# KNOWLEDGE, ATTITUDE AND PRACTICES ABOUT TRANSMISSION OF HEPATITIS C VIRUS IN PARAMEDICAL STAFF OF CHILDREN HOSPITAL AND DHQ HOSPITAL FAISALABAD

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## Abstract

Hepatitis C is a blood-borne infection that has developed into a significant global health problem in recent decades. HCV infection may progress from acute to chronic, resulting in a variety of morbidities such as liver cirrhosis and liver cell cancer. With about 71 million chronically infected people globally, HCV infection-related morbidity puts a significant burden on healthcare systems worldwide. According to WHO data, about 3% of the world's population is afflicted with HCV. As a consequence, about 170 million people are chronic HCV carriers, putting them at an increased risk of developing liver cirrhosis and HCC. HCC affects about 3% to 4% of individuals who are chronically afflicted. Recent research has highlighted HCC induced by HCV infection as a possibility for liver transplantation. Compliance with HCV transmission guidelines is insufficient at public secondary health facilities, especially in resource limited regions, putting PMS at risk of infection. PMS occupational safety is frequently overlooked in low-income countries, despite the increased risk of infection associated with higher disease prevalence, low awareness of the risks associated with occupational exposure to blood, an insufficient supply of personal protective equipment, and limited organizational support for safe practices. Patients' blood and other body fluids are becoming more hazardous to those who care for them. As a result, suitable steps are required to ensure HCV transmission compliance and to reduce the risk of infection among PMS. The purpose of this research is to determine the level of awareness, practice, and factors affecting the usage of HCV transmission among PMS at Children Hospital and DHQ Hospital Faisalabad (Pakistan). The purpose of this study is to

determine the level of awareness about HCV transmission among PMS at Children Hospital and DHQ Hospital Faisalabad (Pakistan). The study will be conducted at a single site, among paramedical personnel at Children Hospital and DHQ Hospital Faisalabad, using randomized sampling. Additionally, many PMS originate in rural and remote areas. The following criteria were used to recruit the subjects: paramedical staff of all ages, paramedical staff of Children Hospital and DHQ Hospital Faisalabad, staff with a range of experience and male and female PMS. The results indicated that the PMS at the Children Hospital and DHQ Hospital Faisalabad was unaware of the expanded reach of universal precautions, dubbed transmission of HCV. The responders were better familiar with some elements of the universal precautions.

**Key words:** Hepatitis C, HCV infection, HCV transmission, Compliance with HCV transmission, PMS occupational safety, Conclusion

## Introduction

Hepatitis is the inflammation of liver cells caused by an infectious or autoimmune process. Viral hepatitis is the most frequent cause of infectious hepatitis globally. One of the most common causes of infectious viral liver illness is hepatitis C. It may be a blood-borne illness, an STD or a vertically transmitted infection. The virus has various genotypes and an incubation period ranging from 2 weeks to 6 months with the average being 45 days after coming into contact with an infected individual. Following infection, the disease has a series of symptoms:

• Acute, largely silent, or short-term sickness [1].

• Anxiety and perception of risk of HIV and hepatitis B infection among health-care workers reporting accidental exposures to blood and other body fluids.

• Chronic symptoms such as tiredness, fever, nausea, vomiting, and jaundice

• Cirrhosis problems may develop over 10 to 20 years.

• Hepatocellular carcinoma, also known as liver cancer.

HCV (genus Hepaciviruses, family Flaviviridae) is a hepatotoxic human disease with a global seroprevalence of about 2.8 percent [2] The seven main HCV genotypes exhibit significant antigenic diversity and are divided into many known subgroups[3]. The vast majority of

infections globally are caused by a limited number of "epidemic" subtypes (1a, 1b, 3a, and 2a) [4].Their expansion was recent (within the past 50–100 years) due to the introduction of procedures that result in parenteral exposure[5] [6].The epidemic subtypes account for a modest proportion of HCV variability. The pattern of HCV variability in Sub-Saharan Africa and South-East Asia is characterized by substantially diverse subtypes of the same genotype dominating transmissions throughout physically contiguous regions[7];[8]. Hepaciviruses have been found in various domestic and wild animals, with bats and rodents having the most viral diversity [9-11]. HCV's closest relatives were discovered in horses/donkeys and dogs (equine and canine hepaciviruses, EHV, and CHV) [12, 13]. however, the origin of HCV as a human disease remains a mystery. Some writers proposed that HCV developed through a horse-to-human transmission event [14, 15], while others proposed that HCV emerged relatively recently from one or more cross-species transmission events from a yet-tobe-defined species [16, 17]. However, the strong species-specificity of HCV and its capacity to survive in humans for life led to the alternative theory that HCV-related viruses have infected humans and other primates throughout their evolutionary history [18, 19].

## Materials and Methods

The study's primary objective is to investigate knowledge, attitude, and practice about HCV transmission in the paramedical staff of Children Hospital and DHQ Hospital Faisalabad.

## Design and setting

Using randomized sampling, the research will be performed, paramedical staff of Children Hospital and DHQ Hospital Faisalabad. Furthermore, many PMS travel from rural and distant regions.

## Participants

The subjects were recruited based on the following criteria:

1. Paramedical Staff of all ages
2. Paramedical Staff of Children Hospital and DHQ Hospital Faisalabad
3. Staff have a variety of experience

4. Male and female PMS

## Exclusion Criteria

1. Administrative Staff
2. Doctors

## Randomization and allocation

Individual questionnaires were distributed among paramedical staff of Children Hospital and DHQ Hospital Faisalabad about knowledge, attitude, and practice about HCV transmission. Allocation concealment will be accomplished by using sequentially numbered, sealed, opaque envelopes that will be stored.

## Sample Size

The sample size for the study was 400 individuals but while gathering data 15 questionnaire was missing/incomplete which were not included in the study; hence sample remains 385

## Duration of Study:

One month

## Ethical Considerations

The consent forms were filled up by the nurses and lab technicians/doctors included in the study and their information was kept confidential and used only for this study.

## Data Collection Procedure

It included the personal characteristics questions such as sex, age, education level, experience years etc.

## Data Analysis Procedure

For all statistical studies, IBM SPSS Statistics 25 was utilized (SPSS). Descriptive statistics for customarily distributed data include meaning standard deviation and frequency charts.

## Results and Analysis

PMS and data were gathered and analyzed through the descriptive method to meet the study's objectives. Descriptive statistics were used to clarify the nature of the variables. Here, various values are discussed.

## Demographic Analysis

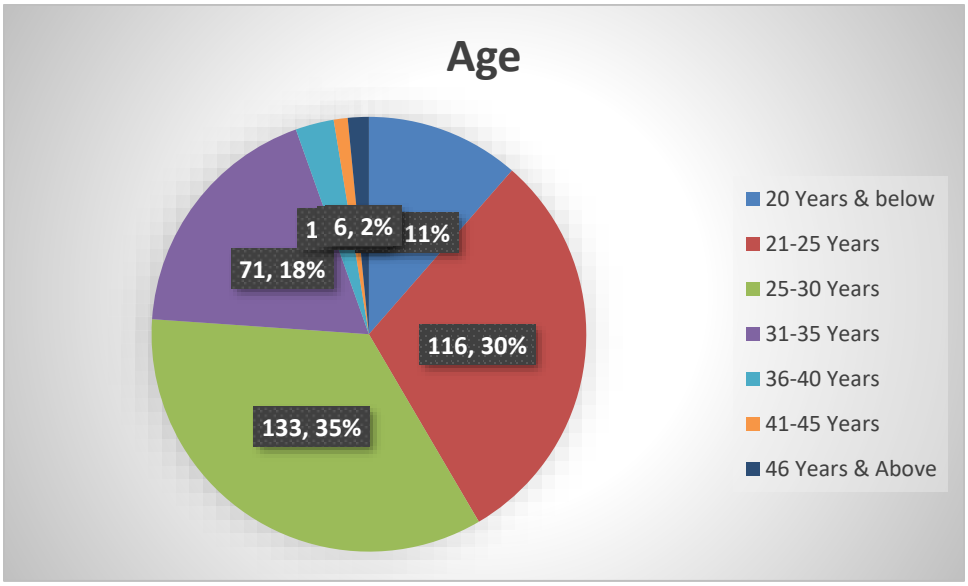
According to the survey, the following demographic characteristics analyzed by descriptive statistics (i.e., frequency and percentage)

**According to current age (years)**

| | Frequency | Percent | Mean | p-value |
|---|---|---|---|---|
| 20 Years & below | 44 | 11.4 | 2.8052 | 1.16859 |
| 21-25 Years | 116 | 30.1 | | |
| 25-30 Years | 133 | 34.5 | | |
| 31-35 Years | 71 | 18.4 | | |
| 36-40 Years | 11 | 2.9 | | |
| 41-45 Years | 4 | 1.0 | | |
| 46 Years & Above | 6 | 1.6 | | |
| Total | 385 | 100.0 | | |

After randomized sampling, the results have found that there were 11.4% of respondent who was below 20 years, there were 30% students between the 21 to 25 years.

