



KNOWLEDGE, ATTITUDES AND PRACTICES OF BARBERS TOWARDS HEPATITIS B.

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ABSTRACT

Background: The barbershop is a place where hair cutting, shaving and hair reforming for men are practised. Negligence during the use of sharp instruments may be a risk factor for bloodborne infections, causing serious health problems for both the barber and the clients. **Objective:** This study aimed to assess the knowledge, attitudes, and practices of barbers towards hepatitis B in El-Obied North Kordofan State. **Methodology:** This facility based cross-sectional study comprised of 150 barbers, selected by total coverage. Data were collected via questionnaires and observation checklist and were analyzed by SPSS software. **Results:** In this study, 90% of barbers hear about hepatitis B, 70% know the causative agent of hepatitis B, only 29% know hepatitis B can be transmitted via contaminated razors, 40% not aware about the availability of hepatitis B vaccine, 33% belief that hepatitis B infection is associated with stigma. While 11% do not sterilize their instruments and 4% of barbers were using razors for more than one client, 61%, they do not wearing gloves during shaving their clients and 17% of them practiced sexual intercourse out of marriage. **Conclusion:** Such knowledge and practices of barbers may lead to hepatitis B transmission within barbershops. North Kordofan ministry of health, clients and media should pay more attention to the problem.

KEYWORDS: Hepatitis B, barbers, knowledge, attitude and practices.

INTRODUCTION

Hepatitis B virus (HBV) infection are a serious global public health problem. A small proportion of acute hepatitis B virus (HBV) infections may be clinically recognized; less than 10% of children and 30%–50% of adults with acute hepatitis B virus (HBV) infection show icteric disease. In approximately 5 to 15 per cent of cases, HBV infection fails to resolve and the affected individuals then become persistent carriers of the virus.^[1,2] More than 2 billion people worldwide have evidence of past or current HBV infection and 350 million are chronic carriers of the virus, which is harboured in the liver and causes an estimated 780,000 deaths from cirrhosis of liver and hepatocellular carcinoma.^[3] HBV is 50 to 100 times more infectious than HIV, yet is transmitted by contact with blood or body fluids of an infected person in the same way as HIV.^[4] The barbershop is a place where hair cutting, shaving and hair reforming for men are practised. Negligence during the use of sharp instruments may be a risk factor for bloodborne infections, causing serious health problems for both the barber and the clients.^[5] Razor sharing and shaving in barbershops has been identified as a key risk factor for HBV infection.^[6] Study

in Pakistan showed that 96.2% washed razors with antiseptic after each client and 95.7% used a new blade with new clients. However, knowledge about the diseases and modes of transmission were poor and only 36.6% knew that hepatitis can be transmitted via shaving instruments.^[7] Sudan is classified among countries with a high hepatitis B surface antigen (HBsAg) endemicity of more than 8%.^[8] Exposure to HBV infection ranges from 47%^[9] to 78%^[10] with a hepatitis B surface antigen (HBsAg) seroprevalence ranging from as low as 6.8%^[9] in central Sudan to as high as 26%^[11] in southern Sudan. Identified risk factors for HBV infection in Sudan include living in southern Sudan, parenteral antischistosomal therapy,^[9] sexual promiscuity,^[10] and scarification^[11] which is a common ritual in southern Sudan.

This study aimed to determine knowledge, attitudes and practices of barbers towards hepatitis B in El-Obeid, Sudan.

MATERIALS AND METHODS

Study design

Facility based descriptive cross-sectional study.

Study area

El Obeid or Al-Ubayyid is the capital of North Kordofan State its area has been estimated by 81 km² and the distance from Khartoum is about 560 km. El Obeid is connected to Khartoum by an asphalt motorway, a railway line and air-flights taking off its airport several times a week. The population of the City estimated by 440483 person. There are 38000 houses, 40000 families and 50 barbershops in the City. The population of this City is majority Muslim with a small Christian presence. Health services consist of four governmental hospitals, single private hospital, 22 health centers, two health units and three dispensaries.^[9]

Study population

Barbers within the barbershops in El Obied.

