



KNOWLEDGE REGARDING THE MODES OF TRANSMISSION AND PREVENTION OF HEPATITIS- B IN THE AMONG LABORATORY TECHNICIANS

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ABSTRACT

Hepatitis B is one of the most common infectious diseases globally. Approximately one million hospital staffs are exposed to HBV annually in their clinical practice. This demands specific protective measures designed for the situations like biological safety. **Methodology:** A descriptive survey research design has been used to conduct the present study. A structured knowledge questionnaire was used to collect the data. A sample of 80 laboratory technicians working in selected Hospitals of Bagalkot was selected using convenient sampling technique. The data collected were analyzed using descriptive and inferential statistics. **Results:** Majority (58%) of the respondents had average knowledge on regarding modes of transmission of hepatitis B and its prevention. A significant association found between knowledge levels of laboratory technicians and their socio-demographic variables professional education ($\chi^2 = 12.15$, $p < 0.05$) work experience ($\chi^2 = 15.32$, $p < 0.05$) and attending educational programme ($\chi^2 = 25.61$, $p < 0.05$). **Conclusion:** Findings reveal that majority of laboratory technicians have average knowledge regarding mode of transmission of Hepatitis B and its prevention. Hence future researches should consider testing the effectiveness of educational programmes in that perspectives.

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INTRODUCTION

Background of the Study

Hepatitis – B is one of the most common infectious disease globally and it is the most common serious liver infection in the world. According to the world health organization [WHO], it is 100 times more infectious than HIV & approximately 350 million people worldwide are chronically infected with the hepatitis –B virus [HBV]. The virus is transmitted through direct contact with blood & bodily fluids that contain blood. The hepatitis – B [HBV] targets the liver & eventually causes scarring of the liver [also known as cirrhosis], liver failure or cancer of the liver & even death. Most adults who become infected with hepatitis-B clear the virus & recovery from the infection. However some people develop a chronic condition that requires treatment to prevent further damage to the liver.¹ Exposure of health care workers to blood borne pathogens through accidental contact with sharp instruments has been

widely publicized & the prevention & control of exposure to sharp instrument is a high profile issues. The dominant perspective in the literature & in most agency guidelines is that the transmission of blood borne pathogens from patients to health care workers is largely preventable through the use of universal precautions & special equipment [Primarily systems that re-sheath needles after use & needles less access devices] however, exclusive reliance on these strategies is inadequate for several reasons.²

The economic complication of safety precautions in laboratory practice make compliance difficult, especially for laboratories in countries with poor economics. They are exposed to the risk of laboratory acquired infection and need to be adequately informed and equipped with facilities to protect their health.³ Workers perception of health and safety also influence compliance with safety guidelines. There is a need for educational programs to create awareness on safety and assessment of current knowledge of laboratory safety is essential for formulations of guidelines.⁴ Hence, the investigator concludes that if the laboratory technicians will have adequate knowledge regarding Hepatitis B and its prevention, they can practice preventive measures in their working conditions.

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Statement of the Problem

“A study to assess the knowledge regarding the modes of transmission and prevention of Hepatitis- B among laboratory technicians working in selected Hospitals of Bagalkot, Karnataka”.

Objective of the Study

- To assess the knowledge of laboratory technicians regarding the modes of transmission and prevention of Hepatitis B.
- To find out the association between the knowledge regarding modes of transmission and prevention of hepatitis-B with selected socio-demographic variables of Laboratory technicians.

Hypothesis

H₂: There is a significant association between the knowledge regarding modes of transmission and prevention of hepatitis-B with selected socio-demographic variables of Laboratory technicians at 0.05 level of significance.

METHODOLOGY

Research approach: Non-experimental descriptive approach was used for the present study.

Research design: Descriptive survey research design.

Variables under the Study

Study Variable: Knowledge of laboratory technicians regarding modes of transmission and prevention of Hepatitis-B.

Socio-demographic Variables: Age, Gender, Religion, General Education, Professional Education, Work Experience, Type of Working Place, and Attendance of Educational Programme.

Setting of the Study: The study was conducted in selected hospitals of Bagalkot.

Population

Universal Population: The universal population of this study consists of laboratory technicians working in various Hospitals of Bagalkot District.