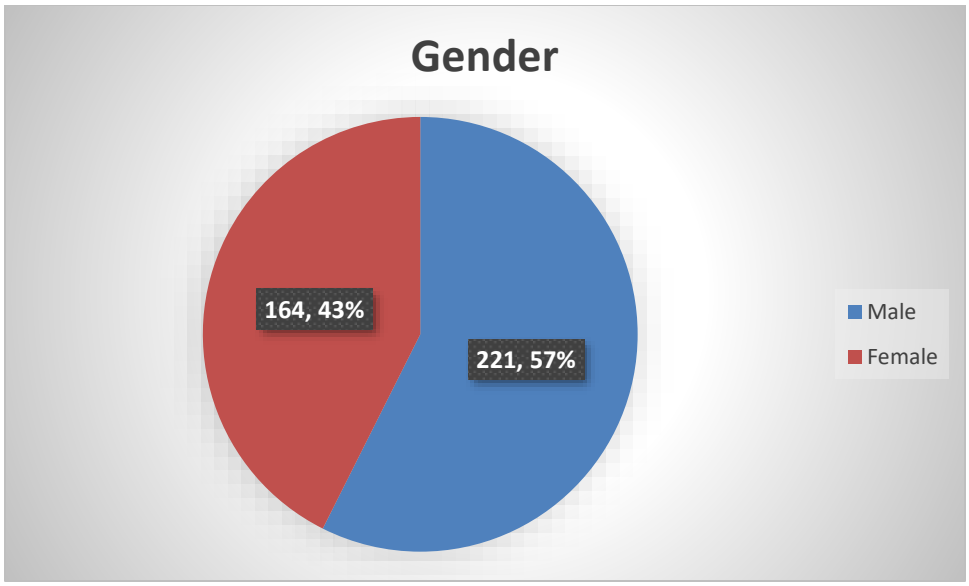
The respondents in the age category of 25 to 30 years were around 34.5%; there were 18.4% respondents in the age category of 31 to 35 years.




**According to Gender**

| | Frequency | Percent |
|---|---|---|
| **Male** | 221 | 57.4 |
| **Female** | 164 | 42.6 |
| **Total** | 385 | 100.0 |

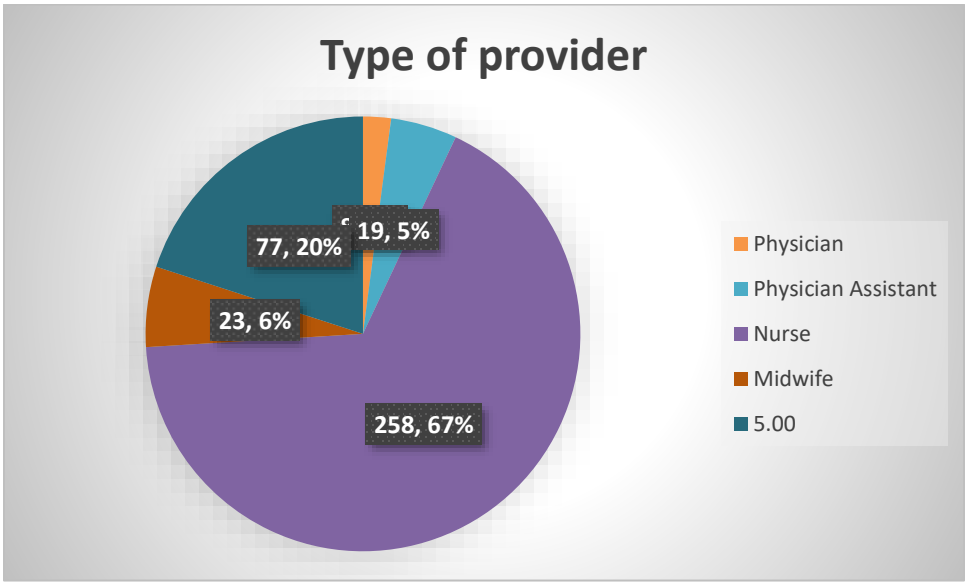
In this result 221 male respondents and 164 female respondents in our sample data.


Gender
164, 43%
221, 57%
Male
Female

**Acc. to Type of provider**

| | Frequency | Percent |
|---|---|---|
| **Physician** | 8 | 2.1 |
| **Physician Assistant** | 19 | 4.9 |
| **Nurse** | 258 | 67.0 |
| **Midwife** | 23 | 6.0 |
| **Others** | 77 | 20.0 |
| **Total** | 385 | 100.0 |

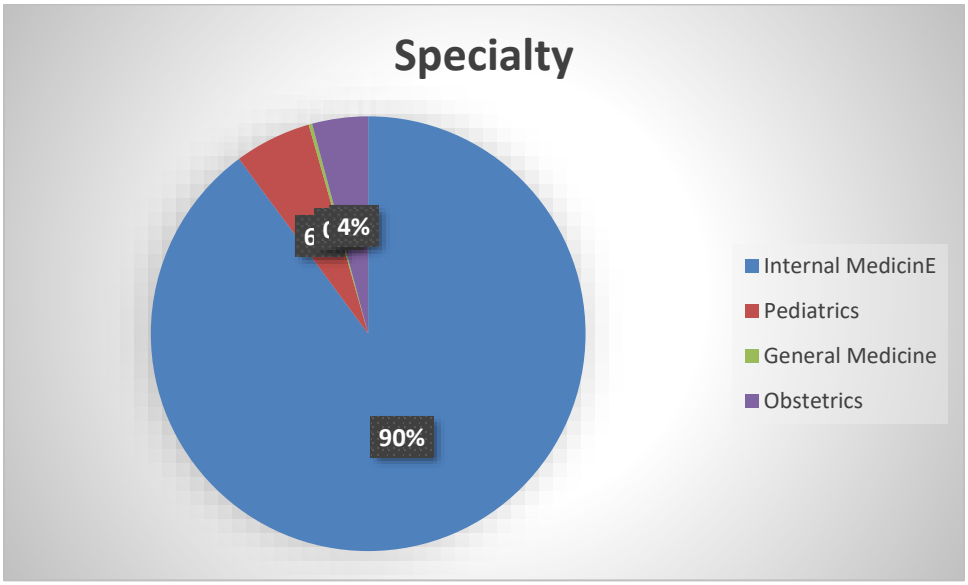
The results have found eight physicians, 19 physician assistants, 258 nurses, 23 midwives and the remaining were lying in the other category.



**About Specialty**

| | Frequency | Percent |
|---|---|---|
| **Internal Medicine** | 346 | 89.9 |
| **Pediatrics** | 22 | 5.7 |
| **General Medicine** | 1 | 0.3 |
| **Obstetrics** | 16 | 4.2 |
| **Total** | 385 | 100.0 |

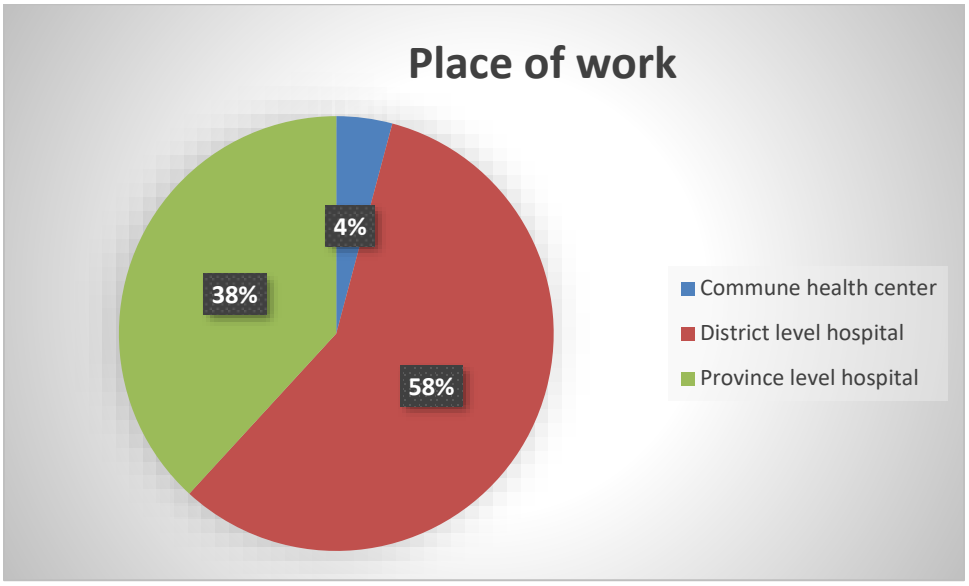
- 89.9% of respondents have a specialty in internal medicine,
- 5.7% respondents have a specialty in pediatrics,
- 0.3% respondents have a specialty in general medicine
- Remaining has a specialty in obstetrics.



**Place of work**

| | Frequency | Percent |
|---|---|---|
| **Commune health center** | 16 | 4.2 |
| **District level hospital** | 222 | 57.7 |
| **Province level hospital** | 147 | 38.2 |
| **Total** | 385 | 100.0 |

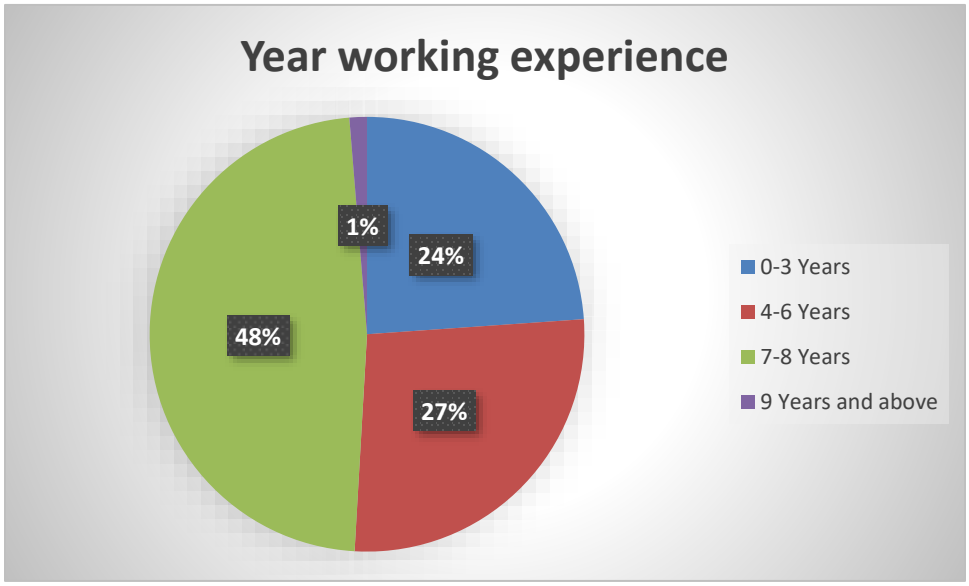
After randomized sampling, 4.2% of respondents have their place of work in the commune health center, 57.7% of respondents have a place of work lying in the district-level hospital, and 38.2% were in the province-level hospital



