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Awareness and Opinions about Hepatitis B among Secondary School Teachers in Irepodun Local Government Area of Kwara State, Nigeria

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Abstract

The role of secondary school teachers in creating awareness and causing behavioral changes among students that will prevent the spread of Hepatitis B through the provision of accurate information on its causes, modes of transmission and prevention cannot be overemphasized. It is against this background that this study sought to assess the knowledge and opinions of secondary school teachers in Irepodun Local Government Area of Kwara State, Nigeria about Hepatitis B Virus Infection. Descriptive survey design was adapted to sample 150 teachers. The overall mean knowledge score on facts, mode of transmission, and prevention of HBV infection for all the respondents were 4.6 out of 8, 8.7 out of 17 and 4.7 out of 8 respectively. Television (54%), radio (44%), newspaper (42%) and friends (39%) was the main sources of information on HBV infection, while least utilized source of information was internet (23%), church/mosque (21%), tertiary institution (21%) and library/librarian (18%). The factors militating against the teaching of Hepatitis B to students as identified were teacher's inadequate knowledge, lack of formal training, lack of teaching aids, teachers poor motivation and HBV infection not being part of school subject's curriculum. Recommendation that hepatitis B as well as other trending health issue should be introduced into teacher educational programs and those teachers themselves should take advantage of the vast collection of information available in the interest to improve their knowledge on HBV infection and general health was given.

Keywords: Hepatitis; Infection; Cancer

Introduction

Generally, hepatitis refers to the inflammatory condition of the liver which among other things is mostly caused by infection with one of the hepatitis viruses (A, B, C, D or E).

Hepatitis B is a disease caused by a blood borne virus known as hepatitis B virus (HBV). It's a contagious life threatening disease of the liver which ranges in severity from a mild illness of few weeks to a critical lifelong illness. In other word hepatitis B is an important form of both acute and chronic viral hepatitis [1]. It is considered to be more easily transmitted, with degree of infectiousness 50 to 100 times higher than Human Immunodeficiency Virus (HIV). An estimated 240 million people are chronically infected with hepatitis B globally and a contributor to an estimated 686,000 to 786,000 deaths worldwide each year due to its complications including cirrhosis and liver cancer [2]. Approximately 5% of the world's populations are carriers of HBV, defined as being positive for hepatitis B surface antigen [3]. Like HIV, there are healthy carriers who show no symptom of hepatitis B and may be unaware of their hepatitis B status thereby making them potential risk to others. Hence, hepatitis B virus is a serious health problem worldwide including Nigeria.

One of the important priorities for elimination and control of HBV is to know the factors involved in HBV transmission especially in the endemic regions [4]. Hepatitis B is transmitted through percutaneous or mucosal contact with blood and body fluids infected with HBV. Such body fluid includes saliva, menstrual, vagina and seminal fluid. It can also be contacted during birth from an infected mother to her child, sexual intercourse with an infected partner, direct contact with the sore of an infected person as well as sharing needles/syringe or other drug injection equipment. While it is possible for anyone to be infected with the disease, those at greater risk of being infected with hepatitis B include infants born to infected mothers, persons with infected or multiple sex partners, users of intravenous drugs, men who have sex with men, people who live or travels to geographical regions with high Hepatitis B virus endemicity, persons with sexually transmitted diseases (STDs), healthcare and public safety workers exposed to blood on the job, hemodialysis patients as well as those living with infected persons among others [5].

Hepatitis B and its consequences including liver cancer and cirrhosis can be prevented by testing and vaccination. However other protective measures include condom use

