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Knowledge, Attitude, and Prevention Practices towards Hepatitis B among Grade 9 Students

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ABSTRACT

Hepatitis-B is a life threatening infection affecting 0.6 million deaths annually. The prevalence of Hepatitis-B still exists in the Philippines despite of the availability of prophylaxis vaccine; there is still insufficiency of information about Hepatitis B. The study was to determine the knowledge, attitudes and prevention practices about Hepatitis B among Grade-9 student. A mixed method was used in collecting and analyzing data of 100 Grade 9 students. Data were gathered by means of survey questionnaire and group interview. The validated questionnaire contains 32 for the knowledge, attitude and prevention practices. Descriptive statistics were used for determining patients' demographic profile and mean scores for knowledge, attitude and practices of students toward hepatitis B. Data revealed that overall of the respondents have moderately knowledgeable, moderately prevention practices and moderate attitudes towards hepatitis B and also revealed that there's no significant difference in attitude and practices between male and female and there is significant difference in knowledge between male and female. The findings of this study indicate that Grade 9 students lack a basic understanding of Hepatitis B. This can result in the further spread of

Hepatitis-B infection. Intensive health education should be provided in school and communities.

Keywords: Hepatitis B, knowledge, attitude, practices and health education.

INTRODUCTION

The Hepatitis B virus is widely spread in the Philippines; a vaccine against Hepatitis B are available and transmission can be prevented but despite of the availability of vaccines there are still number of people who have Hepatitis B and Chronic Hepatitis B infection is affecting 10%-16% of Filipino adults, As estimated by the DOH in 2015, the Philippines is considered to be highly endemic for chronic hepatitis B virus (HBV) infection. Approximately 60,000 newborns are being at risk of acquiring a perinatal Hepatitis B infection annually (Ruff et al., 2009; Goldstein et al., 2005). The choice of focusing on hepatitis B is also helpful to us and to our future generation. Personal insights from this study and information gained interacting with assessing the level of knowledge, attitude and practices towards Hepatitis B; from this intention of this study we also gained to improve our health care system to eradicate Hepatitis B in our country.

There is an approximated 1% of the estimated 100 million Filipinos who have chronic Hepatitis C and almost 40% of global mortality due to viral Hepatitis occurs in the Western Pacific Region as evaluated by World Health Organization in 2016. Moreover, about 2 billion people worldwide have been infected with HBV and about 400 million persons are living with chronic HBV infection (Mahoney et al., 1995). According Keeffe et al. (2008), 5% of those with childhood acquired chronic HBV infection will later die from the liver-related complications of cancer and cirrhosis if left untreated. More than 350 million people are carriers and reported 0.6 million deaths annually according to Keeffe et al. (2008). The Hepatitis B research Network believed that 2 billion of the population worldwide has been afflicted with the chronic hepatitis B virus infection and considered worldwide a serious Global health concern and one of the most infectious leading causes of death worldwide (Razi et al., 2010; Bukhari et al. 1999).

According to Wong et al. (2013), the Hepatitis B virus (HPV) is a prevalent infection in Philippines. The World Bank (2015) cited that poverty is one of the challenges of the health care in the Philippines, Although the Department of

Health has standardized the healthcare industry and national plans both public and private sectors and patients have the right of choice of where to receive health care. In reality, many patients' choice are bounded due to financial limitations. Much effort has been put in providing health care to needy families and in terms of health related spending, the Philippines falls behind in other countries in Western pacific according to the Wolrd Health Organization (WHO, 2011).

Hepatitis B could be either an acute or chronic infection and it is the most destructive virus that can seriously damage the liver and threaten life threatening (Melhus, 2013). The acute Hepatitis B infection is the most infectious type and may develop into chronic infection and if chronic infection intensifies it may lead to liver cirrhosis and liver cancer (Murray et al., 2013).

According to the Centers for Disease Control and Prevention (2015) symptoms of Acute Hepatitis arise 90 days from the incubation period. Others will experience fatigue, loss of appetite. Not all cases can be diagnosed since some are asymptomatic. The infected blood can be detected thru blood sample from 30-60 days post infection and can remain and become a chronic Hepatitis B infection. Some will experience icterus, abdominal pain, dark urine, nausea and vomiting, but in most cases it is unnoticeable until the end stage of the disease (WHO, 2015). The World Health Organization (2015) reported that more than 686,000 people die annually due to complications. According to the Centers for Disease Control and prevention (2015), and WHO (2015), medications are available, but the medical treatment does not eradicate the infection but reduce the virus to replicate.