**Years of working experience**

| | Frequency | Percent | Mean | p-value |
|---|---|---|---|---|
| 0-3 Years | 92 | 23.9 | 2.2649 | 0.83693 |
| 4-6 Years | 104 | 27.0 | | |
| 7-8 Years | 184 | 47.8 | | |
| 9 Years and above | 5 | 1.3 | | |
| Total | 385 | 100.0 | | |

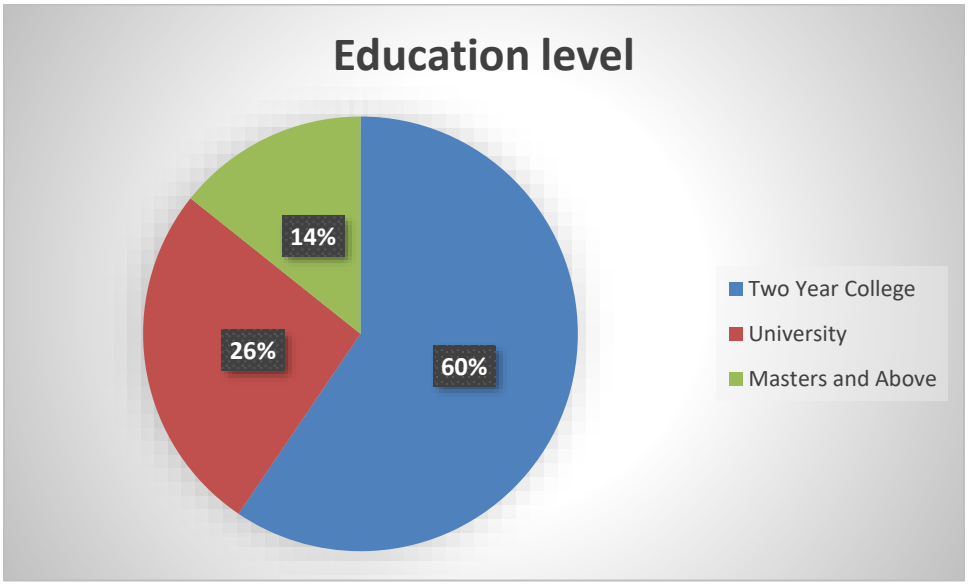
After randomized sampling, the results have found that 23.9% of respondents have experienced three years or less, 27% of respondents have experience 4 to 6 years, 47.8% respondents have experienced between 7 to 8 years, and only 1.3% of respondents have experienced more than nine years.



**Education level**

| | Frequency | Percent |
|---|---|---|
| **Two Year College** | 229 | 59.5 |
| **University** | 101 | 26.2 |
| **Masters and Above** | 55 | 14.3 |
| **Total** | 385 | 100.0 |

The results have found that 59.5% of respondents have a two-year college degree, 26.2% of respondents have a university degree, and the remaining 14.3% of respondents have a master's and above degrees.

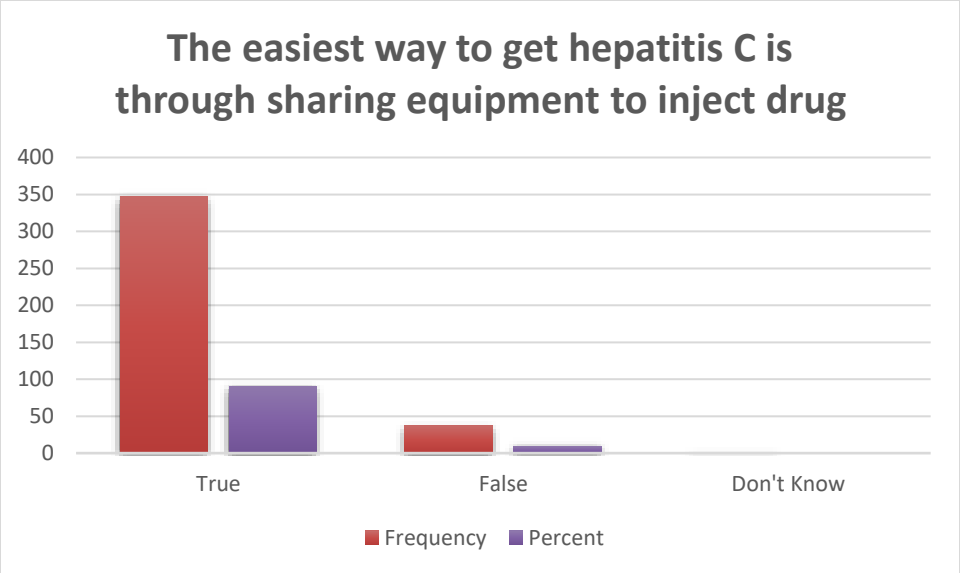


## Frequency Tables Questionnaire Survey

**The easiest way to get hepatitis C is through sharing equipment to inject the drug**

| | Frequency | Percent | Mean | p-value |
|---|---|---|---|---|
| True | 347 | 90.1 | 1.1013 | 0.01062 |
| False | 37 | 9.6 | | |
| Don't Know | 1 | 0.3 | | |
| Total | 385 | 100.0 | | |

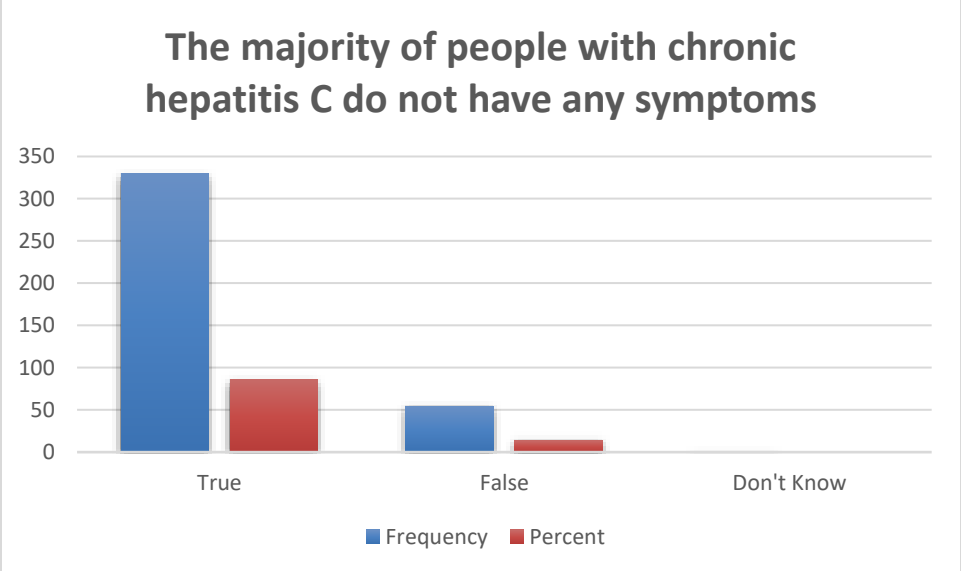
The results have found in response to the above query, 90% respondents think that the easiest way to get HCV is through sharing equipment and drugs. The graphical and tabular representation is also mentioned for the clear view of the results as well as findings against each inquiry. Hence majority of the respondents have awareness about the HCV in this context. All results are significant at $p < .05$.



**The majority of people with chronic hepatitis C do not have any symptoms**

| | Frequency | Percent | Mean | p-value |
|---|---|---|---|---|
| True | 330 | 85.7 | 1.1455 | 0. 032 |
| False | 54 | 14.0 | | |
| Don't Know | 1 | 0.3 | | |
| Total | 385 | 100.0 | | |

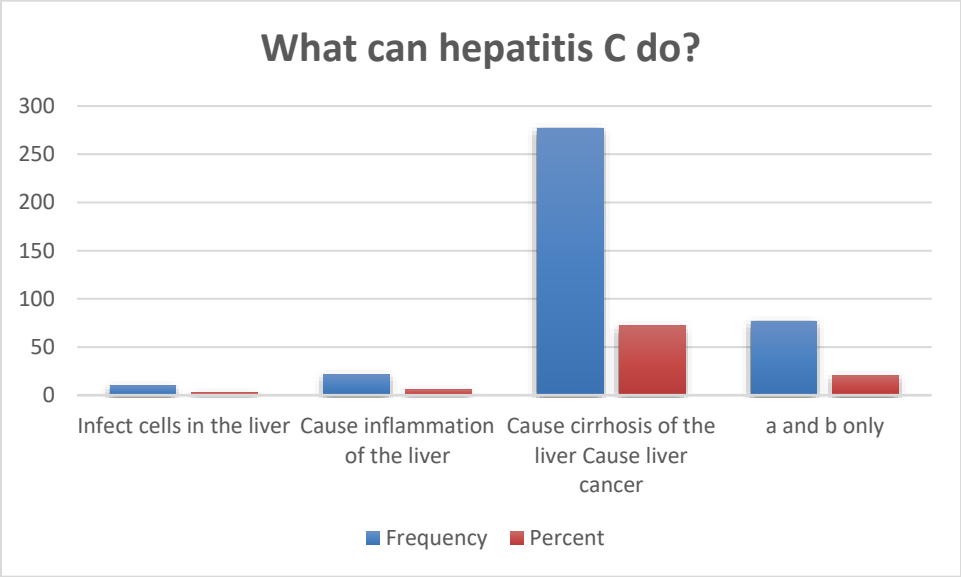
The results have found in response to the above query are mentioned in the graphical and tabular representation is also mentioned for the clear view of the results as well as findings against each inquiry.85.7% respondents says that chronic hepatitis C virus do not have any symptoms. Hence majority of the respondents have not much awareness about the HCV in this context. All results are significant at $p < .05$.