Sampling

In this study the entire target population (barbers) in El Obied was covered. Thus, the number of target population is 150 barbers working in 50 barbershops.

Data collection

In this study questionnaire was used to collect data from study group. It contained four sections the first section was to gather personal data of barbers, the second section to assess the knowledge of barbers about hepatitis B, the third section to examine the attitude towards hepatitis B and the last section was about practices towards hepatitis B. In addition, an observation checklist was used to recording the practices of barbers, towards hepatitis B.

Ethics

Approval from Ministry of health and Shiekan locality was obtained.

Participants assured of the confidentiality of their responses and provided informed verbal consent.

Data processing & analysis

Data were analyzed using statistical software package (SPSS).

RESULTS AND DISCUSSION

In this study 90% of barbers hear about hepatitis B (**table.1**) while in similar study conducted in Rawalpindi and Islamabad about 34.6% have heard advertisements about hepatitis.^[12]

The results of the present study revealed that 70% of barbers know the causative agent of hepatitis B (**table.1**). This knowledge is considered high as compared with 39.6% knew the causative agent in similar study conducted in Rawalpindi and Islamabad.^[12] In this study only 32% of barbers know that hepatitis B can be transmitted via blood transfusion (**table.1**). This knowledge is very low as compared with 82.1% who knew that hepatitis can be transmitted through blood transfusion in similar study conducted in Sana'a City, Yemen.^[13] blood transfusion is a major source of HBV transmission in countries where the blood supply is not screened for HBsAg.^[13] Also in this study 29% of barbers know that hepatitis B can be transmitted via contaminated razors, which is considered poor knowledge as compared with 36.6% of barbers knew that hepatitis can be transmitted via shaving instruments, in study conducted in Hyderabad, Pakistan.^[7]

The present study illustrated that 40% of barbers are not aware about the availability of hepatitis B vaccine (**table:1**). This knowledge was poor and in contradiction with that mentioed by Robert B. Wallace, which said that hepatitis B immunization is the most effective prevention measure, two products are available to prevent HBV infection, hepatitis B vaccine and hepatitis B immune globulin (HBIG).^[14]

Table 1: Knowledge of barbers towards hepatitis B.

Hearing of barbers with hepatitis B	Frequency	Percent
Yes	135	90%
No	15	10%
Causative agent of hepatitis B		
Bacteria	31	21%
Fungi	6	4%
Virus	105	70%
Algae	8	5%
Modes of transmission of hepatitis B		
Sexual intercourse	41	27%
Blood transfusion	48	32%
Sharing needles in intravenous drug abuse	18	12%
Sharing of contaminated razors	43	29%
High risk groups		
Intravenous drug abuse addicted	56	37%
Barbers	31	21%
Health Workers	23	15%
Homosexuals	40	27%
Prevention of hepatitis B		
Avoid contaminated sharps	74	49%
Use of protective tools and equipments	49	33%

Immunization	26	17%
Others	2	1%
There is a vaccine for hepatitis B		
Yes	90	60%
No	60	40%

This study revealed that 33% of barbers believe that hepatitis B infection is associated with stigma (**table:2**) this negative attitude, in consistence with similar study conducted in Rawalpindi and Islamabad which, found that stigma was marked in terms of disease transmission,

with 66% of patients fearing that they could transmit the infection to others; 19% said that family members avoided sharing towels, soap and eating and drinking utensils. Marital relationships were affected for 51% of married patients who had told their spouse.^[15]

Table 2: Attitudes of barbers towards hepatitis B.

