

ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PRACTICE TOWARDS HEPATITIS B AMONG HEALTHY POPULATION IN SAUDI ARABIA, 2017

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ABSTRACT

Background: Hepatitis Virus B is a major health problem in KSA as it used to be one of the most endemicity countries for being hepatitis B seropositive. **Objectives:** Evaluation of the KAP of Saudi population toward hepatitis B infection in KSA. **Methods:** A descriptive cross sectional study was used among 890 Saudi subjects aged between 20-50 years old. All participants were interviewed and filled-up a predesigned validated questionnaire form February 2017- June 2017 that consisted of 4 parts including the demographics and KAP of

included subjects. **Results:** Out of 890 Saudi subjects, 69.3% were females, 48.3% were working, 77% had college degree and 50.9% of them aged from 20-30 years old. The prevalence of hepatitis B among the studied population showed that only 8% of subjects declared that they had hepatitis B infection. Most of participants had good knowledge regarding the methods of HB transmission, the definition, symptoms and effects of the disease. The attitude of subjects was good in 60% of subjects but the level of practice was poor among 66% of subjects as most of subjects hadn't been screened or vaccinated for hepatitis B infection. **Conclusion:** The level of KAP toward hepatitis B was good in 56% of

subjects with high scores of good knowledge and attitude but with poor practice levels among most of subjects.

KEYWORDS: KAP, Hepatitis B, Cross-Sectional, Adult, KSA.

INTRODUCTION

Hepatitis B virus (HBV) is considered a global disease of humanity with estimated prevalence of 30% around the world but about 350 million of population were found to be serological carries of hepatitis B.^[1] It is an infectious disease and the tenth leading cause of death all over the world also it could occur with no seasonal spreading.^[2,3]

HBV could be transmitted through contaminated blood, secretions and unsafe sex. The disease is divided into two phases acute or chronic infection. The acute phase could result in fulminant hepatitis with urgent need for liver transportation.^[4] On the other hand, chronic type is significantly associated with death due to cirrhosis and failure of liver and resulting in hepatocellular carcinoma (HCC).^[5,6]

The incidence of HBV infection is very high among hospital workers as most of them were never vaccinated.^[7] The surveys that concern assessing the knowledge, attitude, and practice (KAP) toward hepatitis B could be used for improving the health and preventing the spread of infection.^[8,10] This study was intended to study the KAP of Saudi population toward hepatitis B infection for providing good preventive measures.

METHODS

- *Study design*

After obtaining an approval from the ethical committee of faculty of medicine, this cross sectional descriptive study was assessed among Saudi population from February 2017 to May 2017.

- *Sample size and population*

This study included 890 Saudi subjects with no physical or mental disturbs who were randomly chosen from all governorates of KSA and their age ranged from 20-50 years old. A written informed consent obtained from all subjects. Privacy and confidentiality of data were confirmed during the study. We confirm no conflict of interest.

- **Study tools**

The KAP of all participants was evaluated by using a self-administrated questionnaire that contains four sections for data collection and was revised by supervisors of the research then translated onto Arabic. The first part included questions about the demographics of included subjects, part two involved questions about the knowledge about HB, the third part regards the attitude and the fourth part addressed toward the practice of included subjects.

- **Statistical analysis**

The data were collected then analysed through Statistical Package for Social Science (SPSS) program (V. 22) then presented into tables and figures. P values < 0.05 were considered statistically significant.

RESULTS

Demographic Characteristics

The age of included subjects showed that most of subjects (50.9%) aged from 20-30 years old, 31.3% aged from 31-40 and 17.8% aged from 41-50 years old. Most of included subjects were females (69.3%) and 39.7% were males. Also, 48.3% of subjects were working, 23% were unemployed and 28.7% were students. The majority of subjects had a college degree (77%), 15.2% had intermediate school and 7.8% were illiterate. 46% of participants had a moderate income, 45% had low income and 9% had high income (Table. 1).

Table 1: Socio-Demographic Characteristics (n=890).

Age (year)	Frequency	Percentage (%)
20-30	453	50.9
31-40	279	31.3
41-50	158	17.8
Gender		
Female	537	69.3
Male	353	39.7
Occupation		
Working	430	48.3
Unemployed	204	23
Student	256	28.7
Education level		
Illiterate	70	7.8
Intermediate	135	15.2
College degree	685	77

Income		
Low	400	45
Moderate	410	46
High	80	9

Incidence of hepatitis B

The prevalence of hepatitis B showed that 71 (8%) of subjects declared that they had hepatitis B but 819 (92%) of subjects don't have hepatitis B (Figure. 1).