Hepatitis B virus is transmitted from person to person or even from their infected mother at birth according to Gjerdingen et al. (1997) and Mahoney et al. (1995). Hepatitis B virus can be detected thru blood sample and vaccination is available for prevention and transmission of HBV infection (Public Health Agency of Sweden, 2013) but both screening and vaccines are too costly for a big part of population (Chen, 2009).

The Grade 9 students of Gusa National High school were selected to be the respondents of the study to assess their knowledge, attitude, and prevention practices towards Hepatitis B for the reason that this school is a government school has a number of youth that are enrolled to this school. They are at risk since adolescents are known to be adventurous groups and indulge in intimate activities just for the reason of experimentation and peer influences, owing to wealth of uncensored knowledge in which they are exposed (Miles, et al., 2001).

FRAMEWORK

The Theory of Self-care, Orem Self-care Model of Nursing was developed by Dorothea Orem in 1991. This theory includes self-care theory points on the performance or practice of activities that individuals initiate and appear on their own behalf to maintain life, health and well-being that explain how personal belief about the Hepatitis B and prevention measures affects their knowledge, attitude and prevention practices towards Hepatitis B and people are responsible for their own care and others in their family needing care. The Self-care agency is a human ability for engaging self-care the decision to get screened and vaccinated may also be influenced by different groups of people in the society such as family system (family or friends) and health care system (accessibility and availability of vaccines and Hepatitis B screening). Lastly, the therapeutic self-care demand the totality of self-care actions to be performed for some duration in order to meet self-care requisites that the individual able to identify the mode of transmission of hepatitis B and determine the prevention measurements to prevent Hepatitis B, prevention of hazards to well-being and promotion of human functioning.

Theory of Ecological Perspective has also been used by Hwang et al., (2008) in previous research on Hepatitis B and validates that the health outcomes and health behaviors are influenced by multiple factors. An ecological perspective to health promotion emphasizes the interaction between, and interdependence of factors within and across all levels of a health problem (U.S. Health and Human Services et al., 2005). As proposed by McLeroy et al. (1988) that the ecological perspective of health promotion emphasized that, in understanding health behavior, one should focus on the interactions of individuals on and by their social and physical environment and the existence of multiple levels or factors that influence health behavior, including the intrapersonal factors that individual characteristics of behavior that influence health behavior, including the intrapersonal factors which individual characteristics of behavior that influences their knowledge, attitudes and practices towards hepatitis B, Intrapersonal factors are influence by multi-factors such as the Interpersonal groups (including family, friends, peers),Institutional Factors (accessibility of Hepatitis B Vaccines and there's a rules, regulations, policies and informal structure), Community factors (social networks), Public Policy (laws that regulate or support healthy activities).

The Ecological perspective is an approach used to explore a particular health problem from varying and multiple perspectives. For example, receipt of Hepatitis B screening and vaccination may be dependent on personal knowledge,

practices and attitudes about hepatitis B infection (intrapersonal). The decision to get screened and vaccinated may also be influenced by family or friends (interpersonal), accessibility to low or no cost screening and vaccination clinics (institutional), existing community-wide hepatitis B prevention and education programs (community), and a mandatory immunization policy for work, school, or immigration purposes (public policy).

The Ecological Perspective Theory

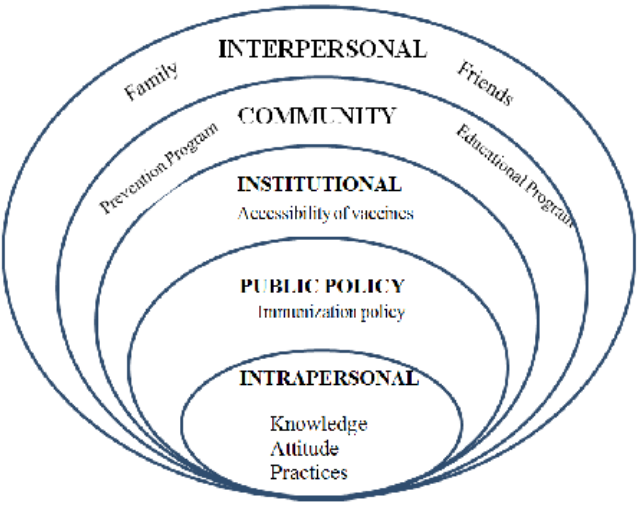

Figure 1. Ecological Perspective shows that health behaviors influences with multi-factors

