Knowledge, Attitude and Practice of Treatment of Hepatitis-B by Natural Medicine Practitioners in South-West Nigeria

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Abstract

Background: Hepatitis B is a potentially life threatening liver infection caused by the Hepatitis B virus (HBV). It is a major global health problem that can cause chronic infection and puts people at high risk of death from cirrhosis and liver cancer. Lack of awareness about Hepatitis B virus, its route of transmission and mode of prevention among health workers including natural medicine practitioners and the general public can lead to increasing prevalence of this public health scourge affecting almost 10% of the world population.

Aims: This study therefore, aims to increase awareness of natural medicine practitioners of Hepatitis B virus as well as assess their attitude and practice of treatment which may help to curb or increase the menace of the disease among the general populace.

Methods: Cross-sectional study involving Natural Medicine Practitioners located within Southwest, Nigeria. Quantitative method of data collection was used through administration of structured interviewer and administered questionnaires.

Results: 120 questionnaires were administered. (76.7%) of respondents have good knowledge of Hepatitis B, majority (72.9%) confirm Hepatitis B in a patient through blood test while (41.7%) use traditional test. Majority of (70%) uses herbal powders for the treatment of Hepatitis B while large number of the respondent uses both herbal powders and decoctions.

Conclusion: Sequel to the result of this research work there is needed to advocate support for branding and regularization of herbal medicine for the treatment of hepatitis B

Keywords: Hepatitis B, Natural Medicine Practitioners, Practice of Treatment

Introduction

Hepatitis is the term used to denote inflammation of the liver by the Hepatitis B virus. Eleven viruses are associated with hepatitis in humans with nine being hepatotropic and two transient in nature [1]. The global distribution of infections with hepatotropic viruses as well as their attendant morbidities and mortalities associated with these infections are becoming major health concern. This is because about 2 million of carriers die globally each year as a result of cirrhosis or primary liver cell cancer. Hepatitis B virus infection is most prevalent in developing countries [2] and worldwide, approximately 350-400million suffer from the chronic form of the disease [3].

An estimated 80% of hepatocellular carcinoma is caused by hepatitis B virus [4], a leading cause of mortality in African and Asia. An estimated 5-10% of infected adults become chronic carriers while the rest most often lead to elimination of the disease without sequelae [5]. An estimated 1 quarter of chronic carriers often die due to hepatic complication while a few remain lifelong carriers and clear the virus at varying intervals. Mode of transmission of the disease is largely through unprotected sex, mother to child transmission (MTCT), contaminated blood and blood products, use of contaminated objects or instruments [6]. Maternal hepatitis B virus transmission is a risk factor in the development of liver cirrhosis and hepato-cellular carcinoma among young adult [7].

In the past two to three decades much research on hepatitis B has focused on “Roadmap for a cure”, a comprehensive research plan to find a cure for chronic hepatitis B and the diseases associated with it, including liver cancer. This global campaign aims
to increase awareness and reduce stigma by putting a human face on the disease. The Roadmap was developed with the input of more than 30% of the world’s leading experts in hepatitis B. It identifies the most promising areas of research and potential funding sources [8].

Another research focus of the past decades in the #Just B story- telling campaign which was launched releasing 20 unique stories of people living with or affected by hepatitis B. The campaign aimed to increase awareness and put a human face on the disease [9]. The Joan Block improving lives fund was established in recognition of HBF Hepatitis B foundation, co-founder Joan Block’s enormous contribution to the world of hepatitis B. Hepatitis B United is another coalition that cuts across 24 states in Europe all working to find a cure to hepatitis B and increase awareness of the populace on the disease. A new Centre for Disease Control (CDC) grant will support its work in continuity to build the natural Hepatitis B United Coalition to increase screening and linkage to cases as the Hepatitis B virus discovery turned 50 in February 2015. Hepatitis B was discovered in February 1965 [10] following the publication of the first article in the Journal of the American Medical Association (JAMA) on the Australian Antigen (now known as hepatitis B virus) by Dr. Baruch Blumberg, Harvey Alter and Sam Vinisich.