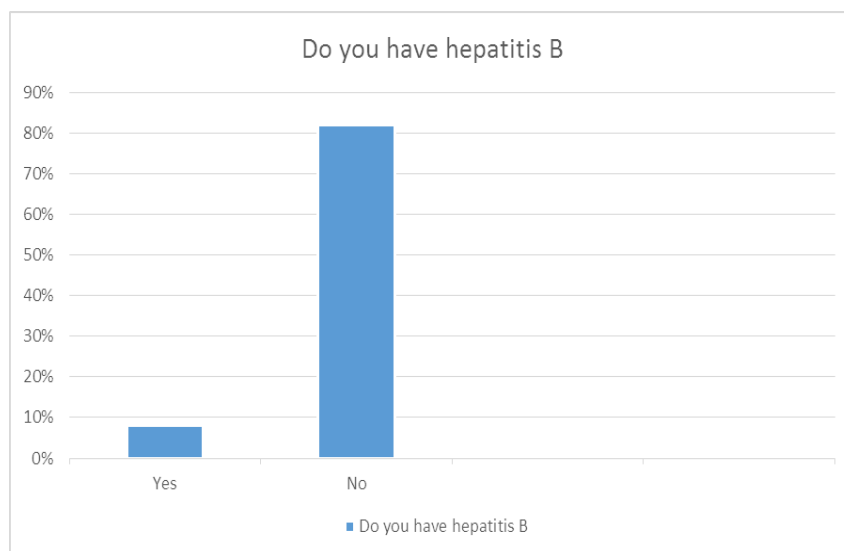


Figure 1: Prevalence of hepatitis B in included subjects.

Knowledge of included subjects

The knowledge of included subjects regarding the hepatitis disease was very good (91%) and more than half of subjects (54%) had good knowledge about hepatitis B. 64.5% of subjects knows that hepatitis B is a viral disease, 76.9% know that hepatitis B affects the liver and its functions but only 34% thought that hepatitis B could induce liver cancer. About 52.8% of subjects had good knowledge about the symptoms of hepatitis B, 63% thought that hepatitis is transmitted through unsafe sex. Also, 75% thought that hepatitis could be transmitted through contaminated blood products, 77% thought that hepatitis could be transmitted through unsterilized equipment and 60.9% answered yes that the disease could be transmitted from mother to child. About 66% of subjects thought that hepatitis B is curable, 68% know that there is available vaccination for hepatitis B and 46% thought that physical activity ad special diet are recommended for treatment of hepatitis B (Table. 2).

Table 2: Awareness of included subjects (n=890).

S. no.		Yes	No
1	Do you know the hepatitis disease?	810 (91%)	80 (9%)
2	Do you have knowledge about hepatitis B?	480 (54%)	410 (46%)
3	Hepatitis B is a viral disease?	574 (64.5%)	316 (35.5%)
4	Hepatitis B affects the liver and its function?	684 (76.9%)	206 (23.1%)
5	Hepatitis B could result in liver cancer?	302 (34%)	588 (66%)
6	Jaundice, nausea, vomiting, loss of appetite are symptoms of hepatitis B	470 (52.8%)	420 (47.2%)
7	Hepatitis B could be transmitted by unsafe sex?	560 (63%)	330 (37%)
8	Hepatitis could be transmitted through contaminated blood products?	668 (75%)	222 (25%)
9	It can be transmitted through unsterilized equipment?	686 (77%)	204 (23%)
10	It can be transmitted from mother to child?	542 (60.9%)	348 (39.1%)
11	The disease is curable?	587 (66%)	303 (34%)
12	Is there available vaccination for prevention of hepatitis B?	605 (68%)	285 (32%)
13	Physical activity and special diet are required for treatment of hepatitis B?	410 (46%)	480 (54%)

Level of awareness

Most of included subjects (78.1%) had good knowledge regarding hepatitis B and only 21.9% had poor knowledge about hepatitis B (Table. 3).

Table 3: Respondents' awareness about hepatitis B.

Level of knowledge	Frequency	Percent (%)
Poor	195	21.9
Good	695	78.1
Total	890	100,0

Attitude of included subjects

The attitude of subjects toward hepatitis was shown in table. 4. 53% of subjects thought that they won't have hepatitis B and 58% of them would feel fear if they had hepatitis while 42% of them would feel sadness. Most of subjects would have good attitude (92.5%) toward going to physician if they had hepatitis. Also, most of subjects (52.9%) would have fears toward transmitting the disease to their family, 33.6% said that they have fears from death, 10.6% had fears from being rejected by the society and only 2.9% of them had fears about the costs of treatment.