Attitudes towards treatment if you get the infection	Frequency	Percent
Go to hospital	135	90%
Using traditional therapy	10	7%
Ignore the disease	5	3%
Dealing of barbers with hepatitis B positive client		
I don't deal with him	30	20%
Gingerly	118	79%
Others	2	1%
Hepatitis B is associated with stigma		
Yes	50	33%
No	100	67%

About (97%) of barbers dispose of razors after they use them (**table:3**) this was considered low proportion as compared with similar study in Rawalpindi and Islamabad which reflect that 100% of barbers dispose of razors after their use.^[16]

The present study illustrated that (11%) of barbers do not sterilize their shaving instruments (**table:3**) this practice may implicate in transmission of hepatitis B, while in study conducted in Ethiopia reflect that, 100% of barbers were sterilizing their instruments.^[17] In addition, 4% of barbers were using razors for more than one client (**table:3**), this is considered low percentage when compared with (45.8%) of barbers reuse of razors in similar study conducted in Rawalpindi and Islamabad.^[16] inspite of lower percentage of reusing of razors (4%), such practices of barbers, may enhancing the risk of

transmission of pathogens from one person to another. In this study more than half (61%) of barbers do not wear gloves during shaving of clients (**table:3**). Such practice may favour the possibility of acquiring hepatitis B infection through skin scratching coupled with presence of injuries. This bad practice is against the opinions of (Glenn Doherty) which said disposable surgical gloves are to be worn when contact with blood and/or body substances is contacted and when performing separate and distinct procedures on the same client.^[18] Beside this practice there is 17% of barbers were practiced sexual intercourse out of marriage (**table:3**). This unfavorable practice poses a great threat for the community members because those barbers may get hepatitis B infection and disseminate this infection to every one who comes to shaving his hair through injuries.

Table 3: Practices of barbers towards hepatitis B.

Razors disposal after shaving clients	Frequency	Percent
Yes	145	97%
No	5	3%
Sterilization of shaving instruments		
Yes	133	89%
No	17	11%
Reuse of razors for more than one clients		
Yes	6	4%
No	144	96%
Wearing of gloves during shaving		
Yes	92	61%
No	58	39%
Sexual intercourse out of marriage		
Yes	26	17%
No	124	83%

Fig. 1: Showed that 30% of barbers do not have health card (medical examination), while 32% of barbershops don't have valid health license, this may lead to spread of hepatitis B among clients.

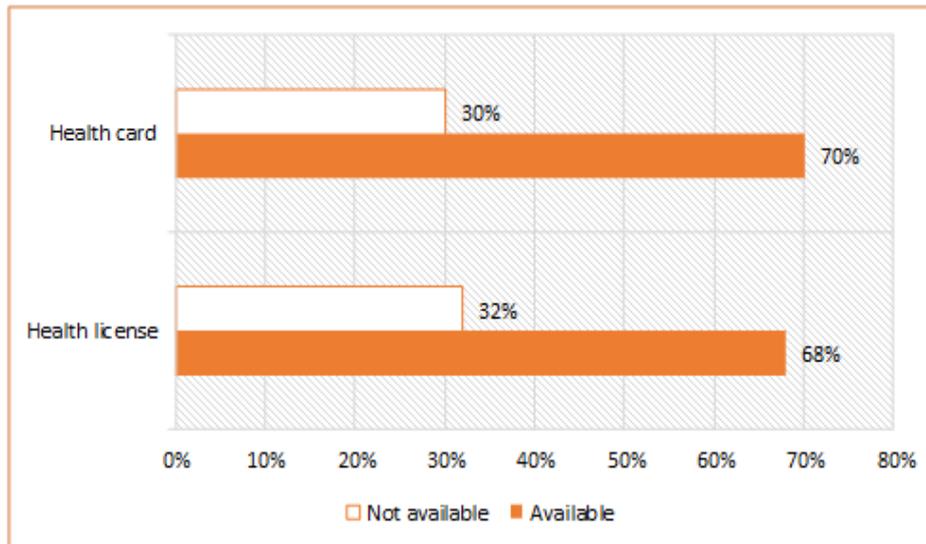


Figure 1: Possession of health license and card among barbers and parbershops.

n= 150

CONCLUSION

Such knowledge and practices of barbers may lead to hepatitis B transmission within barbershops. North Kordofan ministry of health, clients and media should pay more attention to the problem and there is a scope for educational and training intervention, also there should be rules and regulations from ministry of health regarding the sterilization and disposal of sharps equipments within barbershops.

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