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Research Article

Knowledge, Attitude and Practice towards Hepatitis among Medical and Para-medical Workers in Tertiary Institute

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Abstract:
Introduction : Hepatitis B is a serious infection caused by Hepatitis B virus that affects the liver. Hepatitis B is a global health problem and health care workers are at risk mostly. It is contagoius and transmitted from one individual to another through blood to blood, mother to child, sexual contact, sharing of eating utensils, barbar shop and beauty salon equipment. The aim of the study was to assess knowledge, attitude and practice of medical and para-medical workers towards Hepatitis B.
Methods : this cross sectional prospective study was conducted in the Department of Obstetrics and Gynaecology, SMGS Hospital, GMC Jammu . Information about socio-demographic variables, knowledge towards transmission and prevention method of Hepatitis B was taken from 100 medical and para-medical workers.
Results : This study was conducted in the month of July 2019. A questionairre was structured to collect the information from 100 health care workers which include 42 medical workers and 58 para-medical workers. Knowledge regarding transmission was fairly good among medical workers. 52% of medical workers were fully vaccinated while only 32% para-medical workers were fully vaccinated. The most common reason for not getting vaccinated was ignorance.
Conclusion : Our study recommended regular health education highlighting occupational risk of Hepatitis B, need for complete vaccination and giving training on infection prevention for health care workers. It is also advisable to make sure vaccine availability and accessibility.

Key Words: Health care workers, Transmission, Vaccination, Attitude, Practice, Knowledge

Introduction

Hepatitis B (HB) is a serious blood born infection caused by hepatitis B virus (HBV) that affects the liver. It is the most common cause of chronic hepatitis, liver cirrhosis and hepato-cellular carcinoma (1). Hepatitis B is a very important public health problem affecting almost 10% of the world population(2). According to 2009 WHO report, about 2 billon people are affected with HB worldwide, more than 350 million suffered from chronic lifelong infection and, more than one million of individuals die because of cirrhosis and liver cancer every year (3).

In India the prevalence of hepatitis B infection is between 2-10% in the studied population(4). The number of HBsAg carriers in India has been estimated to be about 40 million. Estimates indicate that annually over 100,000 Indians die because of disease related with HBV infection(5).

HBV is contagious and easily transmitted from one infected individual to another through blood to blood contact, mother to child, unprotected sexual contact, sharing of eating utensils and other barber shop and beauty salon equipment (6). The main transmission routes include prenatal infection, skin and mucous membrane infections caused by contaminated blood or body, sexual contacts and injection drug abuser. In addition, tattooing, ear piercing, acupuncture, dialysis, and even using a syringe can be the source of infection(7)

The practice of modern medicine have contributed a lot in the increase of the case and spreading of blood born diseases like Human immune deficiency virus and HBV due to lapse in the sterilization technique of instruments and improper hospital waste management as 10 to 20% health care waste is regarded hazardous (8). Prevention against any disease is proportional to knowledge, attitude and practice (KAP) of the population and reflection of the importance that is paid to health related issue by the society. Health care workers should familiarize themselves with ‘‘universal precautions’’, which is defined by Center for Disease Control, as a set of precautions designed to prevent transmission of Human immunodeficiency virus (HIV), HBV, and other blood-borne pathogens when providing first aid or health care. Under universal precautions, blood and certain body fluids of all patients are considered potentially infectious for HIV, HBV and other blood borne pathogens (9). A safe and effective vaccine against HBV is available since 20 years and is effective in preventing infection and the serious consequence of hepatitis including liver cancer and cirrhosis when given before or after exposure (10).

KAP surveys are representative of a specific population to collect information on what is known, believed and done about a particular topic, and are the most often used study tool in health-seeking behavior research.(11) Knowledge is usually assessed to see how far community knowledge corresponds to biomedical concepts (12). Practices in KAP surveys usually inquire about preventive measures or different health care options. Normally, hypothetical questions are asked, so it permits statements about actual practices, rather, it yields information on people’s behaviors or on what they know should be done (13).

Methods

This cross-sectional study prospective study was conducted in

the Department of Obstetrics and Gynaecology, SMGS Hospital, GMC Jammu in the month of july 2019. A sample of 100 health care workers including medical and para-medical professionals was taken. A structured questionnaire was used to collect information about socio- demographic characteristics, knowledge towards transmission and prevention of Hepatitis B virus and practice towards prevention of Hepatitis B virus.

Statistical analysis

Analysis of results done and results were tabulated.

Results

A total of 100 health care workers were taken for the study. Among 100 cases 42 were medical professionals and 58 were para-medical professionals.

Our study shows that maximum workers were in the age group 25-28 yrs in both the groups (table 1).

Table 1: Distribution according to age

Age(years)	Medical workers No.(%)	Para-medical workers No.(%)
21-24	12(29%)	14(24%)
25-28	22(52%)	28(48%)
>28	8(19%)	16(28%)

Table 2 shows knowledge regarding routes of transmission. 100% of medical workers had correct knowledge regarding all modes of transmission. Whereas knowledge regarding transmission was less in para-medical workers. Knowledge regarding sexual route was 88%, needles 76%, blood transfusion 92% and vertical transmission was 80%.