**What can hepatitis C do?**

| | Frequency | Percent | Mean | p-value |
|---|---|---|---|---|
| Infect cells in the liver | 10 | 2.6 | 3.2935 | 0.0513 |
| Cause inflammation of the liver | 21 | 5.5 | | |
| Cause cirrhosis of the liver Cause liver cancer | 277 | 71.9 | | |
| a and b only | 77 | 20.0 | | |
| Total | 385 | 100.0 | | |

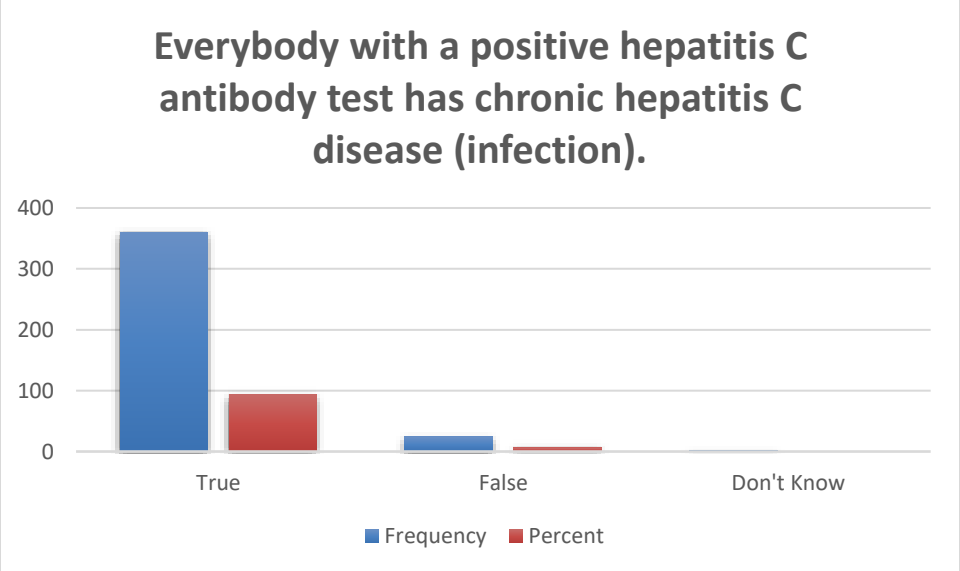
2% respondents think that HCV can infect liver, 5% think that HCV can infect inflammation in liver, 71% think HCV can cause cancer, the graphical and tabular representation is also mentioned for the clear view of the results as well as findings against each inquiry. All results are significant at $p < .05$.



**Everybody with a positive hepatitis C antibody test has chronic hepatitis C disease (infection).**

| | Frequency | Percent | Mean | p-value |
|---|---|---|---|---|
| True | 360 | 93.5 | 1.0675 | 0.0243 |
| False | 24 | 6.2 | | |
| Don't Know | 1 | 0.3 | | |
| Total | 385 | 100.0 | | |

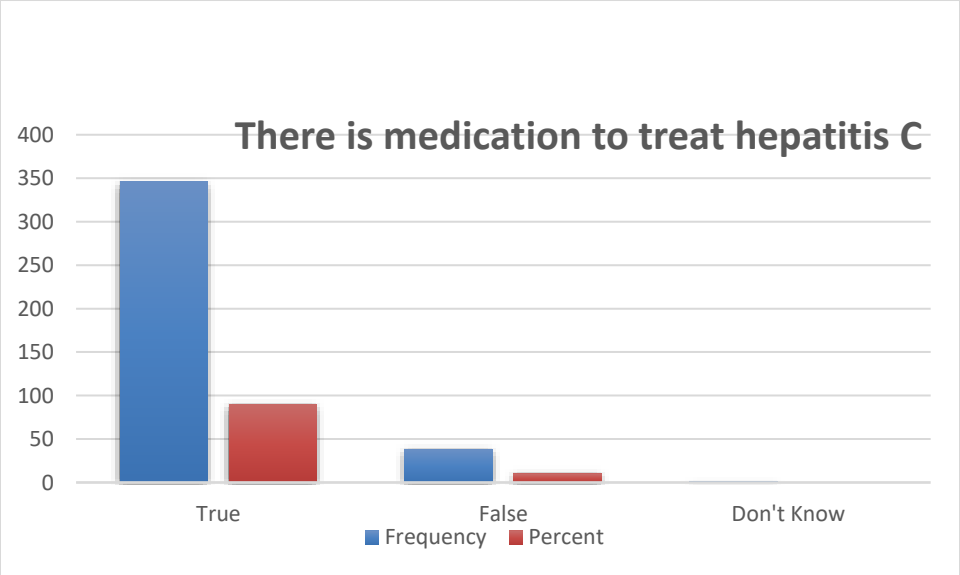
93.5% respondent's answers are true. The results have found in response to the above query are mentioned in the graphical and tabular representation is also mentioned for the clear view of the results as well as findings against each inquiry. Hence majority of the respondents have awareness about the HCV in this context. All results are significant at $p < .05$.



**There is medication to treat hepatitis C**

| | Frequency | Percent | Mean | p-value |
|---|---|---|---|---|
| True | 346 | 89.9 | 1.1039 | 0.0393 |
| False | 38 | 9.9 | | |
| Don't Know | 1 | 0.3 | | |
| Total | 385 | 100.0 | | |

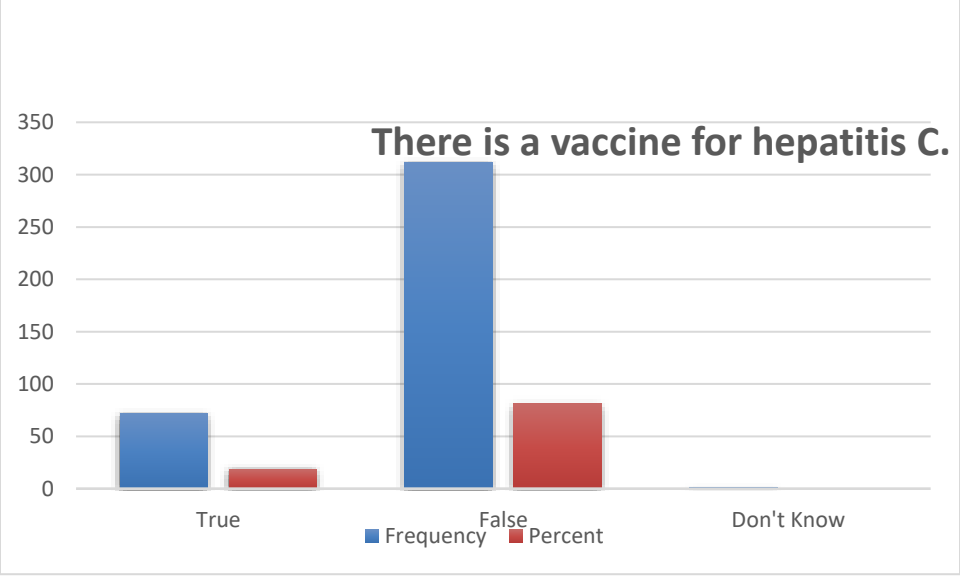
The majority of respondents are known that hepatitis C virus treat by the medication. Hence majority of the respondents have awareness about the HCV in this context. All results are significant at $p < .05$.



**There is a vaccine for hepatitis C.**

| | Frequency | Percent | Mean | p-value |
|---|---|---|---|---|
| True | 72 | 18.7 | 1.8156 | 0.0043 |
| False | 312 | 81.0 | | |
| Don't Know | 1 | 0.3 | | |
| Total | 385 | 100.0 | | |

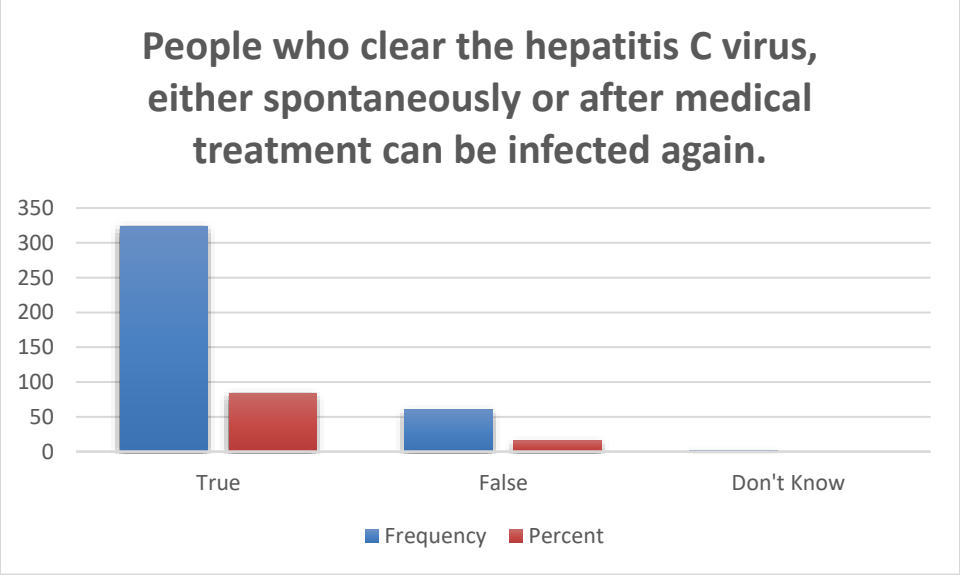
The results have found in response to the above query are mentioned in the graphical and tabular representation is also mentioned for the clear view of the results as well as findings against each inquiry. Hence majority of the respondents have not much awareness about the HCV in this context. All results are significant at $p < .05$.