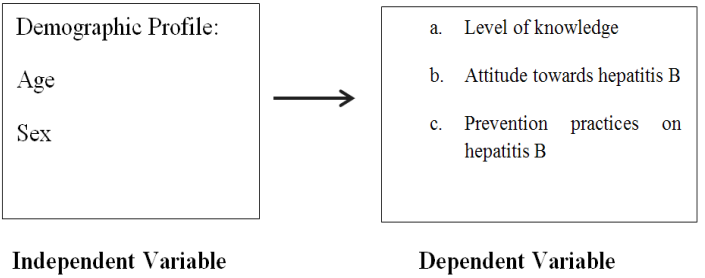

Figure 2. The schema of the study showing the relationship among independent and dependents variables

The study aimed to measure the level of knowledge, attitude and prevention practices on Hepatitis B of Grade-9 students of Gusa National Highschool. Gender and age are the independent variable while the levels of knowledge, attitude and prevention practices are the variables of interest or the dependent variables. As shown on Figure 2 above, the researcher assumes that there is a unidirectional and direct relationship with the gender and age of the Grade-9 students and their level of knowledge, attitude and practices on Hepatitis B. The study used the Ecological Perspective theory as proposed by McLeroy et al. (1988) to that the ecological perspective of health promotion and health behavior according to the independent variable are influences with multiple factors that shows that will result to their knowledge, attitudes and practices towards hepatitis B (dependent variables).

OBJECTIVES OF THE STUDY

This study aimed to determine the knowledge, attitude, and prevention practices about Hepatitis B virus infection among the Grade 9 students of Gusa National High school. Specifically, it aimed to: (1) describe the profile of the respondents in terms of Age, and Gender; (2) determine the level of Knowledge towards hepatitis B of Grade 9 Student; (3) determine the level of attitude towards hepatitis B of Grade 9 Student; (4) determine the level of prevention practices towards Hepatitis B of Grade 9 Student; and (5) determine the significant difference in the respondents' knowledge, attitude, and practices towards Hepatitis B according to gender.

METHODS

The study was conducted at Gusa National High School. The school is a public school that teaches students in grades seventh through tenth in Cagayan De Oro, Misamis Oriental of Northern Mindanao (Region X). The questionnaire was given to the three sections of Grade-9 students of Gusa National high school, and this will be done during their lunch break.

The study used a mixed methods approach in collecting and analyzing the data by integrating both qualitative and quantitative data. A descriptive design was used in describing linkage of the variables to assess the level of knowledge, attitude and practices towards hepatitis B. In the collection of the qualitative data,

a focus group discussion was conducted. Five female and five male respondents were interviewed to establish consistency of responses to the questionnaire.

The Researcher provides a fuller picture and deeper understanding of the health issue at hand according to Creswell and Plano Clark et al. (2006). More specifically, an open-ended and closed-ended questions were added to the BCC in-depth interview guide to explored topics such as meaning of disease and personal experiences related to Hepatitis B.

Participants shared their perspectives and experiences in their own words, providing explanations and context for their knowledge, attitudes, and practices.

Knowledge, attitude, and practice (KAP) studies are representative of a specific population to collect information on what is known, believed and performed in difference to a particular topic and the most frequently used study tools in health-seeking behavior (Launiala, 2009) and Knowledge is usually assessed to evaluate how patients' knowledge corresponds to biomedical concepts (Good, 1994).