Table 4: Attitude of respondents toward physical activity (n=890).

Attitude of respondents toward hepatitis B		
Do you think you can have hepatitis B?	No.	Percentage (%)
Yes	418	47
No	472	53
What would be your reaction if you have hepatitis?		
Sadness	374	42
Fear	516	58
Who would you talk with about you illness?		
Physician	602	67.6
Parents	11	1.2
Wife or husband	200	22.5
Nobody	77	8.7
What will be your attitude toward hepatitis B?		
Go to physician	823	92.5
Use herbal medications	55	6.2
Surrender and loss hope	12	1.3
What would worry you if you have hepatitis B?		
Fear of death	299	33.6
Fear from the treatment costs	26	2.9
Fear from being isolated from the society	94	10.6
Fear from transmitting the disease to your family	471	52.9

Assessing attitude level

The attitude of subjects was good in 60% of them and poor in 40% toward hepatitis B as shown in table. 5.

Table 5: Subjects' attitude toward hepatitis B.

Level of attitude	Frequency	Percent (%)
Poor	356	40
Good	534	60
Total	890	100,0

Practice pattern of included subjects

The practice pattern of included subjects showed that only 30% of subjects had screened for hepatitis B, 42.2% have been vaccinated against hepatitis B but 70% have never been screened for hepatitis B and 57.8% have never been vaccinated toward hepatitis B. About 79.1% of subjects had good practice pattern regarding sterilizing their equipment and not using other people's staff. Most of participants (80%) had never been to educational health programs about hepatitis B. Only 27% of subjects avoid contacting with patients having hepatitis B (Table. 6).

Table 6: Practice pattern of respondents toward hepatitis B (n=890).

	Yes	No
Have you ever screened for hepatitis B?	267 (30%)	623 (70%)
Have you been vaccinated against hepatitis B?	376 (42.2%)	514 (57.8%)
Do you even sterilize equipment before use and don't use other people equipment?	704 (79.1%)	186 (20.9%)
Have you ever participated in health education programs related to hepatitis B?	178 (20%)	712 (80%)
Do you avoid patients with hepatitis B?	240 (27%)	650 (73%)

Level of practice pattern

As for the level of practice pattern, 66% of subjects had poor practice pattern despite of good knowledge and attitude but only 34% of subjects had good practice score (Table. 7).

Table 7: Respondents' practice pattern of included subjects.

Level of practice	Frequency	Percent (%)
Poor	588	66
Good	302	34
Total	890	100,0

Level of overall KAP of included subjects

Most of subjects (56%) had a good KAP toward hepatitis B infection and 44% had poor knowledge (Table. 8).

Table 8: Respondents' KAP of hepatitis B.

KAP level	Frequency	Percent (%)
Poor	391	44
Good	499	56
Total	890	100,0

DISCUSSION AND CONCLUSION

The present study was conducted to evaluate the KAP of Saudi population toward hepatitis B. The prevalence of hepatitis B among the studied population showed that only 8% of subjects declared that they had hepatitis B infection. In consistent, an epidemiological large-scale study conducted among Saudi children showed that the prevalence of HB was of approximately 7%.^[11] However, other studies showed lower rates of prevalence as only 1.31% out of 74,662 individuals tested positive for HBV in 2008,^[12] Also, other studies showed that the HBV prevalence in KSA was 1.5% among the whole population and 2.6% among adult subjects.^[13,14]

Most of participants had good knowledge regarding the methods of HB transmission, the definition, symptoms and effects of the disease. This was consistent with a recent study conducted in KSA showing that there was a good knowledge among the included subjects toward hepatitis B.^[8] Also, the results of the study could be attributed to that most of subjects in the present study had a college degree, young age and had a good income. However, in other studies in different parts of the world, there was a poor knowledge among the included subjects regarding HB^[9,15,16]

The attitude of subjects was good in 60% of subjects and this could be attributed to the high knowledge among participants as found in many studies as the level of knowledge was significantly associated with positive attitude.^[17,18]

The level of practice was poor among 66% of subjects as most of subjects hadn't been screened or vaccinated for hepatitis B infection. In the same line, recent studies showed low level of practice among studied participants regarding being screened or vaccinated.^[8,10,18]

In conclusion, the level of KAP toward hepatitis B was good in 56% of subjects with high scores of good knowledge and attitude but with poor practice levels among most of subjects. Health educational programs should be conducted for declaring the importance of early screening and preventive measures. Also, those educational programs could be used for improving the KAP of the Saudi population.

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