In Africa, according to a publication titled “Treatment of Chronic Hepatitis B in Sub-Saharan Africa 1 year Results of a Pilot Program in Ethiopia” [11]. The World Health Organization (WHO) has set an ambitious goal of eliminating viral hepatitis by 2030. However, in Sub-Saharan Africa, anti-viral treatment of chronic hepatitis B (CHB) is virtually unavailable. In Sub-Saharan Africa however, treatment for viral hepatitis is rarely available in the public sector [11] as patients with CHB are left untreated and physicians are left to merely follow the natural course of the disease and provide palliative care. To date few African countries have developed national action plan for viral hepatitis [12], and only one published study the PROLIFICA study in the Gambia [13], has reported results of Hepatitis B virus treatment on the continent. Consequently, there is a lack of local data to direct guidelines and promote implementation.

In Nigeria, a study conducted in 2018 published in The Pan African Medical Journal titled Hepatitis B virus infection among sexually active individuals in Nigeria [14] reported Hepatitis B virus (HBV) as a major health challenge in Sub-Saharan Africa. Perinatal and Sexual transmission of Hepatitis B virus being the main routes of infection in Nigeria. However, there is paucity of data as regards the major contributory route of transmission to chronic Hepatitis B virus infection in this region. Also, in Nigeria, not everyone at high risk of the infection has been identified.

Hepatitis B virus is said to be hyper-endemic in Nigeria, Gabon, Namibia, Burkina Faso and Cameroon [16]. The prevalence is also higher in rural areas compared to urban areas. They also observed a greater risk for males than for females. The risk of contracting Hepatitis B virus in Nigeria is substantial not only due to low vaccination rates but also given that as many as 75% of the population will be exposed [17]. In Nigeria, high prevalence of Hepatitis B virus has been found among surgeon (25.7%), voluntary blood donors (23.4%) and infants (16.9%).

Globally, it has been estimated that 350 million chronic hepatitis B virus carriers exist worldwide. The prevalence of chronic Hepatitis B virus infection varies geographically from high (>8%), intermediate (2-7%) to low (<2%) prevalence.

Approximately 2 Billion people have serological evidence of past or present Hepatitis B virus infection. Approximately 75% of chronic carriers live in Asia and the Western Pacific. 500,000 to 1.2 million people die of Hepatitis B virus infection annually [18]. Because of the high Hepatitis B virus related morbidity and mortality, the global disease burden of Hepatitis B is substantial.

Changes in sexual practice and improved screening measures of blood products have reduced the risk of transmission of Hepatitis B virus. Behaviour modification is thought to be more beneficial in developed countries than in developing countries while prevention by vaccination is an important strategy to decrease the risk of chronic Hepatitis B virus worldwide [19].

Hepatitis B is a potentially life threatening liver infection caused by the Hepatitis B virus (HBV). It is a major global health problem that can cause chronic infection and puts people at high risk of death from cirrhosis and liver cancer. Lack of awareness about Hepatitis B virus, its route of transmission and mode of prevention among health workers including natural medicine practitioners and the general public can lead to increasing prevalence of this public health scourge affecting almost 10% of the world population. This study therefore, aims to increase awareness of natural medicine practitioners of Hepatitis B virus as well as assess their attitude and practice of treatment which may help to curb or increase the menace of the disease among the general populace.

Materials and Methods

Study Design

This is a Cross-sectional study involving Natural Medicine Practitioners located within the Southwest geopolitical zone of Nigeria. The main focus is to assess the understanding of these practitioners of hepatitis B, to investigate how the attitude of the practitioners affect the prevalence of hepatitis B, and to see if the practice of treatment of hepatitis B among the natural medicine practitioners is more effective than the conventional orthodox treatment of the diseases. Quantitative method of data collection was used as data was generated from natural medicine practitioners located within the southwest geopolitical zone of Nigeria through administration of structured interviewer and administered questionnaires.

Study Area

This study was conducted in South west geopolitical zone of Nigeria comprising six states out of the thirty-six states of the Nigerian Federation. These are Lagos, Ogun, Oyo, Osun, Ekiti, and Ondo State. Southwest Nigeria lies on Latitude: 9.081999° N and Longitude: 8° 40’ 30.9972 E of Nigeria. The population of the South West region is estimated at 32.5 million people. The region’s population is predominantly members of the Yoruba ethnic group, who make up approximately 21% of the national population. The population of Lagos is an estimated 10.7m with an annual population growth rate of about 3.2%. The major religions of the inhabitants are Islam and Christianity.
Samples and Subjects

The instrument for data collection was a structured Questionnaire.

