

Research Article**Quasi-experimental study to assess the effectiveness of structured teaching program on knowledge regarding Management of Hepatitis C among students in selected Nursing college kishtwar**Corresponding author: Mr. Masood Ahmad Sheikh *, Mrs. Charu Jamwal ¹, Mrs. Mahiya Hassan Trak ²

* Ph. D Scholar Nursing, Nursing Tutor, BGSB University Rajouri (J &K), India.

¹M.sc Nursing, Nursing Tutor GMC Associated College Jammu, India.² M.sc Nursing, Nursing Tutor, BGSB University Rajouri (J &K), India.

* sheikhmasoodi8@gmail.com

Received on: 16-12-2020; Revised and Accepted on: 04-01-2021

ABSTRACT

Hepatitis C is a major cause of chronic liver disease. It has been recognized as a global health problem because of the progression to cirrhosis and hepatocellular cancer. Chronic hepatitis C is usually asymptomatic but can cause considerable liver damage before its recognition. There are number of viral diseases which are most fatal for human beings but among these viral diseases one of the disease related to liver is hepatitis C. If this viral disease is not treated at right time it can lead to damage the whole liver and act as fatal for human being. Moreover if health professional personals are not taking care of personnel protective equipment's and other barriers, they can become the victim of hepatitis of C subjected patients are free from this disease. Hepatitis C is a disease caused by the hepatitis C virus and is transmitted by infected body fluids of infected cases to the healthy ones. Hepatitis C virus cause acute hepatitis, a disease that can vary anywhere from a mild and self-limiting form to an aggressive and distractive disease leading to post necrotic cirrhosis and death. So it is very important for health care provider to be very vigilant while delivering care to the patients. On those aspects a quantitative, quasi-experimental two group pretest posttest research design study was conducted to assess the knowledge regarding management of Hepatitis C for which 60 subjects were selected by simple random sampling. After data collection structured knowledge questionnaire was used to assess the knowledge among both the groups (control and experimental group). The data was analyzed by descriptive and inferential statistics using chi-square and t-test. The findings revealed that majority of the study subjects 29(96.7%) had good knowledge, 1(3.3%) had average knowledge and none of the subjects had neither average nor below average knowledge with posttest mean score 29.67, median 30.00 and standard deviation 2.57 in experimental group. Study concludes that there was gain in knowledge among students after importing structure teaching programme. The study also concluded that there was statistically significant association between educational qualification ($p=0.001$) of students with their pre-test knowledge scores while as no association was found between age, Residence and source of information of students with their pre-test knowledge scores ($p>0.05$).

Keywords: Impact, Structured Teaching Programme, Hepatitis, Management, Therapy.**1. INTRODUCTION:**

Viral Hepatitis is a term commonly used for several clinically similar yet etiologically and epidemiologically distinct disease. It is caused by five different viruses with transmission either through contaminated food or water (hepatitis A and E) or

through exposure to blood or body fluids (hepatitis B, C and D). Hepatitis C is a contagious liver disease that results from infection with the hepatitis C virus. It can range in severity from a mild illness lasting a few weeks to a serious, life long illness. It is among the most common virus that infect the liver and it has been shown to be a major cause of parenterally transmitted hepatitis. Every year, 3-4 million people are infected with the hepatitis C virus. About 130-150 million people are chronically infected and are at risk of developing liver cirrhosis and liver cancer. More than 700,000 people die from hepatitis C- related liver disease every years. The hepatitis C virus is most commonly transmitted through exposure to infectious blood. This can occur through receipt of contaminated blood transfusions, blood products and organ transplants, injections given with contaminated syringes and

***Corresponding author:**

Mr. Masood Ahmad Sheikh
Ph. D Scholar Nursing, Nursing Tutor, BGSB University Rajouri (J &K), India.

Email: sheikhmasoodi8@gmail.com

Phone: 91 99066 16357

DOI: [10.46978/sjnr.21.2.1.01](https://doi.org/10.46978/sjnr.21.2.1.01)

needle stick injuries in health care settings, injection drug use and being born to hepatitis C-infected mother. The incubation period for HCV ranges from 14 to 180 days with an average of 45 days. The natural history of the disease in children is not well defined. Some children may be asymptomatic, but hepatitis C can become a chronic condition and can cause cirrhosis and hepatocellular carcinoma. About 60% to 70 % of individuals infected with HCV develop chronic disease. Infection with HCV is the leading reason for liver transplantation in the United States. Early diagnosis can prevent health problems that may result from infection and prevent transmission to family members and other close contacts. Hepatitis C does not always require treatment as the immune response in some people will clear the infection and some people with chronic infection do not develop liver damage. When treatment is necessary, the goal of hepatitis C treatment is cure. The standard of care for hepatitis C treatment was based on therapy with interferon and ribavirin, which required weekly injections for 48 weeks, cured approximately half of treated patients but caused frequent and sometimes life-threatening adverse reactions. Recently, new antiviral drugs have been developed so called direct antiviral agents. 1, 2