during sex, avoiding sharing of needles and personal care items like toothbrush and razor, wearing of latex or plastic gloves before touching blood, and avoiding tattooing as much as possible especially when the sterility of the tattooing equipment is not guaranteed. The basic test for acute HBV infection is called the "Hepatitis B Core IgM Antibody test". People who have acute hepatitis B show positive IgM antibodies on this test. Those recently exposed to HBV can protect themselves by taking hepatitis B immune globulin (HBIG) within 24 hours after exposure (Communicable Disease Control and Prevention, n. d.). It is important to state here that the most effective protection against hepatitis B is the hepatitis B vaccine which according to American Academy of Pediatrics [6] is up to 95% effective against hepatitis B if all the shots in the vaccination series is received (3 or 4 shots given at different times). The vaccine is also important because it provides protection against the infection for at least 20 years [2]. The Advisory Committee on Immunization Practices (ACIP) recommends that all children receive their first dose of Hepatitis B vaccine at birth and complete the vaccine series by age 6-18 months including routine screening of all pregnant women for hepatitis B surface antigen (HBsAg) and post-exposure immunoprophylaxis of infants born to HBsAg-positive women, vaccination of children and adolescents who were not previously vaccinated, and vaccination of unvaccinated adults at increased risk for infection [7]. Similar recommendation was also made by Centers for Disease Control and Prevention that Hepatitis B vaccination should be administered to all unvaccinated people traveling to areas with intermediate to high prevalence of chronic hepatitis B (HBV surface antigen prevalence $\geq 2\%$) [8].

While adverts and media campaign about HIV/AIDs and condom use such as ABC campaign, zip up campaign, HIV no dey show for face, and AIDS is real are popular in Nigeria and are geared towards creation of awareness and sensitization of people on possible means of HIV/AIDs infection and spread as well as safe behaviors towards the pandemic as explained by Edegoh et al. [9], this cannot be said to be the case with hepatitis B as there are little or no advert and media campaign to create awareness about the mode of transmission and prevention of hepatitis B. Effort aimed at increasing community awareness and knowledge of HBV transmission and prevention should therefore be of a special interest, especially among adolescents and young adults. Exposing adolescent and young adults to hepatitis B information is important because it is at this stage that they initiate interest in sexual relationship as well as having the tendency to explore and experiment with sex which is a risk factor for the contraction or transmission of Hepatitis B. It is also at this stage that most detrimental lifelong lifestyles and behaviors are adopted like substance use, alcoholism, promiscuity etc. which are also a predisposing factors for the contraction of HBV infection and others infections. The school is a place where hepatitis B information can get to adolescents and the teachers are potent instruments for giving out this information. Hence, the need to assess the knowledge of teachers about Hepatitis B.

Significance of study

Data obtained in this study will be useful to the Academic Planning Units of Universities as well as Colleges of Education in including Hepatitis B instructions as well as instructions about other pandemic diseases in the curriculum for teacher's education, regardless of the discipline pursued by prospective teacher. It can also be handy to Health Education curriculum planners in inclusion of Instructions on Hepatitis B and other prevailing pandemic. Data obtained from this study could also serve as baseline information on the awareness of the facts, transmission and prevention of hepatitis B among secondary school teachers in Irepodun Local Government Area of Kwara state.

Purpose of the study

The purpose of the study is to:

1. To examine the knowledge of facts about Hepatitis B among secondary school teachers in Irepodun local government area, Kwara state.
2. To examine the knowledge of the mode of transmission of Hepatitis B among secondary school teachers in Irepodun local government area, Kwara state.
3. To ascertain the knowledge of the prevention of Hepatitis B among secondary school teachers in Irepodun local government area, Kwara state.
4. To examine the source of Hepatitis B information among secondary school teachers in Irepodun local government area, Kwara state.
5. To examine preference of information source for the delivery of Hepatitis B messages to secondary school students among secondary school teachers in Irepodun local government area, Kwara state.
6. To examine the barriers to the teaching of Hepatitis B to secondary school students by secondary school teachers in Irepodun local government area, Kwara state.

Research questions

1. What is the knowledge of facts about Hepatitis B among secondary school teachers in Irepodun local government area, Kwara state?
2. What is the knowledge of the mode of transmission of Hepatitis B among secondary school teachers in Irepodun local government area, Kwara state?
3. What is the knowledge of the prevention of Hepatitis B among secondary school teachers in Irepodun local government area, Kwara state?
4. What is the source of Hepatitis B information among secondary school teachers in Irepodun local government area, Kwara state?
5. What information source does secondary school teachers prefer for the delivery of hepatitis B messages to secondary school students?