**People who clear the hepatitis C virus can be infected again, either spontaneously or after medical treatment.**

| | Frequency | Percent | Mean | p-value |
|---|---|---|---|---|
| True | 324 | 84.2 | 1.1610 | 0.000 |
| False | 60 | 15.6 | | |
| Don't Know | 1 | 0.3 | | |
| Total | 385 | 100.0 | | |

The PMS had an insufficient understanding of the fundamental idea of HCV transmission. They lacked understanding about cough etiquette, the risks of infectious disease transmission when deciding where to put patients, proper injection techniques, and hand washing before and after direct contact with patients. Only a few people correctly answered all of the questions on the components of the HCV transmission concept. Hence majority of the respondents have awareness about the HCV in this context. All results are significant at $p < .05$.

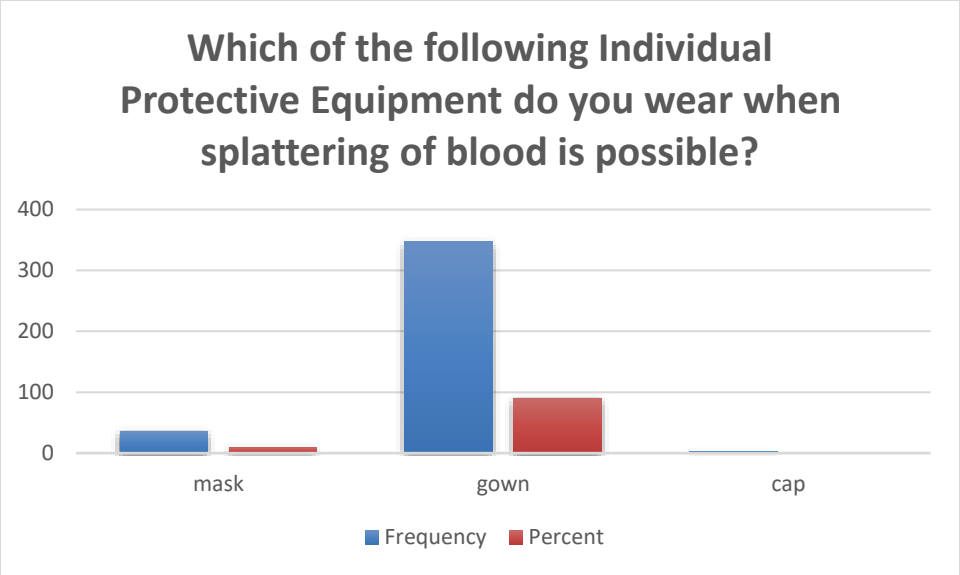


**Which of the following Individual Protective Equipment do you wear when splattering blood is possible?**

| | Frequency | Percent | Mean | p-value |
|---|---|---|---|---|
| Mask | 36 | 9.4 | 2.8182 | 0.000 |
| Gown | 347 | 90.1 | | |
| Cap | 2 | 0.5 | | |
| Total | 385 | 100.0 | | |

Despite this being an essential regular infection prevention and control practice, a small percentage of PMS admitted not constantly washing their hands with soap and water following direct contact with patients. Hand washing practice and years of professional experience had a statistically significant relationship. Respondents who indicated they did not always wash their hands with soap and water after direct contact with patients cited the inconsistency of water and soap as a significant limitation.

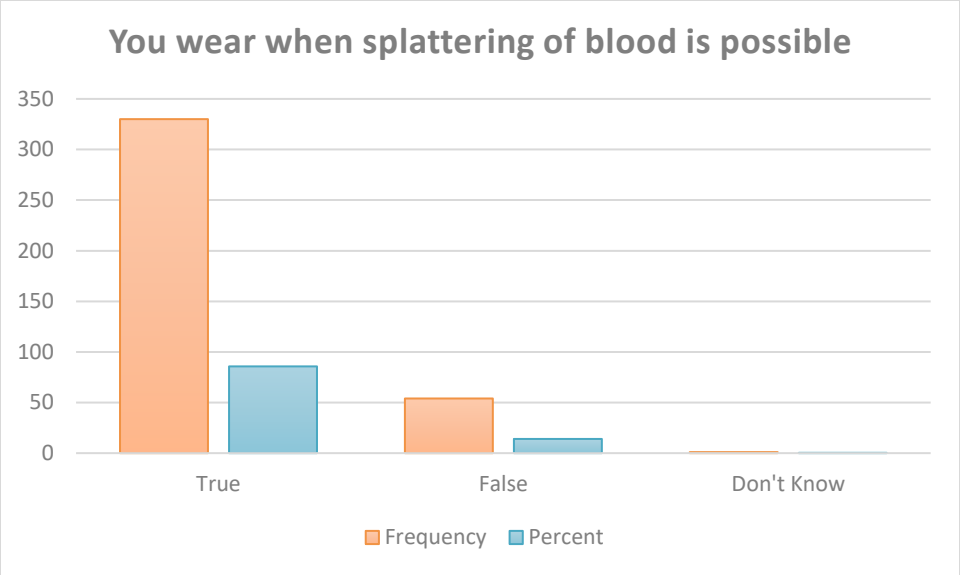
According to the study's findings, the vast majority of respondents always wear gloves when they expect to come into touch with bodily fluids, non-intact skin, or mucous membranes. All results are significant at $p < .05$.




**You wear when splattering of blood is possible**

| | Frequency | Percent | Mean | p-value |
|---|---|---|---|---|
| True | 330 | 85.7 | 1.1455 | 0.032 |
| False | 54 | 14.0 | | |
| Don't Know | 1 | 0.3 | | |
| Total | 385 | 100.0 | | |

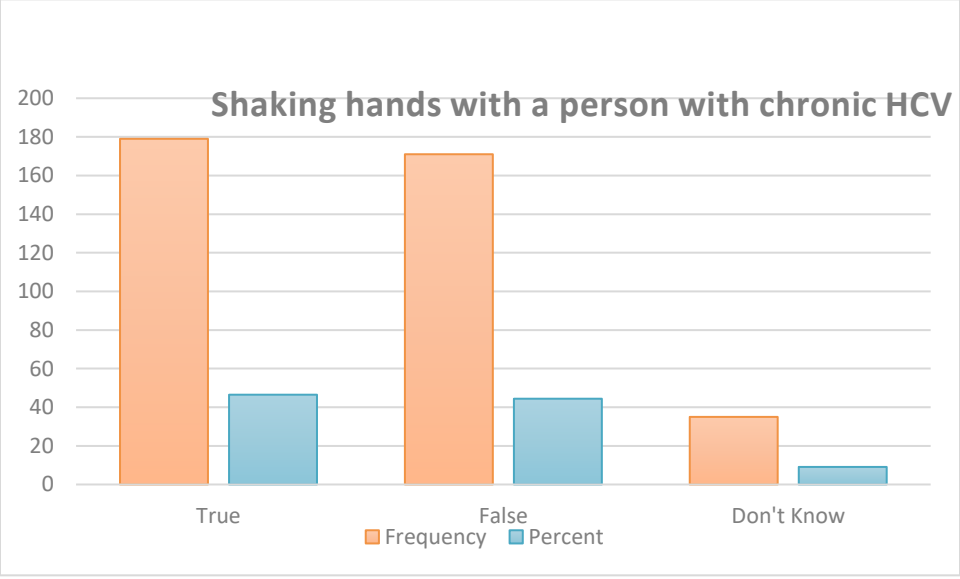
The results have found in response to the above query are mentioned in the graphical and tabular representation is also mentioned for the clear view of the results as well as findings against each inquiry. Hence majority of the respondents have not much awareness about the HCV in this context. All results are significant at $p < .05$.


You wear when splattering of blood is possible
350
300
250
200
150
100
50
0
True
False
Don't Know
Frequency
Percent

**Shaking hands with a person with chronic HCV**

| | Frequency | Percent | Mean | p-value |
|---|---|---|---|---|
| True | 179 | 46.5 | 1.6260 | 0.078 |
| False | 171 | 44.4 | | |
| Don't Know | 35 | 9.1 | | |
| Total | 385 | 100.0 | | |

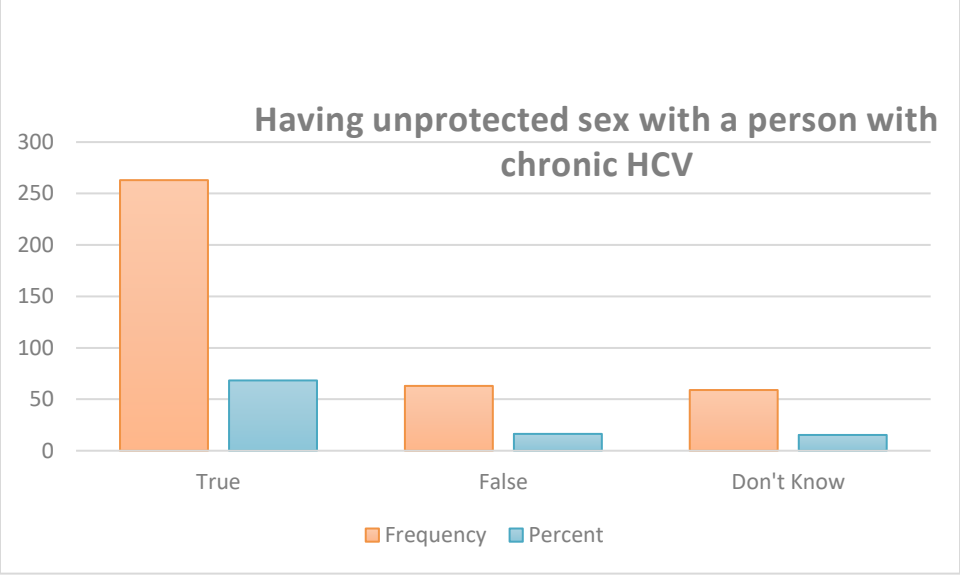
46.5% respondents answer are true, 44.4% says false and 9.1% says don't know. Hence majority of the respondents have awareness about the HCV in this context. All results are significant at $p < .05$.