A Simple random sampling technique was used picking from a subset of individuals chosen from a larger set. Twenty (20) Natural Medicine Practitioners were chosen from each state within the six southwest geopolitical states of Nigeria for this study.

Data Analysis

Data collection, collation and analysis were done using statistical package R. result from self-administered interview conducted among Natural Medicine Practitioners in Southwest Nigeria. A total of 130 questionnaires was administered, a total of 120 questionnaires were filled and returned to the researcher which represented a response rate of 92%.

Results

Respondents’ Socio Demographic Characteristics (n = 120)

More than half of the respondents 69(57.5%) were aged above 50 years, 81(69.2%) of the respondents were male respondents, 85(72.6%) of the respondents were married, 43(36.8%) of the respondents had primary level of education. More than half 46(54.8%) of the respondent were between 11-20 years of experience, 92(76.7%) of the respondents were Yoruba and 66(55%) of the respondents practice Islam.

Table 1: Socio Demographic Characteristics of the Respondents

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>Percentage (%)</th>
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<tbody>
<tr>
<td>Age</td>
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<td>Ethnicity</td>
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<td>Igbo</td>
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<td>11.7</td>
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<tr>
<td>Hausa</td>
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<tr>
<td>Total</td>
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<tr>
<td>Religion</td>
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<tr>
<td>Islam</td>
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<tr>
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<td>Total</td>
<td>120</td>
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</tbody>
</table>

Discussion

This study focuses primarily on the perception of the knowledge, attitude and practice of treatment of hepatitis B among natural medicine practitioners in southwest, Nigeria.

Although more attention is given to western medicine for the treatment of HBV in southwest region of Nigeria, our findings reveal that traditional medicine practitioners have good knowledge of hepatitis B infection and have been able to manage the treatment with natural medicines over time. More than half...
(57.5%) of the respondents were above 50 years of age. (45.0%) of the respondent are Christians while (55.0%) of them are of Islamic faith. Educationally (27.4%) of the respondents had higher education, (35.9%) had secondary education and (36.8%) had just primary education (table 1). This analysis depict the socio-demographic information of respondents which confirms that despite low level of education there is adequate knowledge of Hepatitis B, afterall, before the existence of western education and medicine traditional medicine practitioners have been treating HBV infection using herbs.

Report on the assessment of the knowledge of traditional medicine practitioners regarding hepatitis B shows that (76.7%) agree that hepatitis B is a disease of the liver (Figure 2), this conform with the literature review as existing studies in Southwest Nigeria shows 57.1% of patients with primary liver cell carcinoma were infected with Hepatitis B virus [20-39]. Furthermore, respondents posit that hepatitis B is not injury of the liver or the destruction of the liver but a virus infection that can damage the liver if not well treated at the acute stage, this conform with the literature review that there are two stages of HBV infection which are acute hepatitis B called fulminant hepatitis and chronic hepatitis B. It as well establishes the fact that respondents have good knowledge of hepatitis B infection. Majority (72.9%) of the respondent’s agree that they know whether hepatitis B is present in the patient body through blood test while (41.7%) of the respondent’s agree that they use traditional test to know if hepatitis is present in their patient body. It is pertinent to state here that some of the respondents use both blood test of medical laboratory result together with traditional test to confirm the type of the hepatitis the patient has. It is also noteworthy that the traditional medicine practitioners know the different types of hepatitis of about five in number (hepatitis A – E) which was explained during the course of this study. The natural vaccine for age 5 to 10 children was also explained. All the aforesaid with other variables in the result analysis establish the good knowledge of hepatitis by the respondents.

Report on the attitude of respondents towards hepatitis B patients show that few (2.80%) of the respondents agree that hepatitis B patients should be isolated to prevent others getting the disease while (97.20%) disagree. The majority however suggest that the infected person should avoid unprotected sex so as not to infect others, (33.0%) of the respondents agree that infected person should avoid consuming alcohol while (24.1%) of the respondents agree that they will advise someone who is Hepatitis B positive to avoid donating blood to others. The fact that majority of the respondents do not suggest isolation of the infected person portrays a good attitude of respondents towards hepatitis B patient.