6. What are the barriers to the teaching of Hepatitis B to secondary school students by secondary school teachers in Irepodun local government area, Kwara state?

response. Accordingly, these items were either modified or omitted.

Methodology

Design of the study

The study adopted descriptive survey design in which a group of people are studied by collecting and analyzing data from few persons who are representatives of the entire group over a short period of time; thus deeming it appropriate for this study.

Population of study

The population for this study was made up of all teachers in public secondary schools in Irepodun Local Government Area, Kwara State. There are 41 public secondary schools in Irepodun local government area [10].

Sample and sampling techniques

To answer the research questions, 10 schools were conveniently selected from the 41 public secondary school in Irepodun local government area. 15 teachers were drawn each from the 10 selected schools by simple random procedure, thereby constituting a sample size of 150 participants.

Instrument

The instrument used for data collection was the researcher's self-developed questionnaire, which consisted of 67 items arranged in seven sections A, B, C, D, E, F and G. Section A solicited for demographic information of respondents. Section B contains 8 items meant to elicit information about respondent's knowledge on facts about hepatitis B. Section C contains 17 items meant to elicit information about respondent's knowledge of the mode of transmission of hepatitis B. Section D contains 8 items meant to elicit information about respondent's knowledge of the prevention of hepatitis B. Section E contains 13 items meant to elicit information about respondent's source of hepatitis B information. Section F contains 12 items meant to elicit information about respondent's preference of information source for the delivery of hepatitis B messages to students while section G contains 9 items meant to elicit information about barriers to the teaching of hepatitis B to secondary school student.

Validity and reliability

The instrument was subjected to both face and content validity using two Health Education lecturers from Health, Safety and Environmental Education Department, University. The instrument was also pretested on 20 respondents who were not used for this study. The pretesting indicated that a few items were not clear and will not produce reliable

Data collection

Permission was obtained from the school Principals in each secondary school included for the study to use the teachers for the research before data collection. A consent note with the explanation of the research purpose, method of response and assurance of anonymity was attached to each copy of the instrument. The 150 instruments were administered to respondents during break period in their offices and were collected on the spot immediately after completion, out of which none was mutilated. The knowledge of facts, modes of transmission, prevention of Hepatitis B as well as factors acting as barriers to the teaching of hepatitis B was assessed by requesting participants to indicate 'Yes', 'No' or 'Do not know' to 8, 17, 8 and 9 statements respectively. The channels through which the respondents have obtained their knowledge about Hepatitis B were determined by requesting them to tick the applicable ones from the list provided, while spaces were provided for them to list sources relevant to them not indicated in the questionnaire. Respondents were further asked to give their opinion on the appropriateness of various channels for the delivery of Hepatitis B information to secondary school students in Nigeria. They were required to classify the channels on a Likert scale from 1, much inappropriate to 5 much appropriate.

Data analysis

Data were analyzed quantitatively using frequency count and simple percentage.

Results

Demographic profile of respondents

The respondents consisted of 31 males (20.7%) and 119 females (79.3%); their mean age was 38.6 years with a standard deviation of 7.7 and ranged from 21 to 58 years (**Table 1**). Majority of them were in age bracket of 40 - 49 years (46%). 83 of them are National Certificate of Education holders forming a majority of 55.3%. Approximately 79.3% (n=119) of the respondents were married, while majority were Christians (n=92, 61.3%). The respondents' years in teaching profession ranged from 1 to 32 years with a mean of 10.3 years approximately.

Table 1 Demographic information of teachers that participated in the Hepatitis B knowledge survey (n=150).