**Having unprotected sex with a person with chronic HCV**

| | Frequency | Percent | Mean | p-value |
|---|---|---|---|---|
| True | 263 | 68.3 | 1.4701 | 0.036 |
| False | 63 | 16.4 | | |
| Don't Know | 59 | 15.3 | | |
| Total | 385 | 100.0 | | |

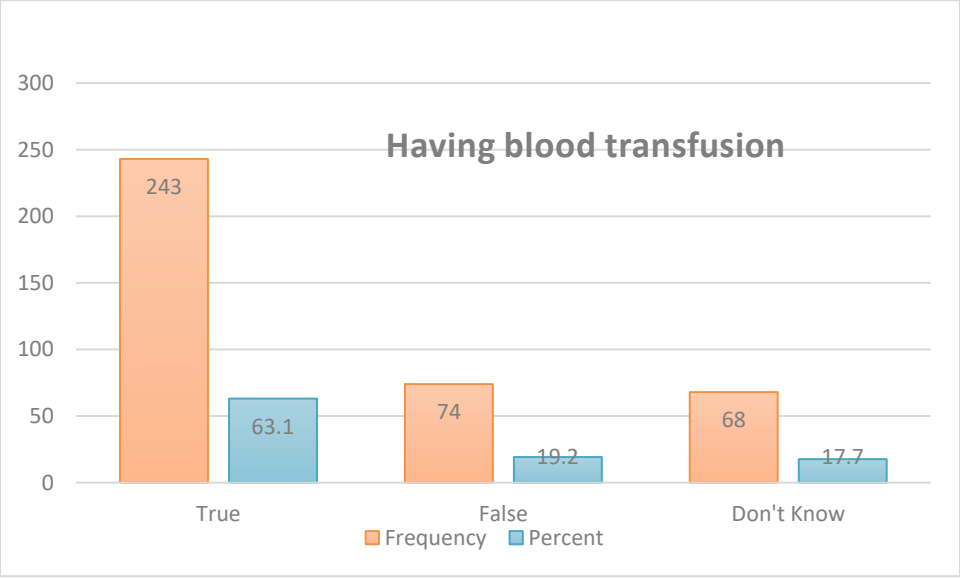
On the other hand, most PMS were aware that HCV transmission should apply to all patients and all bodily fluids, regardless of diagnosis. This element of the universal precautions was more known to PMS. The PMS had varying levels of understanding about post-exposure prophylaxis. According to the responders, HCV counseling and testing should be done after exposure, and PPE should only be administered to individuals who test negative. 68.3% respondent's answers are having unprotected sex with HCV infected people. All results are significant at $p < .05$.



**Having a blood transfusion**

| | Frequency | Percent | Mean | p-value |
|---|---|---|---|---|
| True | 243 | 63.1 | 1.5455 | 0.037 |
| False | 74 | 19.2 | | |
| Don't Know | 68 | 17.7 | | |
| Total | 385 | 100.0 | | |

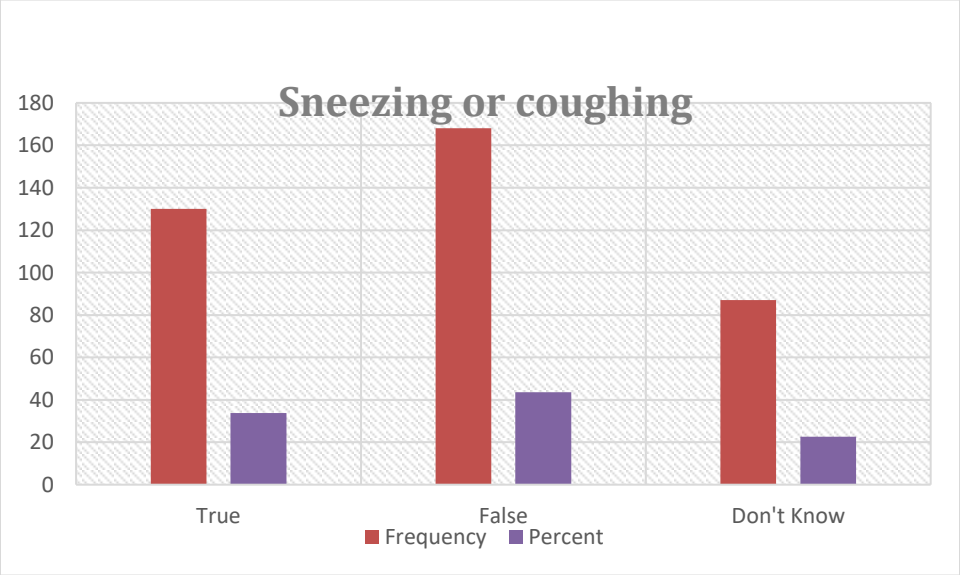
The results have found in response to the above query are mentioned in the graphical and tabular representation is also mentioned for the clear view of the results as well as findings against each inquiry. Hence majority of the respondents have awareness about the HCV in this context. All results are significant at $p < .05$.



**Sneezing or coughing**

| | Frequency | Percent | Mean | p-value |
|---|---|---|---|---|
| True | 130 | 33.8 | 1.8883 | 0.037 |
| False | 168 | 43.6 | | |
| Don't Know | 87 | 22.6 | | |
| Total | 385 | 100.0 | | |

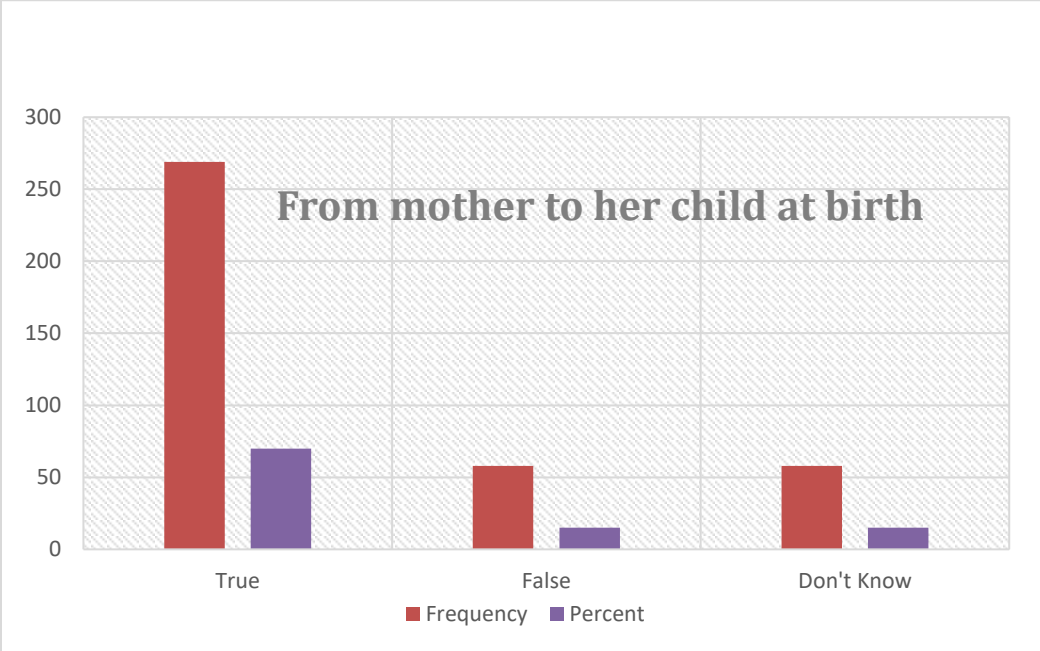
The results have found in response to the above query are mentioned in the graphical and tabular representation is also mentioned for the clear view of the results as well as findings against each inquiry. Hence majority of the respondents have awareness about the HCV in this context. All results are significant at $p < .05$.



**From mother to her child at birth**

| | Frequency | Percent | Mean | p-value |
|---|---|---|---|---|
| True | 269 | 69.9 | 1.4519 | 0.0190 |
| False | 58 | 15.1 | | |
| Don't Know | 58 | 15.1 | | |
| Total | 385 | 100.0 | | |

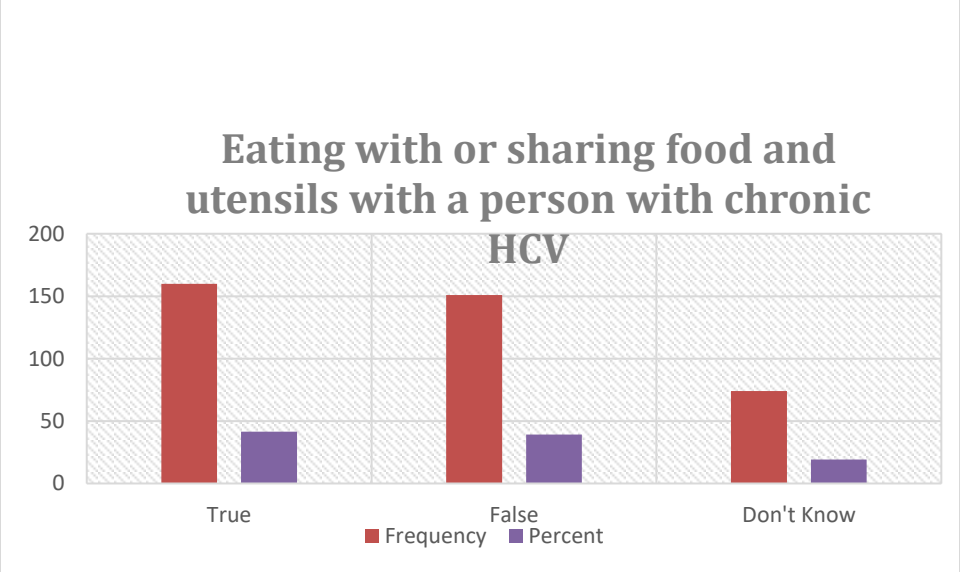
69.9% respondents know that HCV transmitted from mother to her child at birth. The results have found in response to the above query are mentioned in the graphical and tabular representation is also mentioned for the clear view of the results as well as findings against each inquiry. All results are significant at $p < .05$.