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The research instrument utilized to get the research data about information was a self-administered questionnaire which is partitioned into four parts. The first part included the demographic data of the respondents regarding their age and gender. The second part consisted of 18 questions revised to determine their knowledge. Respondents were asked to rate their answers with a 5 point Likert scale ranging from (1) strongly not knowledgeable to (5) highly knowledgeable to measure their response to the questions. The third part determined the level of attitude toward Hepatitis B; the respondents rated statement on a 5-point Likert scale from (1) strongly not practiced to (5) strongly practiced. The Fourth part determined the prevention practices towards hepatitis B the respondents rated statement on a 5-point Likert scale from (1) not favorable to (5) highly favorable. Higher points more positive results.

In the 18 questions for knowledge, seven questions for the attitude and seven questions for prevention practices were designed to evaluate KAP among Grade 9 students. Respondents were asked to answer in limited as well as multiple choice formats. The respondents were asked to rate the study as a questionnaire based, cross sectional analysis; the STROBE guidelines was used to report the data by

Vandenbroucke et al. (2007).

The researcher also conducted Focus Group Discussion (FGD) for the qualitative data. This was done to discuss special topics that came from a survey. The members were selected based on the criteria as follows: Group of Grade 9, five male and five female students from the first section.

Research Protocol

To ensure the quality and reliability of research findings, the researchers observed the following University research protocol. The researcher sought approval form the adviser after careful and review of manuscript for the thesis. The dean of the College approved the schedule for the defense of the thesis proposal after through assessment and review of the final manuscript. After the proposal defense, the researchers accomplished the research Ethics application form and submitted it to the office of the Vice President for research, Publication, and Extension together with the approved research proposal. The Associate Director of the research and Publication office reviewed the proposal and research Ethics form for completeness and compliance with the university format and guidelines. The research ethics form was then forwarded to the RPO Director and Vice president for Research, Publication, and Extension for further review and approval of the Research Ethics Review Committee. The researcher wrote letters and secured permission from the Principal of Gusa, National Highschool. The Researcher also secured the parental consent from the respondent then secured respondents' consent to participate in the study. Moreover, the respondents were assured that all their responses would be treated with utmost confidentiality. Provision of the Final manuscript. The Researcher provided the adviser the copy or the manuscript for assessment and review of the quality and relevance of the paper before scheduling of the final research presentation. Once the Paper was approved by the adviser, it was forwarded to the college Research Coordinator for further review of the completeness of the paper. The coordinator then met with the dean for the scheduling of the paper presentation. After the final paper presentation, the researchers incorporated all the corrections and suggestions of the research panel. It was then reviewed by the adviser and the panel members After the paper was approved by the panel. It was the submitted to the Research and publication office for plagiarism and Grammarly tested. The researchers then forwarded the final paper to their assigned editor, after incorporating all corrections, the researcher submitted the final paper to the adviser and research panel for signature and approval binding.

Upon approval to conduct the study and after screening the parents' consent of the students, the researcher conducted an orientation among the students about the nature and scope of the study. They were then asked to sign the consent form to indicate their willingness to conduct the study. The questionnaires were distributed to the respondents and they were given enough time to answer all the questions, once they were done answering, the researcher collected the questionnaires. Data were encoded tabulated, and submitted to statistical techniques.

The study used a mixed methods approach in collecting and analyzing the data both integrating qualitative and quantitative data. Independent variables (age, gender) with dependent variables (level of knowledge, attitude towards Hepatitis B, prevention practices on Hepatitis B). A qualitative method analyzed the data collected from the focus group discussion among the chosen respondents.

To assess the validity of the data gathering tool, a pilot study was initially conducted to ten respondents' questionnaires in Cagayan de Oro City. The Cronbach's Alpha result of 0.873 score confirmed that the tool was reliable for data gathering.

To determine the profile of the respondents, frequency count and percentage distribution were used. T-test is an inferential statistics, was used to determine whether there is significant different between the means, between the two variables, the independent variable and dependent variable (knowledge, attitude, and prevention practices toward Hepatitis B).

RESULTS AND DISCUSSION

Objective 1: To describe the demographic profile of the respondents' in terms of age and gender.

Table 1

Demographic Profile of the respondents according to their age and gender

Categories	Frequency	Percentage
Age		
13-15 years old	56	56
16-19years old	44	44
20-23years old	0	0.00

Table 1 Continued

Categories	Frequency	Percentage
24-30years old	0	0.00
31-35years old	0	0.00
TOTAL	**100**	**100.00**
Gender		
Female	76	76
Male	24	24
TOTAL	**100**	**100.00**

Table 1 presents the profile of the respondents based on age and gender. When it comes to age, majority (56%) of the respondents belonged to the age bracket of 13-15 years old and 44% of them are 16-19 years old.