Variable	Frequency	Percentage
Gender		
Males	31	20.7
Females	119	79.3
Age group		

20—29	19	12.7
30—39	57	38
40—49	69	46
≥ 50	5	3.3
Marital status		
Single	28	18.7
Married	119	79.3
Divorced/widowed	3	2
Level of education		
N.C.E.	83	55.3
BSc/HND/Postgraduates	61	44.7
Religion		
Christianity	92	61.3
Muslim	58	38.7
Traditional	-	-
Years in Service		
1-5	24	16
6-10	51	34
11-15	68	45.3
>15	7	4.7

Knowledge of facts about Hepatitis B

The respondent's knowledge of fact about hepatitis B is shown in **Table 2** below with 43 - 83% giving correct answers to each of the eight questions. None of the respondents were able to answer all 8 questions correctly while 10 (7%) and 30 (20%) of the respondents currently answered seven questions and six questions respectively out of the eight questions. The mean score of respondents who correctly answer less than or equal to five questions out of eight is 3.9 while the overall mean score of all of all respondent is 4.6.

A total of 83% (n=125) of respondents knew that hepatitis B is a viral infon. 62% (n=93) of them knew that hepatitis B is not a punishment from God and that it is a disease of the liver. Only 52% (n=78) knew that hepatitis B is worse than HIV/AIDS and 43% (n=64) expressing awareness of the fact that one can be infected with the disease without having its signs and symptoms. Also only 35% (n=53) and 63% (n=95) are aware of the lack of cure and availability of the vaccine for hepatitis B respectively. Finally 61% (n=91) of the respondents knew that hepatitis B is not a spiritual attack.

Table 2 Knowledge of facts about Hepatitis B among secondary teachers in Irepodun L.G.A. of Kwara state.

Facts	Correct answers	Frequency	Percentage
Hepatitis B is a virus infection	Yes	125	83%

Hepatitis B is a punishment from God	No	93	62%
Hepatitis B is a disease of the liver	Yes	93	62%
Hepatitis B is worse than HIV/AIDS	Yes	78	52%
One can be infected with the disease without having	Yes	64	43%
Signs and symptoms of the infection			
There is no cure for hepatitis B	No	70	47%
There is a vaccine for hepatitis B	Yes	95	63%
Hepatitis B is a spiritual attack	No	91	61%

Knowledge of the mode of transmission of Hepatitis B

The respondent's knowledge on the mode of transmission of Hepatitis B is presented in **Table 3** below with 37% - 63% giving correct answers to the statements about the mode of transmission of the disease. 63% (95) are aware that hepatitis could be transmitted through heterogeneous contact and 53 (80) indicated that having multiple sexual partners is a risk factor for the spread of hepatitis B, while only 53% (79) indicated its transmission by homosexuals.

Approximately 57% (86) of respondents identified sharing of needles/syringe and personal care items like razor, toothbrush etc. as potential sources for the spread of hepatitis B, while only 41% (62) mentioned the use of intravenous drugs. Furthermore, 63% (95) mentioned that contact with blood and sores of other people is a risk factor for its spread, while 49% (73) rightly stated coughing and sneezing could not transmit the disease, with 33% (50) of the wrongly believing it could. Another 45% (67) stated that tribal marking/tattooing/skin piecing can transmit hepatitis B, while 37% (56) believed that breastfeeding cannot transmit hepatitis B, 44.6% (67) wrongly believed that breastfeeding can. Finally only 59% (75) indicated that it can be transmitted from mother to child during birth, with 11.3% (17) claiming to be ignorant.

Table 3 Knowledge of modes of transmission of Hepatitis B among secondary.

Which of the following modes can transmit Hepatitis B	Correct answers	Frequency	Percentage
Mosquito/Insect bits	No	66	44%
Toilet	No	71	47%
Sexual relationship between a male and a female	Yes	95	63%
Hugging	No	81	54%
Shaking of hands	No	94	63%
Multiple sexual partners	Yes	80	53%
Sexual relationship between men	Yes	79	53%

Sharing of cloth	No	75	50%
Sharing of needles/syringe	Yes	86	57%
Sharing food/food utensil	No	70	47%
Sharing personal care items like razor, toothbrush or nail clippers	Yes	86	57%
Contact with blood or sore	Yes	95	63%
Coughing or sneezing	No	73	49%
Using intravenous drugs	Yes	62	41%
Breastfeeding	No	56	37%
Tribal mark/Tattooing/Skin piecing	Yes	67	45%
Mother to child during birth	Yes	75	50%

None of the respondent answered all 17 questions on hepatitis B transmission correctly. 3 respondents (2%) scored 16 out of the 17 questions. 4 (2.7%), 7 (4.7%) and 6 (4%) scored 15, 14 and 13 respectively out of 17, while 130 (86.7%) had less than or equal to 12 correct responses. The overall mean score for all respondents was 8.7 out of 17.