**Eating with or sharing food and utensils with a person with chronic HCV**

| | Frequency | Percent | Mean | p-value |
|---|---|---|---|---|
| True | 160 | 41.6 | 1.7766 | 0.0290 |
| False | 151 | 39.2 | | |
| Don't Know | 74 | 19.2 | | |
| Total | 385 | 100.0 | | |

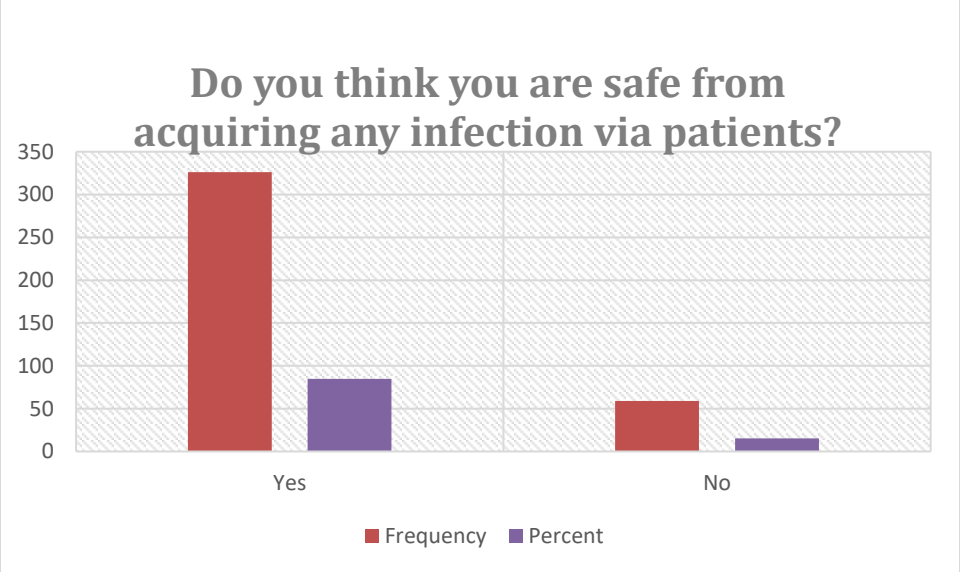
The results have found in response to the above query, 41.6% respondents think that eating or sharing food and utensils with chronic HCV can cause disease. the graphical and tabular representation is also mentioned for the clear view of the results as well as findings against each inquiry. All results are significant at $p < .05$.



**Do you think you are safe from acquiring any infection via patients?**

| | Frequency | Percent | Mean | p-value |
|---|---|---|---|---|
| Yes | 326 | 84.7 | 1.1532 | 0. 069 |
| No | 59 | 15.3 | | |
| Total | 385 | 100.0 | | |

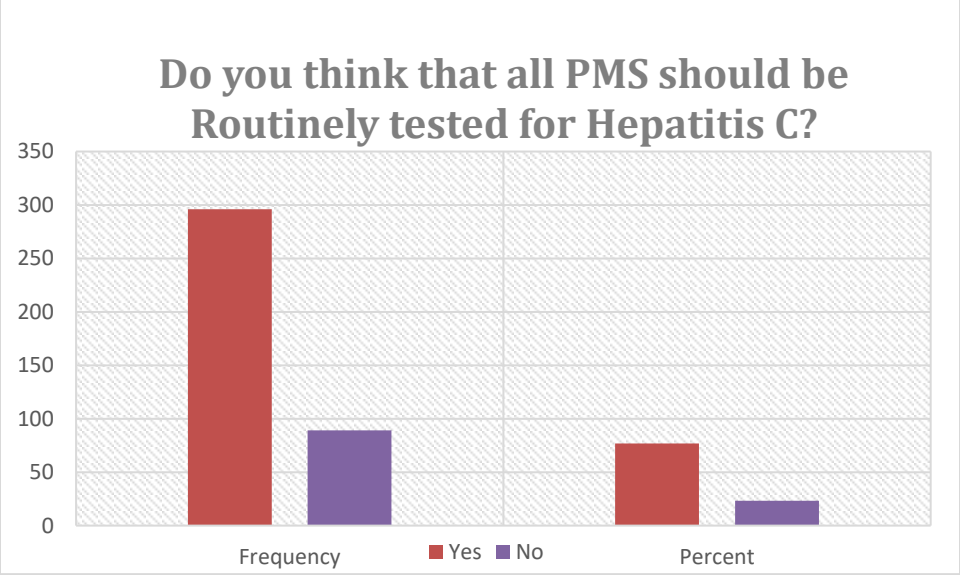
84.7% respondents were of the view that they are safe from acquiring any infection form the patient while remaining 15% said they don't think so. the graphical and tabular representation is also mentioned for the clear view of the results as well as findings against each inquiry. All results are significant at $p < .05$.



**Do you think that all PMS should be routinely tested for Hepatitis C?**

| | Frequency | Percent | Mean | p-value |
|---|---|---|---|---|
| Yes | 296 | 76.9 | 1.2312 | 0.0213 |
| No | 89 | 23.1 | | |
| Total | 385 | 100.0 | | |

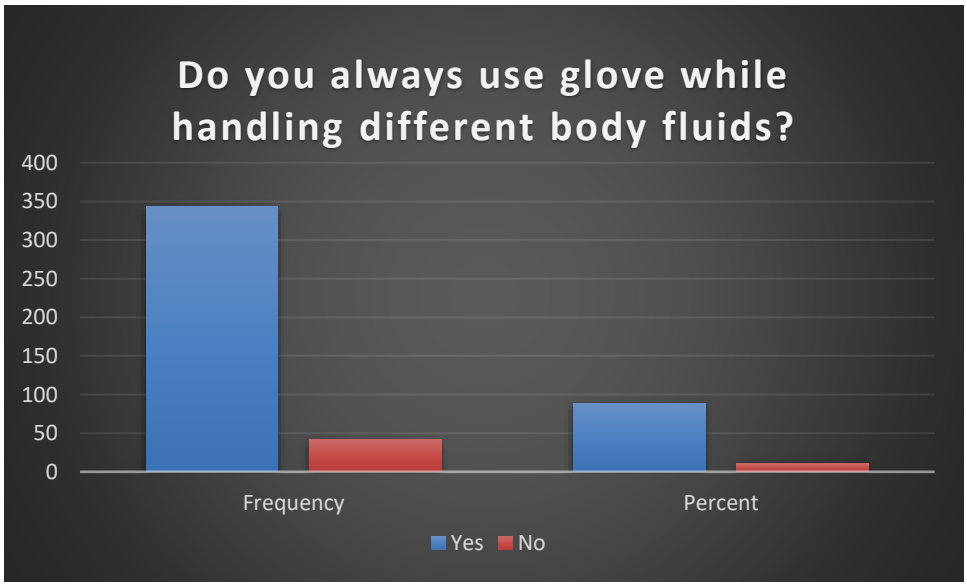
The results have found in response to the above query, 76.9% respondents think that PMS should be routinely tested for HCV while remaining respondents said No in this regard. All results are significant at $p < .05$.



**Do you always use gloves while handling different body fluids?**

| | Frequency | Percent | Mean | p-value |
|---|---|---|---|---|
| Yes | 343 | 89.1 | 1.1091 | 0.0216 |
| No | 42 | 10.9 | | |
| Total | 385 | 100.0 | | |

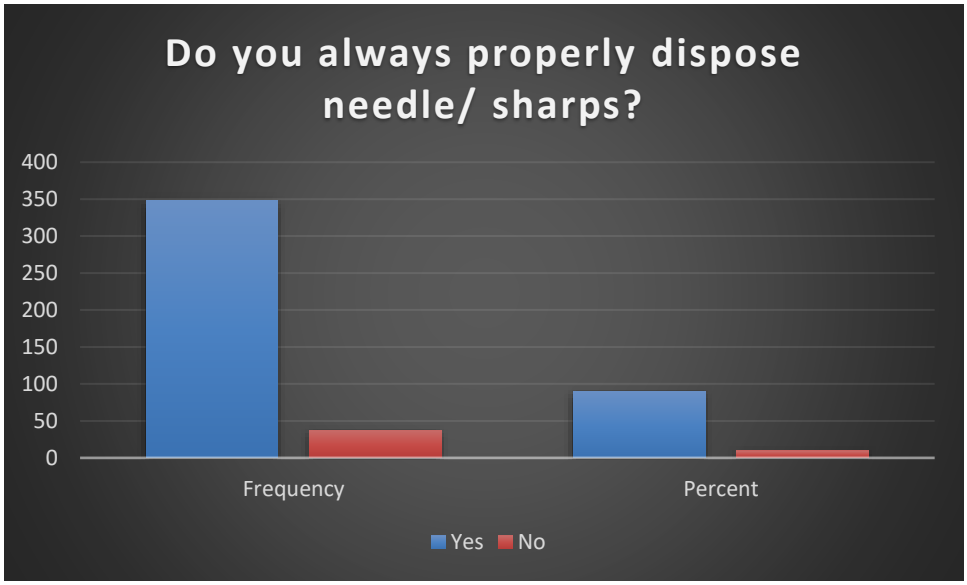
The results have found in response to the above query there were 89% respondents who think that they use gloves while handling the body fluids while 10.9% remaining said No. The graphical and tabular representation is also mentioned for the clear view of the results as well as findings against each inquiry. All results are significant at $p < .05$.