Hepatitis C is the most common blood-borne viral infection in the U.S. and can cause fatal liver damage if left untreated. In 2016, the CDC reported at least 18,153 deaths related to hepatitis C. However, improvements in education, risk-based screening, prevention methods, and modern treatments, the outlook for hepatitis C is better than ever. Early diagnosis and treatment can significantly improve a person's outlook and prevent liver damage. Modern medicines can cure hepatitis C in 90% of cases. These treatments are expensive. If a person is at risk of exposure to the virus, they should have regular screenings to make sure they do not have the virus. Recombinant interferon alfa-2b may be given with chronic hepatitis C to force the virus into remission^{3, 4}.

Hepatitis C is a liver infection that can lead to serious liver damage. It's caused by the hepatitis C virus. Hepatitis C is transmitted parenteral through exposure to blood and blood products from HCV-infected persons. About 3.9 million people in the U.S. have the disease. But it causes few symptoms, so most of them don't know. The virus spreads through an infected person's blood or body fluids. There are many forms of the hepatitis C virus. The most common in the U.S. is type 1. None is more serious than any other, but they respond differently to treatment. The hepatitis C virus affects people in different ways and has several stages. The incubation period last 14 to 180 days but the average is 45 days. For most people who get hepatitis C up to 85% the illness moves into a long-lasting stage longer than 6 months. This is called a chronic hepatitis C infection and can lead to serious health problems like liver cancer or cirrhosis. Many people with hepatitis C have no symptoms. But between 2 weeks and 6 months after the virus enters bloodstream, the symptoms may be developed are Clay-colored poop, Dark urine, Fever, Fatigue, Jaundice a

condition that causes yellow eyes and skin, as well as dark urine, Joint pain, Loss of appetite, Nausea, Stomach pain, Vomiting etc. 5, 6.

Hepatitis C is a liver infection caused by the hepatitis C virus. Hepatitis C is spread through contact with blood from an infected person. Today, most people become infected with the hepatitis C virus by sharing needles or other equipment used to prepare and inject drugs. For some people, hepatitis C is a short-term illness, but for more than half of people who become infected with the hepatitis C virus, it becomes a long-term, chronic infection. Chronic hepatitis C can result in serious, even life-threatening health problems like cirrhosis and liver cancer. People with chronic hepatitis C can often have no symptoms and don't feel sick. When symptoms appear, they often are a sign of advanced liver disease. There is no vaccine for hepatitis C. The best way to prevent hepatitis C is by avoiding behaviors that can spread the disease, especially injecting drugs. Getting tested for hepatitis C is important, because treatments can cure most people with hepatitis C in 8 to 12 weeks. HCV is transmitted primarily through parenteral exposures to infectious blood or body fluids that contain blood. Possible exposures include Injection-drug use, birth to an HCV-infected mother, through sex with an HCV-infected person, sharing personal items contaminated with infectious blood, and other health-care procedures that involve invasive procedures, such as injections unregulated tattooing, Receipt of donated blood, blood products, and Needle stick injuries in health-care settings. Hepatitis C infection is treated with antiviral medications intended to clear the virus from infected body. The goal of treatment is to have no hepatitis C virus detected in body at least 12 weeks after the completion of. Treatment. The choice of medications and length of treatment depend on the hepatitis C genotype, presence of existing liver damage, other medical conditions and prior treatments like liver transplantation.^{7, 8}

Over 90% of people infected with hepatitis C virus can be cured of their infection, regardless of Hepatitis C virus genotype, with 8–12 weeks of oral therapy. To provide health-care professionals with timely guidance as new therapies are available and integrated into hepatitis C treatment regimens, the Infectious Diseases Society of America and American Association for the Study of Liver Diseases in collaboration with the International Antiviral Society–USA, developed evidence-based, expert-developed recommendations for hepatitis C management.^{9, 10}

Health care workers all over the world and students constantly face the danger of getting exposed to HCV in the clinical setting. Yet the problem of exposure to contaminated blood among the nurses has received inadequate attention, more so in India. Today's Nursing Students are tomorrow's health professionals and Their knowledge will help in the prevention and control of hepatitis C among health care professionals. Thus the investigator felt the need to take up the study, as the researcher has himself been a bed-side nurse for some period of time and

has worked in different medical and surgical areas. During his posting, it was observed that different health care workers get infected with Hepatitis C. Therefore precautions and preventive measures need to be taken by all health care workers to decrease this problem. Hepatitis C is a burning issue now a day's, this study will be very useful to nursing students, so the investigator decided to assess the knowledge of C among students in selected Nursing college kishtwar.