Knowledge of the prevention of Hepatitis B

The respondent's knowledge of the prevention of hepatitis B is presented in **Table 4** with 33% - 77% giving correct answers to each of the eight statements. All statements were correctly answered by 14 (9.3%) of the respondents, while 7 (4.7%) and 24 (16%) score 7 and 6 respectively out of the 8 statements. The overall mean score of all participants was 4.68 while that of those that scored less than or equal to 5 is 3.78.

Table 4 Knowledge of the prevention of Hepatitis B among secondary school teachers in Irepodun L.G.A of Kwara state.

Which of the following are measures for preventing Hepatitis B	Correct answers	Frequency	Percentage
Avoid sharing of personal care items such as toothbrush and razor	Yes	116	77%
Avoid sharing of toilet	No	50	33%
Avoid sharing of needles	Yes	108	72%
Avoid sharing of food/food utensils	No	79	53%
Avoid sharing of cloths	No	63	42%
Use of protective gloves before touching blood	YES	92	61%
Get vaccinated	Yes	108	72%
Condom use during sex	Yes	86	57%

A total of 116 (77%) of the respondents indicated that avoiding sharing of personal care item can prevent hepatitis B, and 108 (72%) of respondents mentioned to avoid sharing of needles/syringe for its prevention with 15 (10%) claiming to be ignorant.

Another 92 (61%) of the respondents mentioned the use of protective gloves before touching blood as a measure to prevent the disease, however 20 (13.3%) expressed ignorance. Furthermore, 108 (72%) believed that getting vaccinated could prevent the disease while 86 (57%) identified the use of condom during sex as a measure for the prevention of hepatitis B with 21 (14%) of respondents expressing ignorance.

Source of Hepatitis B information

The source by which the respondents obtain information about hepatitis B is represented in **Table 5**. Television took the first position (54%), followed by radio (44%). Newspaper and hospital/health center both came third (42%). Friends (39%) came fourth, closely followed by health workers (35%). The sources that took lower positions were posters/pamphlet, workshop/lectures and church/mosque all of which had 21% and finally library/librarian which had 18%.

Table 5 Sources by which secondary school teachers obtain their information about Hepatitis B in Irepodun L.G.A of Kwara state.

Source	Frequency	Percentage
Television	81	54%
Radio	66	44%
Newspaper	63	42%
Posters/Pamphlet	39	26%
Friends	58	39%
Hospital/Health Centre	63	42%
Health workers	52	35%
Workshop/Lectures	31	21%
Library/Librarian	27	18%
Tertiary institution/education	31	21%
Church/Mosque	32	21%
Family member	45	30%
Internet	35	23%

Preferred information source

The response preference of channels for the delivery of hepatitis B information to secondary school students is presented in **Table 6**. Teachers were rated as the most appropriate channel for passing across hepatitis B information to secondary school students (3.36), followed by health workers (3.33), then family members ranked third (3.23), while friends fourth (3.23), and health clubs fifth (3.21). Poster/pamphlet (3.20) and Television (3.14) ranked sixth and seventh respectively, followed by Radio (3.00), Internet (2.99), church/mosque (2.98) and library/librarian (2.88) which were

in the eighth, ninth, tenth and eleventh rank respectively. Finally, in the least rank was telephone hotline (2.85).

Table 6 Respondents opinion as to the appropriateness of different channels for delivery of Hepatitis B information to secondary school students.