The respondents also enunciates various means of caring for the infected person in a way that caregiver do not get affected such as quick washing of washable items used for the preparation of herbs for the treatment and other hygienic measure as well as cleaning environment. Vaccination of people around the patient through traditional means is also a good attitude of the traditional medicine practitioners towards hepatitis B patients. Report on the assessment of the practice of treatments of hepatitis B by respondents shows that more than half (67.4%) of the respondents agree they make use of herbal powders to treat hepatitis B patients, (70.7%) of the respondents agree that they use herbal decoction to treat Hepatitis B patients while (43.5) of the respondents agree that they use Herbal teas to treat Hepatitis B patients and (37.0%) of the respondents agree that they use Herbal infusion to treat Hepatitis B patients, (Table 2). Although, there are no found literature for similar study in the study location but observation and comments of some patient at available at the spot of administering the study suggest a significant assurance of the respondents claims. This suggests that there are known herbal medicine by traditional medicine practitioners for the treatment of HBV that can be prepared in different forms. It is noteworthy that majority of the respondents (80.4%) agree that they do blood to test to know whether the disease has been cured. Also, more than half 52% agree that the cured patient can be re-infected another time while (48%) of the respondents disagree that the cured patient can be re-infected. This study also shows that majority of the respondents (91%) of the respondents agree that in their practice cases of hepatitis B get better treatment using herbal medicine than in the hospital (Figure 1). They reported cases of infected patient after been treated at the hospital setting without getting well who later get better treatment via herbal medicine.

Sequel to the result of this research work there is need to advocate support for branding and regularization of herbal medicine for the treatment of hepatitis B. Although, respondents do not disclose the combinations of herbal medicine for the practice of treatments of hepatitis B, only the form such as powder; decoction and tea was mentioned.

Limitation of the Study

This study was limited to southwest, Nigeria alone more, results obtained are specific to that area, hence they are not generalizable to populations in other areas or geopolitical zones in Nigeria as there could be diverse perception.

Conclusion

This study shows significant knowledge and good attitude as well as practices of treatment of hepatitis B viral infection among natural medicine practitioners. More than half of the respondents agree that hepatitis B is a liver disease, they understand the mode of transmission of the disease, recognize signs and symptoms of the disease as well as those at risk of contracting the disease and majority knows how to confirm presence of the disease in an infected person.

Natural Medicine Practitioners showed a good attitude of care to hepatitis B patients by disagreeing on the need to isolate the infected persons, would not advice an infected person to donate blood, share toothbrushes and razor blades and would discourage, unprotected sex and consumption of over the counter drugs while encouraging copious consumption of water to detoxify the body in an infected patient but did not discourage alcohol consumption in an infected person.

It is fascinating to note that respondents claim there are traditional means of vaccination against hepatitis B infection for children.

The attitudes of respondents as discussed in the preceding chapter indicate a sense of professionalism and medical inclination in traditional medicine practitioners.
The years of practice and experience gathered in the treatment of hepatitis B viral infection has a significant impact on the level of confidence in the practice of treatment of the practitioners while the results of treatment has always be satisfactory after conducting another test of confirmation in majority hence the assertion that traditional medicine yields better results than orthodox medicine in the care of Hepatitis B viral infection.

**Recommendations**

Having gone through the assessment of the knowledge, attitudes and practices of traditional medicine practitioners in southwest Nigeria with the above result from respondents, this study therefore recommend thus:

1. The need for individual to consider alternative herbal medicine for the treatment of hepatitis B from traditional medicine practitioner due to the acclaimed effectiveness of the treatment as compared to the orthodox practice in the care of this disease.
2. The need for traditional medicine practitioners to develop appropriate means of product branding, standardization and quality control of natural medications for the treatment of hepatitis B viral disease.
3. The need for government agencies such as Nigerian Natural Medicine Development Agency (NNMDA) to support adequate laboratory analysis and further research into the efficacy and standardization of the Hepatitis B herbal formulars for better acceptance by the general populace.
4. Federal Government initiatives to encourage natural practitioners to reveal the secrets of nature known to them or passed on from generation to generation for the benefit of the masses.

Need for scholarships to the youths to study Natural Medicine at home and abroad to improve healthcare and reduce cost of healthcare while improving life expectancy.

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