Table 2: Knowledge regarding routes of transmission

Routes	Medical workers No.(%)	Para-medical workers No.(%)
Sexual	42(100%)	51(88%)
Needles	42(100%)	44(76%)
Blood	42(100%)	53(92%)
Vertical	42(100%)	46(80%)

Table 3 shows vaccination status of health care workers. Among 42 medical professionals 34 (80.24%) were vaccinated. Among them 22(52.04%) were fully vaccinated i.e had taken 3 doses, while 12(28.20%) were partially vaccinated i.e had taken only 2 doses. In para-medical staff 34(58.4%) were vaccinated. Among them 18(31.71%) had taken 3 doses and 16(27.23%) had taken only 2 doses.

Table 3: Vaccination status of health care workers

Vaccination status	Medical workers No.(%)	Para-medical workers No.(%)
Fully vaccinated	22(52.04%)	18(31.71%)
Partially vaccinated	12(28.20%)	16(27.23%)
Not vaccinated	8(19.76%)	24(41.06%)

Our study shows that 8(19.76%) medical professionals had not taken vaccination (table 3). When asked about the reasons(table 4), 86% had ignored vaccination inspite of awareness while 14% had non availability of vaccine.

However 24(41.06%) of para-medical workers were not vaccinated (table 3). Reasons for not taking vaccination (table 4) being ignorance (76%) followed by lack of awareness (14%) and non availability of vaccines in 10% .

Table 4: Reasons for not taking vaccination

Reasons	Medical workers No.(%)	Para-medical workers No.(%)
Ignorance	86%	76%
Non availability	14%	10%
Lack of awareness	0%	14%

Table 5 shows knowledge of medical and para-medical workers regarding patient's hepatitis B status. 42% of medical professionals were aware about the Hepatitis B status of patients, 56% were occasionally aware and 2% not aware. While in para-medical workers, only 26% were aware about patient's Hepatitis B status, 62% were occasionally aware and 12% were not aware.

Table 5: Knowledge about patient's hepatitis B virus status

Awareness	Medical workers No.(%)	Para-medical workers No.(%)
Aware	18(42%)	15(26%)
Occasionally aware	23(56%)	36(62%)
Not aware	1(2%)	7(12%)

Our study shows that 62% medical professionals were aware about own Hepatitis B status whereas only 34% of para-medical workers knew about their Hepatitis B status (table 6).

Table 6: Knowlege about own Hepatitis B status

Awareness	Medical workers (%)	Para-medical workers (%)
Aware	62%	34%
Not aware	38%	66%

Discussion

The current study was done to evaluate knowledge, practice and attitude towards Hepatitis B among medical and para-medical professionals working in the Department of Obstetrics and Gynaecology, SMGS Hospital, GMC Jammu. Knowledge about Hepatitis B transmission is essential for health care workers so that they can take proper protection during their clinical practice as Hepatitis B virus is 50 times easier to transmit than HIV(14). Our study revealed that there was good knowledge regarding transmission of Hepatitis B virus among medical professionals(100%) whereas 88% of para-medical professionals had knowledge regarding sexual route, 76% needles pricks, 53% blood and 46% vertical transmission. Anjali S et al(15) in their study found majority of medical students had correct knowledge of the mode of transmission.

In our study 52% of medical staff was fully vaccinated, 28% partially vaccinated and 20% not vaccinated. In para-medical staff only 32% was fully vaccinated, 27% partially vaccinated and 41% not vaccinated at all. Muhammad A et al(16) in their study found 87.8% vaccination rate. While Anjali S et al(15) reported 29.3% vaccination rate among medical students of B.J.Medical College and Ali K et al(17) reported vaccination rate of 35%. The main reasons for not getting vaccinated were ignorance in 86% followed by non availability in 14% in medical workers while in para-medical workers main reasons were ignorance in 76% followed by lack of awareness in 14% followed by non availability in 10%. While Muhammad et al(16) and Ali K et al(17) in their study reported lack of knowledge as the main reason for not getting vaccinated followed by ignorance.

Only 42% of medical workers and 26% of para-medical workers were aware about the patient's Hepatitis B status. 56% of medical and 62% were occasionally aware about patient's Hepatitis B status. This lack of awareness was due to high number of unbooked and uninvestigated patients and lack of immediate testing.

62% of medical workers were aware about their Hepatitis B status while only 34% of para-medical workers had done their own tesing. Hussain S et al(18) in their study found that 93.7% knew about their own Hepatitis B status while 6.3% had never got themselves tested for Hepatitis B.

Conclusion

Our study revealed low vaccine compliance in medical and para-medical workers which makes them prone to occupational risk of Hepatitis B virus. Attitude , knowledge and accessibility of vaccines were important factors in low vaccination in health workers. Our study reccommends that Medical Colleges should have Occupational Health Departments that must take responsibility for Hepatitis B virus Testing, vaccination, monitoring vaccine response and providing post exposure prophylaxis. It is also recommended that a policy be implemented for complete vaccination and giving training on infection prevention for health care workers. It is also advisable to make sure vaccine availability and accessibility.

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