Source	Mean/SD	Percentage	Rank
Family members	3.23/1.49	21%	3
Teacher	3.36/1.34	21%	1
Television	3.14/1.25	11%	7
Posters/pamphlets	3.20/1.45	25%	6
Friends	3.23/1.56	29%	4
Radio	3.00/1.10	11%	8
Health workers	3.33/1.39	23%	2
Health clubs	3.21/1.45	25%	5
Internet	2.99/1.33	15%	9
Church/Mosque	2.98/1.10	11%	10
Library/Librarian	2.88/1.09	7%	11
Telephone hotlines	2.86/1.22	13%	12

Barriers to the dissemination of Hepatitis B information

When the teachers were asked whether they have discussed the issue of hepatitis B with their students, none indicated haven done so. **Table 7** shows the reasons they cited to be a barrier to them in giving hepatitis B information to their students. The most cited reason was teacher's inadequate knowledge about hepatitis B (71%). The second most cited reason which is also related to first was teacher's lack of formal training (63%), closely followed by lack of teaching aids which was thirdly cited by 55% of the respondents. The fourth and fifth most cited barrier was teacher's motivation (47%), and hepatitis B not being part of subject curricula (45%) respectively, all of which falls within the teacher's domain. The next most cited barrier was its role in increasing sexual activities, parents opposition and religious constraints all of which were equally cited by 41% of the respondents, and finally cultural and social inhibition was least cited by 35% of the respondents.

Table 7 Barriers to the teaching of Hepatitis B in secondary schools as identified by respondents.

Statement	Frequency	Percentage
It will increase sexual activities	62	41%
Teachers inadequate knowledge	107	71%
Lack of teaching aids	83	55%
Teachers lack of formal training	94	63%
Teachers poor motivation	71	47%

Not part of subject curricula	68	45%
Parent opposition	62	41%
Religious constraints	62	41%
Cultural and social inhibition	53	35%

Discussion

The result of the study reveals that most teachers are aware of the facts of Hepatitis B. However only 35% of the teacher knows that there is no cure for Hepatitis B with the remaining either believing that there is or expressing ignorance. While there may be indications that HBV may be controlled or possibly eradicated in the nearest future, current antiviral strategies for its treatment are either poorly affective or only effective for non-curative suppression of the viral replication thereby reducing complications, and reduction of inflammation of the liver [11,12].

The findings also reveal that the teachers had a poor awareness of the means by which Hepatitis B is transmitted. A little more than half of the teachers are aware of its transmission through heterosexual and homosexual Intercourse, having multiple partners, sharing of needles/syringe and personal care items, contact with blood and sores of infected persons, and mother to child through birth. This was in agreement with WHO [2]. However, another substantial number of the teacher wrongly indicated mosquito/insect bit, toilet, hugging, shaking of hands, sharing of cloth, food/food utensils, coughing or sneezing and breast feeding as a means through which Hepatitis B could be transmitted as against the position of CDC [5] and Hepatitis B Research Network [13]. WHO [2] indicated that it is commonly spread from mother to child during birth and by percutaneous or mucosal exposure to infected blood and various body fluids? Therefore Mosquito bites, sharing of food/food utensils or cloth, shaking of hands, hugging and breastfeeding does not spread Hepatitis B. Furthermore, the teachers in this study were lacking in their knowledge of the transmission of HBV related to tattooing and body piercing.

The study also revealed that majority of the teachers are aware that hepatitis B can be prevented by avoiding sharing of needles/syringe and personal care items, use of protective gloves when handling blood, condom use during sex, and getting vaccinated. This finding is in consensus with researches of the past which Identified sharing of needles/syringes and personal care items, direct contact with blood and sores, and unprotected sex as risk factors for the contraction of Hepatitis B, and vaccination as the mainstay of the infection [2,5,14,15]. According to WHO [2], the Hepatitis B vaccine as effectively prevented HBV infection since 1982, that perhaps the reason why [16] emphasized the need for prevention programs (vaccination) and imply that condom use promotion could be a potential strategy to prevent HBV infection and other sexually transmitted pathogens.