**Do you always correctly dispose of needles/ sharps?**

| | Frequency | Percent | Mean | p-value |
|---|---|---|---|---|
| Yes | 348 | 90.4 | 1.0961 | 0.0512 |
| No | 37 | 9.6 | | |
| Total | 385 | 100.0 | | |

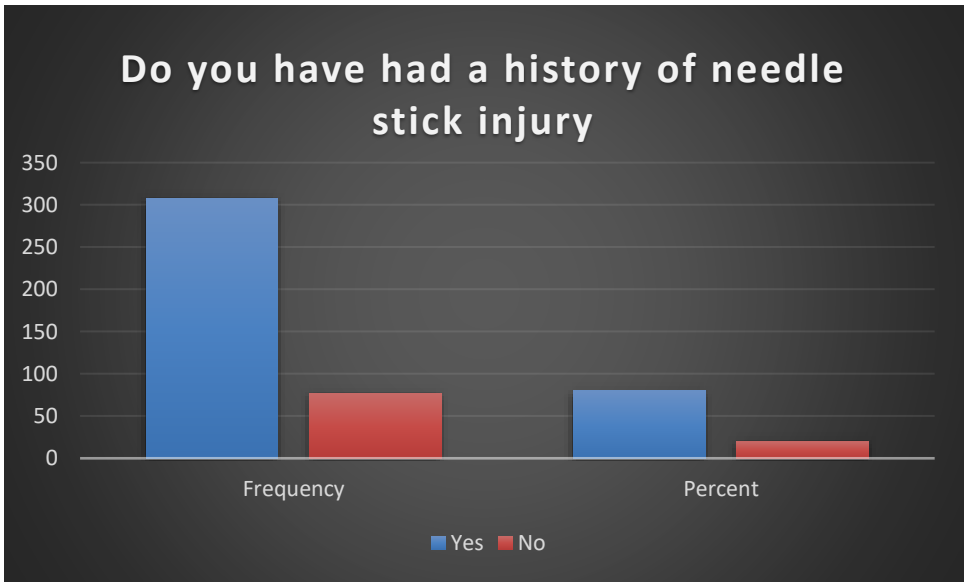
90.4% of respondents answers that they always dispose of off needles and sharps things properly while 9.6% respondents said that they do not always do so. The graphical and tabular representation is also mentioned for a clear view of the results and findings against each inquiry. All results are significant at $p < .05$.



**Do you have had a history of needle stick injury?**

| | Frequency | Percent | Mean | p-value |
|---|---|---|---|---|
| Yes | 308 | 80.0 | 1.2000 | 0.0052 |
| No | 77 | 20.0 | | |
| Total | 385 | 100.0 | | |

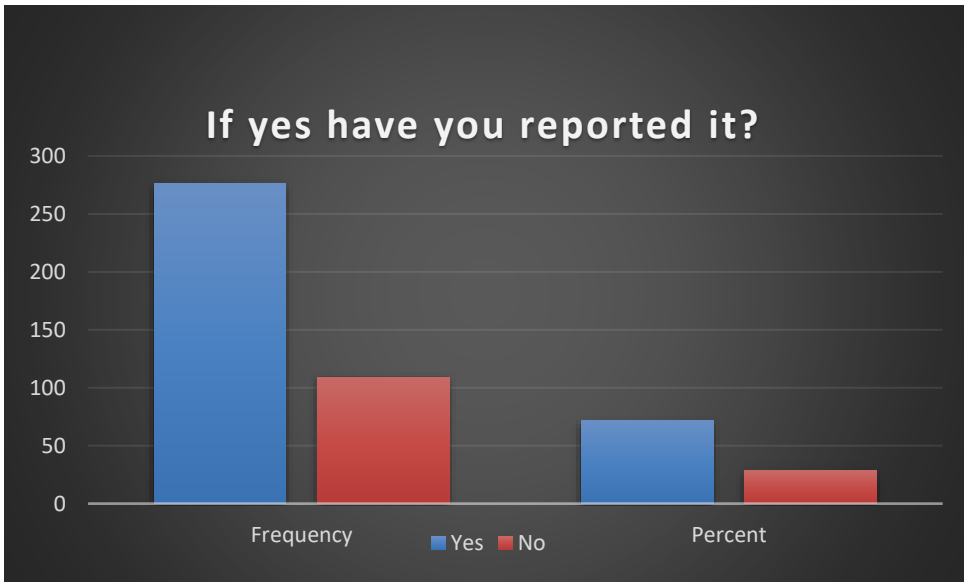
80% of respondents said that they have needle stick injury. The graphical and tabular representation is also mentioned for the clear view of the results as well as findings against each inquiry. All results are significant at $p < .05$.



**If yes, have you reported it?**

| | Frequency | Percent | Mean | p-value |
|---|---|---|---|---|
| Yes | 276 | 71.7 | 1.2831 | 0.0110 |
| No | 109 | 28.3 | | |
| Total | 385 | 100.0 | | |

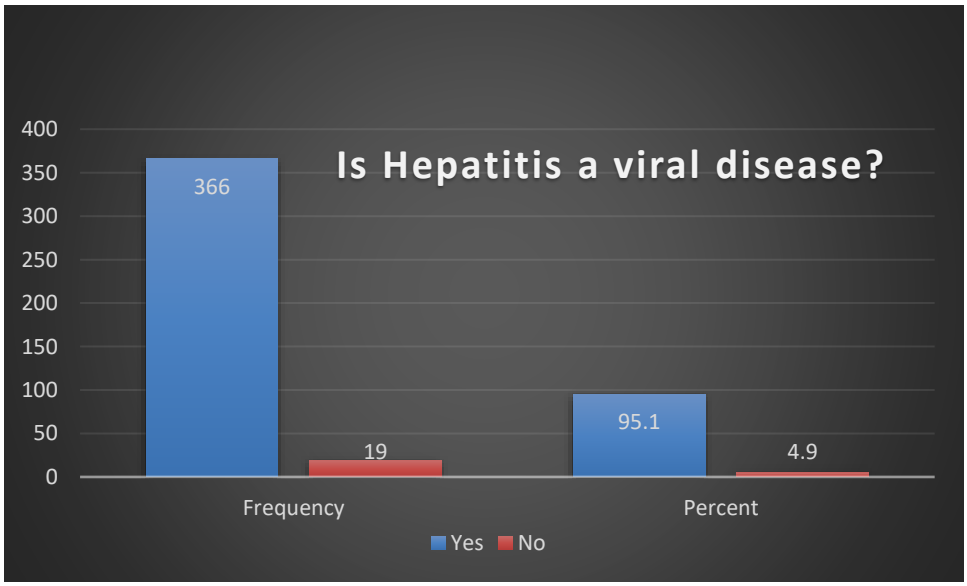
In response to the above query, 71.7% respondents think that if disease was present, they reported it. The graphical and tabular representation is also mentioned for a clear view of the results as well as findings against each inquiry. All results are significant at $p < .05$.



**Is Hepatitis a viral disease?**

| | Frequency | Percent | Mean | p-value |
|---|---|---|---|---|
| Yes | 366 | 95.1 | 1.0494 | 0.0068 |
| No | 19 | 4.9 | | |
| Total | 385 | 100.0 | | |

In response to the above query, 95% of respondents think that hepatitis is a viral disease. The graphical and tabular representation is also mentioned for the clear view of the results as well as findings against each inquiry. All results are significant at $p < .05$.




## Discussion

HCV transmission is based on the concept that all blood, bodily fluids, secretions, and excretions, except for sweat, non-intact skin, and mucosal membranes, may carry infectious organisms. HCV transmission protocols were designed for use in hospitals and may not be

appropriate in other contexts where universal precautions are employed such as childcare facilities and schools. This research aimed to determine how well PMS at secondary health institutions in Faisalabad knew about and practiced HCV transmission. The research evaluated and identified the degree of knowledge of PMS and the extent to which PMS conform to the current idea of HCV transmission in practice to meet the goals.

The research results also revealed the variables influencing the practice of HCV transmission by PMS in public secondary health facilities in Pakistan's Children Hospital and DHQ Hospital Faisalabad. Based on the research results, suggestions have been given on enhancing HCV transmission awareness and practice, including infection prevention and control among PMS. The federal and state ministries of health may design and target cost-effective programs based on these suggestions to raise awareness of HCV transmission among PMS and improve adherence to infection prevention and control.

A comparative assessment of HCV transmission awareness and practice among PMS at Children Hospital and DHQ Hospital Faisalabad (Pakistan). In Faisalabad, many private health care institutions serve a large part of the population. In both private and public health institutions, comparison research will assess the degree of adherence to HCV transmission.

In Children Hospital and DHQ Hospital Faisalabad, a comparative assessment of knowledge and practice of HCV transmission among PMS in tertiary, secondary and primary health institutions was conducted (Pakistan). The three tiers of health care institutions provide health care services.

The degree of compliance with HCV transmission at the three levels of health facilities will be investigated in comparative research. A review of the infection prevention and control program at the Children's Hospital in Faisalabad (Pakistan). According to the results, compliance with HCV transmission by PMS, a component of infection prevention and control, is poor. The planned research would look at all aspects of infection prevention and control, including IPAC administrative problems.

## Conclusion

The Children Hospital and DHQ Hospital Faisalabad's para medical staff had little knowledge of the present enlarged reach of universal precautions, called transmission of HCV. Some aspects of the universal precautions were more known to the responders. There was a lack of understanding that HCV counseling and testing are required for PPE to rule out already established HCV

infections. The majority of PMS were unaware that ARV medicines for PPE, a PPE guideline and a PPE focal person were all available in their institution. This suggests that occupational exposures were not adequately recorded and that the necessary treatment was not provided.

The responders had a high level of understanding that HCV transmission should be avoided while interacting with all patients and bodily fluids, regardless of diagnosis. This understanding however did not seem to lead to a high percentage of compliance with the criteria for wearing PPE.

PMS at Children Hospital and DHQ Hospital Faisalabad were less than enthusiastic about transmitting HCV. The lack of consistent access to water and soap was the most significant barrier to hand washing following direct patient contact. Similarly, a lack of consistent supply was a significant impediment to frequent PPE usage during operations that might result in blood or bodily fluid droplets or splashes. The frequency of needle recapping and needle stick injuries among physicians was found to be relatively high. HBV immunization was not widely reported among PMS.

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