The results reveal that majority of the respondents are females (76%) and only 24 % are males.

All of the respondents belong to the adolescent group and according to Miles et al. (2001) during adolescent stage, there is characteristic of intense and courage to experiment with risk behavior than in later stage in life. This risk behavior may had to acquiring Hepatitis B if they are not informed.

Objectives 2: To determine the level of knowledge towards Hepatitis B among Grade 9 high school students.

Table 2

The level of knowledge of the respondents towards Hepatitis B

Indicators	Mean	Standard Deviation	Verbal Description
1. Have been taught about Hepatitis B virus and its vaccine?	3.19	1.107	Moderately knowledgeable
2. Hepatitis B virus affects all age group?	3.57	0.8415	Knowledgeable
3. Hepatitis B can affect the liver?	3.69	0.9067	Knowledgeable
4. People who get Hepatitis B can be affected for life?	3.65	0.9987	Knowledgeable
5. Jaundice one of the common symptom of hepatitis B virus?	3.65	0.8387	Knowledgeable

Table 2 Continued

Indicators	Mean	Standard Deviation	Verbal Description
6. Hepatitis B transmitted by contaminated blood and blood products?	3.06	0.8897	Moderately knowledgeable
7. Hepatitis B transmitted by unsterilized syringes needles and surgical instruments?	3.38	1.013	Moderately knowledgeable
8. Hepatitis B transmitted from person to another?	3.28	1.045	Moderately knowledgeable
9. Hepatitis B transmitted from infected mother to child?	3.39	1.014	Moderately knowledgeable
10. Hepatitis B transmitted through unsafe sex?	2.91	1.111	Moderately knowledgeable
11. Do you think HBV has laboratory test?	3.83	0.8837	knowledgeable
12. Could we prevent Hepatitis B transmission?	3.48	1.049	Moderately knowledgeable
13. Is hepatitis B uncurable/ untreatable?	3.11	0.8396	Moderately knowledgeable
14 Is vaccination available for hepatitis B for all age group?	3.23	0.8919	Moderately knowledgeable
15. Do you think that hepatitis B virus has post exposure prophylaxis?	3.29	0.8077	Moderately knowledgeable
16. Hepatitis B treatment is not available?	3.33	0.7661	Moderately knowledgeable
17. Can Hepatitis B self-cured by body?	3.44	0.8566	Moderately knowledgeable
18. Prevention of transmission of hepatitis B from infected mother to baby is possible?	3.49	1.000	Moderately knowledgeable
Overall Mean	3.37		Moderately knowledgeable

Legend:
4.5-5.00= Highly knowledgeable
3.50-4.49= Knowledgeable
2.50-3.49= moderately knowledgeable
1.50-2.49= not knowledgeable
1.00-1.49= strongly not knowledgeable

Table 2 shows the respondents' knowledge on Hepatitis B. Questions included in knowledge assessment are related to causes, symptoms, transmission and treatment and the management of the disease or infection condition.

The Overall mean score (3.37) revealed that the respondents are moderately knowledgeable towards Hepatitis B, since they moderately knowledgeable about the causes, symptoms and the transmission of Hepatitis B, the Health education in our country should be improved to prevent the spread of the disease.

Through health education in school, it helps student to informed decision and without proper health education it's easy for the young people to fall into bad habits according to School health and nutrition Program (SHN)

Hepatitis B is transmitted from person to person through infected blood and other bodily fluids like semen, saliva and vaginal secretions and even from their infected mother at birth (Gjerdingen & Lor., 1997; Hurie et al., 1992; Mahoney et al., 1995). The leading contagious way of HBV transmission is from infected blood introduced into a person's bloodstream (WHO, 2015). The prevention of Hepatitis B should be taught thoroughly since there is no treatment of the virus or even antibodies against the virus but it be prevented thru vaccination (Public Health Agency of Sweden et al., 2013).