Accessible Population: The accessible population of this study consists of laboratory technicians working in selected Hospitals of Bagalkot.

Sample size: A total of 80 laboratory technicians working in selected Hospitals of Bagalkot who met the criteria formed were selected as sample for the study.

Criteria for Selection of Sample

Inclusive criteria: The study includes the laboratory technicians, who are;

1. Employees of the selected hospitals of Bagalkot district.
2. Willing to participate in the study.
3. Present at the time of study.

Exclusive criteria: The study excludes the laboratory technicians, who are; On leave

- Not willing to participate in the study.

Sampling Technique: Convenient sampling technique.

Description of the final Tool: The structured questionnaire was used for this study which consists of two parts:

Part I: Consists of items seeking information regarding socio-demographic characteristics of laboratory technicians.

Part II: Consists of 40 items pertaining to knowledge regarding knowledge of laboratory technicians regarding modes of transmission and prevention of Hepatitis-B.

Scoring of the Items: The maximum obtainable scores were 40. To find out the association between the selected socio-demographic variables and knowledge scores, respondents are categorized in to five groups.

Category	Score
Adequate knowledge	31 – 40
Average knowledge	21 – 30
Inadequate knowledge	00 – 20

Data collection procedure: Knowledge questionnaire was administered to laboratory technicians after obtaining permission from concerned authorities and informed consent.

Plan of Data Analysis: The data obtained was analyzed in terms of achieving the objectives of the study using descriptive and inferential statistics.

RESULTS

Part I Assessment of knowledge laboratory technicians regarding modes of transmission and prevention of Hepatitis-B.

Table 1 Level knowledge of laboratory technicians regarding modes of transmission and prevention of Hepatitis-B. N=80

Level of knowledge	Range of scores	Number of respondents	Percentage (%)
Adequate knowledge	31 – 40	16	19
Average knowledge	21 – 30	46	58
Inadequate knowledge	00 – 20	18	23
Total		80	100

The above table depicts that majority of the respondents (58%) had average knowledge, 19 % of them had adequate knowledge, and 23 % of them inadequate knowledge regarding modes of transmission and prevention of Hepatitis-B.

Part III: Association between the knowledge regarding modes of transmission and prevention of hepatitis-B with selected socio-demographic variables of Laboratory technicians.

Table 3 Association between the knowledge regarding modes of transmission and prevention of hepatitis-B with selected socio-demographic variables of Laboratory technicians.

Sl. No	Socio-demographic variables	Df	Chi-square value	Table value	Significance
1.	Age in years	4	5.1850	9.49	P>0.05 NS
2.	Gender	2	0.2220	5.99	P>0.05 NS
3.	Religion	4	6.740	9.49	P>0.05 NS
4.	General education	6	4.509	12.59	P>0.05 NS
5.	Professional education	4	12.150	9.49	P<0.05 S
6.	Work experience	4	15.325	9.49	P<0.05 S
7.	Type of work place	2	0.0970	5.99	P>0.05 NS
8.	Attended any educational programme	2	25.6150	5.99	P<0.05 S

Df – Degree of freedom S- Significant NS – Not significant

The above shows that a significant association was found between the knowledge of laboratory workers and the socio

demographic variables like professional education, work experience and attending any educational programmes on Hepatitis B.

DISCUSSION

In the present study, majority of the respondents (58%) had average knowledge, 19 % of them had adequate knowledge, and 23 % of them inadequate knowledge regarding modes of transmission and prevention of Hepatitis-B

In a similar study conducted on “Knowledge, attitude & practice in aspects of laboratory safety in pathology laboratories at the university of Port Harcourt teaching Hospital Nigeria”, the laboratory personnel showed gross deficiency in the knowledge, attitude & practices of laboratory safety by laboratory staff in areas of use of personal protective equipment, specimen collection & processing, centrifugation, related infective hazards, waste disposal & provision & use of first aid kits. Issues pertaining to safely were found to be given inadequate attention.⁵

CONCLUSION

Findings reveal that majority of laboratory technicians have average knowledge regarding mode of transmission of Hepatitis B and its prevention. Hence future researches should consider testing the effectiveness of educational programmes in that perspectives.

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Conflict of Interest

Author has no conflict of interest.

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