Gender
   a. Male ☐
   b. Female ☐

SECTION B: Knowledge
1. Have you ever heard of hepatitis B Virus? (1)Yes ☐ (2) No ☐
2. Can one conduct Hepatitis BV infection through unsafe sex? (1)Yes ☐ (2) No ☐
3. Can one get Hepatitis BV infection by sharing tooth brushes, sharps & razors? (1)Yes ☐ (2) No ☐
4. Can new born baby get Hepatitis B V infection from their mothers? (1)Yes ☐ (2) No ☐
5. Can one get Hepatitis BV infection by sharing food plus drinks? (1)Yes ☐ (2) No ☐
6. Can people get Hepatitis BV infection from unsterile medical equipment? (1)Yes ☐ (2) No ☐
7. Can people get Hepatitis BV infection by shaking hands? (1)Yes ☐ (2) No ☐
8. Can people with Hepatitis BV infection develop liver cancer? (1)Yes ☐ (2) No ☐
9. Can people have Hepatitis BV infection for life? (1)Yes ☐ (2) No ☐
10. Can people with Hepatitis BV infection develop liver disease? (1)Yes ☐ (2) No ☐
11. Can someone have Hepatitis BV infection but look and feel healthy? (1)Yes ☐ (2) No ☐
12. Is there any treatment for Hepatitis B V infection? (1)Yes ☐ (2) No ☐

SECTION C: Attitudes
13. Hepatitis B infection is not a dangerous disease
   (1) Strongly disagree ☐
   (2) Disagree ☐
   (3) Neutral/Not sure ☐
   (4) Agree ☐
   (5) Strongly agree ☐
14. Hepatitis B Virus infection can be prevented
   (1) Strongly disagree  
   (2) Disagree  
   (3) Neutral/Not sure  
   (4) Agree  
   (5) Strongly agree  

15. You cannot be protected from hepatitis B infection through getting hepatitis B vaccine
   (1) Strongly disagree  
   (2) Disagree  
   (3) Neutral/Not sure  
   (4) Agree  
   (5) Strongly agree  

16. It is expensive to get hepatitis B vaccine
   (1) Strongly disagree  
   (2) Disagree  
   (3) Neutral/Not sure  
   (4) Agree  
   (5) Strongly agree  

17. I fear to get a positive result for hepatitis B Virus infection
   (1) Strongly disagree  
   (2) Disagree  
   (3) Neutral/Not sure  
   (4) Agree  
   (5) Strongly agree  

18. I do not have time to go for Hepatitis B Virus screening
   (1) Strongly disagree  
   (2) Disagree  
   (3) Neutral/Not sure  
   (4) Agree  
   (5) Strongly agree  

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19. Do you perceive yourself to be at risk of hepatitis B Virus infection?
(1) Strongly disagree  
(2) Disagree  
(3) Neutral/Not sure  
(4) Agree  
(5) Strongly agree  

SECTION D: Practices
20. Have you ever been immunized against Hepatitis B virus?
(1) Yes  
(2) No  

21. Have you ever been screened for HBV?
(1) Yes  
(2) No  
22. If yes, how many doses have you received?
1  
2  
3  

23. Have you ever had unprotected sex?
(1) Yes  
(2) No  

24. Do you always ask a saloon barber to disinfect or replace machine blade?
(1) Yes  
(2) No  

25. Have you ever practiced any form of body scarification?
(1) Yes  
(2) No  

25. Have you ever shared a razor blade with any of your family members?
(1) Yes  
(2) No  

26. Have you ever shared bathing towels, handkerchief with any one?
(1) Yes  
(2) No  

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Dear Sir/Madam,

RE: ASSISTANCE FOR RESEARCH

Greetings from International Health Sciences University.

This is to introduce to you **Favour Harriet**, Reg. No. **2013-BNS-TU-019** who is a student of our University. As part of the requirements for the award of a Bachelors degree in Nursing of our University, the student is required to carry out research in partial fulfillment of her award.

Her topic of research is: **Knowledge, Attitude and Practices of Youths Aged Between 15-24 Years Regarding Hepatitis B Infection In Adjumani District.**

This therefore is to kindly request you to render the student assistance as may be necessary for her research.

I, and indeed the entire University are grateful in advance for all assistance that will be accorded to our student.

Sincerely Yours,

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Ms. Agwang Agnes
Ag. Dean, School of Nursing

The International Health Sciences University
P.O. Box 7782 Kampala – Uganda
(+256) 0312 307400 email: aagwang@ihsu.ac.ug
web: www.ihsu.ac.ug
APPENDIX IV: CORRESPONDENCE LETTERS

ST. MARY ASSUMPTA GIRLS S.S.

Our Ref: .................
Your Ref: 

Re: ACCEPTANCE LETTER

Dear Fever Harriet following your request to collect data from this school, I am pleased to inform you that, you have been granted permission to collect the data from the students as your respondents.

You are expected not to interfere with their lessons and therefore ensure that you meet them either during breaks and or after classes.

I wish you good time while here.

ST. MARY ASSUMPTA S.S.
P.O. BOX 12,
ADJUMANI
website: http://www.smagss.wordpress.com
E-mail: stmaryassumptaadj@gmail.com

13 AUG 2016

Tracy Moro
For Head Teacher
0782692291/0772655348
Dear Fever Harriet,

RE: ACCEPTANCE LETTER

I am delighted to inform you that your request to collect data on Hepatitis from our students as respondents has been granted. This shall be carried out with the help of D.O.S to ensure that normal lessons are not interfered with.

Yours in service

HEAD TEACHER
RE: ACCEPTANCE LETTER

Dear Fever Harriet in response to your request to collect data from this school, I am pleased to inform you that you have been granted permission to collect the data from the students who are your respondents. You are to ensure that lessons are not interrupted by your data collection in the school.

Yours in service,

Head teacher