This study identified television, radio, newspaper and hospitals/health centers as the foremost channel by which the

teachers obtain their information about Hepatitis B. Other researchers have identified these channels as a significant source of Hepatitis B information [17-20]. Chapin as cited in Bankole and Mabekoje [21] noted that television has become so influential that it serves as a teacher to young adults, and that it provide young adults with models whose sexual attitudes and behaviors are learned and replicated. According to Edegoh et al. [9] as cited by Edegoh et al. [22] radio has capacity to break illiteracy barriers, penetrate into the remote areas of our rural communities with clear signals to inform, educate and entertain its audience. Radio was also found to be very useful in the Roll Back Malaria Campaign of the Federal Government of Nigeria and other similar campaigns [22]. Campaign on HIV/AIDS and condom use in the past has also utilized newspaper, radio and television [9].

The findings also revealed that teachers were deemed most appropriate for exposing secondary school students to hepatitis B information. This opinion of the respondents may be based on the premise that apart from immediate family members, teachers are nearest to secondary school students and that they are reliable for the provision of credible information. In other word, teachers are look upon as individuals who can effect positive change in the life of people and the society at large. According to a study conducted in Côte d'Ivoire on the knowledge of Hepatitis B among secondary school students, it was found that school was the main source of information after mass media [23]. This re-emphasizes the importance as well as the role of the teacher in creating health awareness in general and hepatitis B prevention through the provision of information. However, the respondents indicated some factors militating against their provision of hepatitis B information. Foremost among these factors are teacher's inadequate knowledge about HBV infection, lack of formal training, lack of teaching aid, teacher's poor motivation, and hepatitis B not being part of subject curricula. These factors were also found to be a hindrance to the teaching of viral infection like HIV/AIDS in secondary schools in Ogun state [21]. If these factors must be overcome, training and retraining program should be organized for secondary school teachers in order to improve their knowledge about hepatitis B and other trending diseases and infections to which students are at risk, as well as imparting in them best practices in the dissemination of such information to students. Such training programs may include workshops, seminars, conferences, symposiums among others. Teachers should also be self-motivated to take the initiative of improving their own knowledge regarding health issues general perhaps through research so as to improve their competence in creating hepatitis B awareness among students. The government through the ministry of education should make available teaching aids and also see to the introduction of health in general to related school subjects curriculum so as to compliment health education as a school subject of its own [24-26].

Conclusion

This study shows that there was good knowledge on basic facts about hepatitis B among teachers in Irepodun Local Government Area, but they were lacking on the knowledge of fact that there is no cure for hepatitis B. Their knowledge of means by which Hepatitis B could be transmitted was also inadequate seeing that most of them believe sharing of food/ food utensils, mosquito bites, coughing and sneezing, and breastfeeding as means of transmission. They also seem to be aware of the preventive measures for hepatitis B although some wrongly stated avoidance of sharing of cloths and food/ food utensils, and shaking of hands as preventive measures. Television, radio and newspapers were identified as the for most channels by which they obtain their knowledge about hepatitis B. Teachers and health workers were foremost in their opinion of the most appropriate channel for delivery of Hepatitis B information to secondary school student. Finally teacher's inadequate knowledge, lack of formal training, motivation and teaching aids and Hepatitis B not being part of subject curriculum was identified as major barriers in the delivery of Hepatitis B information to students by teachers.

Recommendations

1. Hepatitis B as well as other trending global health issues should be introduced into teacher's educational programs so as to produce knowledgeable teachers, who are able to deliver this information to secondary school students.
2. Hepatitis B as well as other trending global health issues should be introduced into the curriculum of health related subjects in schools like basic science and biology.
3. The government as well as non-governmental organizations should give more attention to school based health education since adolescents and youth form a great percentage of those at risk of Hepatitis B and other infections.
4. Teachers should take advantage of the internet to improve their general knowledge about health issues and especially trending issues like hepatitis B virus infection.
5. School administrators should invite health practitioner to schools as guest speaker to educate both teachers and students on hepatitis B as well as other health issues.

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