A qualitative data on respondents of the study were collected through focus group discussion to explore the level of knowledge of Grade 9 students. The respondents were five (5) females and five (5) males, who were asked questions on definition and information about Hepatitis B, signs and symptoms of Hepatitis B, prevention practices towards Hepatitis B. the following were the most common response the respondents made;

According to a female respondent, Hepatitis B is "Sakit na siya na makatakod" (disease that is contagious) and "Sakit na kailangan magpatanaaw sa doctor" (A disease that needs medical attention). Moreover, the female students were informed that Hepatitis B is a contagious that affects the "liver, mao dako ang tiyan"(reason in increase abdominal size) and lungs. Most of them mention they get the information from the book. They are knowledgeable that Hepatitis B is a serious condition that needs medical intervention and attention, According to Gjerdingen and Lor (1997), that transmission of Hepatitis B is from person to person.

Male students common responses about Hepatitis B are; "wala ko kabalo" (I don't know) and "sakit na kailangan magpatambal" (a disease that need medical treatment). Through their answers, male students are not knowledgeable about Hepatitis B. The male students' common responses about Hepatitis B symptoms and which part of the organ are affected there common responses are "wala" (I don't know what are the symptoms of Hepatitis B), lungs, skin, "mao magyellow ang panit" (due to jaundice appearance). WHO defines viral Hepatitis as "an inflammation of the liver caused by one of the six hepatitis viruses: A, B, C, D, E and G" Infections. The results show that there is need to improve the health education in the country. They never been taught about Hepatitis B and they never get Hepatitis B information from anyone.

According to School Health and Nutrition program, it is easy for the young people to fall into bad habits they should be thought about the proper health education.

The result shows that there's a need to improve the health education and the researcher agree with the study conducted by Van Herck et al., (2003) that in reality, there is little knowledge about the contagious disease.

Objective 3: To determine the level of attitude towards Hepatitis B among Grade- 9 students.

Table 3

Respondents' level of attitude towards Hepatitis B.

Indicators	Mean	Standard Deviation	Verbal Description
1. Do you ever think you could get Hepatitis B?	3.22	0.943	Moderately favourable
2. Do you need to be protected from Hepatitis B infection?	3.82	0.893	Higher favourable
3. Do you need to look for medical professional about having this disease	3.72	0.893	Higher favourable
4. Do you go to a health facility when you knew that you have symptoms of Hepatitis B?	3.68	1.107	Higher favourable
5. When you had early symptoms of Hepatitis B, do you think you need treatment?	3.70	0.9468	Higher favorable
6. do you think that the diagnosis and treatment of Hepatitis are expensive	3.48	0.891	Moderately favorable
7. Do you have worries if you will diagnose with Hepatitis B?	3.73	1.059	Moderately favorable
Overall Mean	3.62		Higher favorable

Legend:
4.5-5.00= Highest favorable
3.50-4.49= Higher favorable
2.50-3.49= Moderately favorable
1.50-2.49= Less favorable
1.00-1.49= Not favorable

Table 3 reveals the respondents' attitude towards Hepatitis B overall mean of 3.62 reveals that respondents have favorable attitude towards Hepatitis B. Majority of them have higher attitude against Hepatitis B virus. They also agree to go to the health facilities and look for medical professional for the treatment if they had observed early symptoms of the disease. Most of them worry if they would be diagnosed with Hepatitis B and aware that the diagnosis, prevention and treatment are expensive.

A qualitative data on the respondents of the study were collected to explore the level of attitude of Grade 9 students. The respondents are 5 females and 5 males and the following were the most common responses of the students.

Female students' common responses are from "laway" (saliva), body contact, specifically sexual contact, some of the female students known the other mode of transmission and according to Fairley et al. (2012) that one of the transmissions of Hepatitis B can be transmitted through sexual transmission. Mostly of the respondents don't know the transmission of the disease. The Hepatitis B transmissions are numerous such as infected blood and body fluids (Maheshwari & Thuluvath et al., 2010), using contaminated personal items such as toothbrush, razor (Vescio et al., 2008), unhygienic body modification (Xia et al., 2008).

Male students' common responses are from "ubo" (cough) and "wala ko kabalo" (I have no idea about the transmission of Hepatitis B).

During the focus group discussion, it was asked that it is possible to get Hepatitis B. The respondents verbalized "Oo, sa ka daghan sakit karon na makatakod" and asked if they worry if they will get infected, the respondents replied "oo, kay ulaw kayo kung nay sakit kay likayan ta nila kay makatakod ta". (ofcourse, having a disease is embarrassing, people will avoid us because they will think we can infect them).

Objectives 4: To determine the level of prevention practices towards Hepatitis B among Grade 9 students.

Table 4

Grade 9 Students' practices toward Hepatitis B virus.

Indicators	Mean	Standard Deviation	Verbal Description
1. Have you done screening for Hepatitis B?	2.73	1.043	Moderately practiced
2. Do you ask for screening of blood before transfusion?	3.06	0.8741	Moderately practiced
3. Do you ask your barber to change blade/ or for safe equipment's for ear or nose piercing and nail polishing?	2.91	1.083	Moderately practiced
4. Hepatitis B can be prevented through safe sex?	2.35	1.234	Not practiced
5. Do you share food/ utensils/ water etc. with others?	3.21	1.104	Moderately Practiced

Table 4 Continued

Indicators	Mean	Standard Deviation	Verbal Description
6. Have you ever get yourself vaccinated against Hepatitis B?	2.86	1.073	Moderately practiced
7. Have you ever participated in health education program related to Hepatitis B?	2.91	1.173	Moderately practiced
Total Mean	**2.91**	**0.6276**	**Moderately practiced**

Legend:
4.5-5.00= Highly Practiced
3.50-4.49= Practiced
2.50-3.49= Moderate practiced
1.50-2.49= Not practiced
1.00-1.49= strongly not practiced

Actual practices as well as yielding information on people behavior or on what they know should be done (Yoder et al., 1997), measuring the KAP is consequently critical to prevent the spread of infection. With the total mean of 2.91, the result shows that overall of the respondent have moderately practiced in preventing the Hepatitis B. The result shows that there's a need to improve the health education because in reality, there is little knowledge about the contagious disease (Van Herck et al., 2003).

Prevention of Hepatitis B should be practiced since mostly with Hepatitis B and hepatitis C are asymptomatic (Tohme et al., 2010), prevalent to people with Hepatitis B and C who are unaware that they can transmit the virus to other people (Imperial Jc., 2010). The Hepatitis B transmissions are numerous, transmitted through infected blood and body fluids(Maheshwari and Thuluvath., 2010), transfusion of infected and blood products(Buddeberg et al., 2008), sharing of contaminated personal items such as toothbrushes and razors (Vescio et al., 2008), unhygienic body modification including unregulated body piercing or tattoing and re-using of contaminated medical equipment(Xia et al., 2008), needle sharing from infected person (Hughes et al., 2000), sexual transmission (Fairley et al., 2012) and vertical transmission from infected mother is the most serious since it can lead to chronic to permanent infection (Borgia et al., 2012) and the transmission rate 70-90% (Piratvisuth, 2013) Hepatitis B virus can be spread to a baby during childbirth and according to Centers for Disease Control in 2015 babies should get first dose of hepatitis B vaccine and HBIG shot within

12 hrs for prevention and vaccines should be administer to all infants with infected mother and people belong to high risk population (Hwang et al., 2008).

A Qualitative data on the respondents of the study were collected to explore the level of the prevention practices of Grade-9 students. The respondents are 5 females and 5 males: The following were the most common response the respondents made. Female students' common responses are healthy life style and "dili mag sige og inom" (limit alcohol consumption).

Male Students' common responses are practice healthy lifestyle, eat nutritious foods and "dli man malikayan ang sakit" (Hepatitis B are not preventable).

Both female and male students have lesser preventive practices about Hepatitis B hence; Hepatitis B can be prevented thru vaccination according to Public health Agency of Sweden et al. (2013).

Objective 5: To determine significant difference of gender and age towards knowledge, attitude and prevention practices towards Hepatitis B.

Table 5

The test of difference in the respondents' knowledge of Hepatitis B between male and female students

INDICATORS	MEAN	QUALITATIVE DESCRIPTION	T-TEST RESULT T Calculated Value= 3.3
Female	3.45	Moderately knowledgeable	Degrees of freedom=42 P-values= 0.002
Male	3.12	Moderately Knowledgeable	Conclusion=T calculated Value<T Critical Value
Difference	0.33		Interpretation= **Significant**

Legend:
p-value>0.05= not significant; age show no significant difference knowledge, attitude and practices Hepatitis B
p-value<0.05= significant; age show significant difference knowledge, attitude and practices Hepatitis B.

The T-test results of significant difference in knowledge of Hepatitis B between female and female students using the p-value of 0.002, thus the 1st hypothesis is rejected. There is significant difference between female and male. The result also similar to the findings of Khan et al. (2010) that Female students significantly have better knowledge towards Hepatitis B as compared with male students. This result agrees with the study conducted by Miller et al. (2001) wherein he concludes the significant gender differences in the biological determinants in

knowledge about health and illness that the inequalities reflect the different social experiences and conditions of men's and women's lives.

Table 6

The test of difference in the respondents' attitude of Hepatitis B between female and male students.

INDICATORS	MEAN	QUALITATIVE DESCRIPTION	T-TEST RESULT T Calculated Value=1.94
Female	3.63	Higher Attitude	Degrees of freedom=35
Male	3.41	Moderate Attitude	P-values= 0.060
			Conclusion=T calculated Value>T Critical Value
			Interpretation= Not Significant
Difference	0.27		

Legend:
p-value>0.05= not significant; age show no significant difference knowledge, attitude and practices Hepatitis B.
p-value<0.05= significant; age show significant difference knowledge, attitude and practices Hepatitis B.

Table 6 shows to measure the significance difference of attitude between male and female and it is appears that the attitude towards Hepatitis B have no significant difference (with P-values of 0.060), when the respondents are grouped according to gender. Hence, the null hypothesis is not rejected.

Table 7

The Test of difference in the respondents' prevention practices towards Hepatitis B between male and female students.

INDICATORS	MEAN	QUALITATIVE DESCRIPTION	T-TEST RESULT T Calculated Value= 1.35
Female	2.93	Not practice	Degrees of freedom=64
Male	2.97	Moderately practice	P-values= 0.181
			Value>T Critical Value
Difference	-0.15		Interpretation= Not Significant
			Conclusion=T calculated

Legend:

p-value>0.05= not significant; age show no significant difference knowledge, attitude and practices Hepatitis B.
p-value<0.05= significant; age show significant difference knowledge, attitude and practices Hepatitis B.

Table 7 shows that prevention practices on Hepatitis B have no significant difference, with 0.181 (H03), it is surmised that there is no significant difference between female and male practices towards Hepatitis B. In this manner, the analyst accepted the null hypothesis that there is no significant difference in prevention practices of Hepatitis B between female and male.

CONCLUSIONS

A study of 100 students on Grade-9 students about their knowledge, attitude, and prevention practices towards Hepatitis B infer moderately knowledgeable, pessimism attitude and moderate prevention practices. The adolescent are experimental that results in taking risk and this is normal part development of the adolescent (Ribeaux, 1978) but unfortunately, some of the risk pursue may pose real threat to their health and well-being (Dryfoos et al.,1998).The study indicate that the Grade-9 student needs to improve their knowledge, attitude and prevention practices about Hepatitis B. The researcher agreed with the study conducted by Van Herck et al., (2003) that in reality, there is little knowledge about the contagious disease. Extensive Health education should be provided in school and as well in community settings. T-test tally revealed that gender have no significant difference towards the attitude and practices towards Hepatitis B and gender have significant difference in knowledge towards Hepatitis B, in understanding health behavior determinants is also important when considering gender differences in health and the researcher agreed with the result that conducted by Miller (et al, 2001) that there is significant gender differences in the determinants of health and illness.

RECOMMENDATIONS

Based on the findings and conclusion, the researcher recommends the following:

1.The Commission on higher Education (CHED) should strengthen their strategies on health education in school;

2.The Department of Budget and Management of our country should ensure stable funding to provide continues health facilities, health staff and health services for the promotion of health and prevention of diseases;

3.The Department of Health should confirm that all the communities educate and access about the health services such as vaccines;

4.The individual should be knowledgeable and practice healthy lifestyle because everyone's responsible in their own health;

5.Parents should be aware that their child's health is one of their responsibilities; and

6. For the future researcher similar on this topic may correct or add any variable of interest.

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