2. OBJECTIVES OF THE STUDY

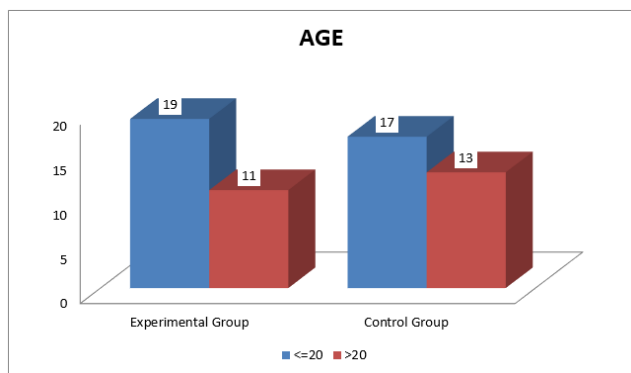
- To assess the pretest knowledge regarding Management of hepatitis C among students in selected Nursing College kishtwar.
- To assess the posttest knowledge regarding Management of hepatitis C among students in selected Nursing college kishtwar.
- To evaluate the effectiveness of structured teaching programme by comparing pre-test and post-test knowledge score regarding management of hepatitis C among students in selected Nursing college kishtwar.
- To find the association between pretest knowledge score regarding management of hepatitis C among students in selected Nursing college kishtwar with demographic variables (Age, education, source of information).

3. FINDINGS

A quasi-experimental study design was conducted to assess the knowledge of students in nursing college kishtwar. 60 subjects were selected by purposive sampling technique. Structure Knowledge questionnaire was adopted to collect the information from the participants in selected nursing college kishtwar. The tool consists of demographic variable and students of nursing college kishtwar. Prior to data collection informed consent was obtained from the participants. The data was analyzed using descriptive and inferential statistics.

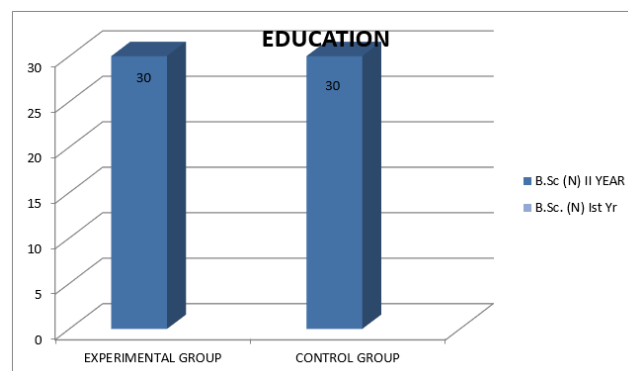
4. RESULTS

Figure 1: Distribution of study subjects (Nursing Students) according to age in experimental and control group.



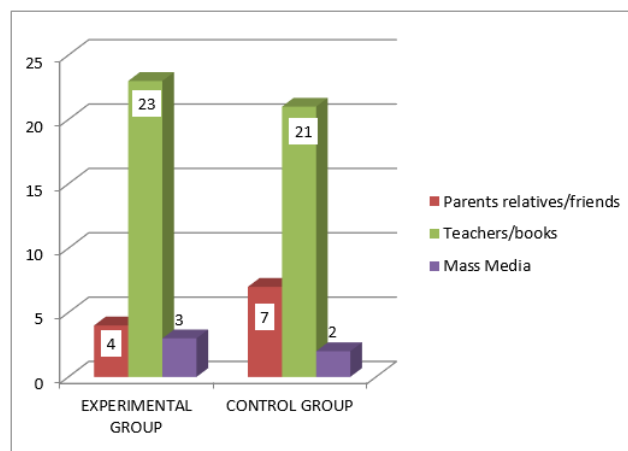
The data presented in figure 1 revealed that out of 30 students in experimental group most of the study subjects were **19(63.7%)** in the age group less than 20 years and **11(36.3%)** greater than 20 years. While as in control group out of 30 students most of the subjects were **17(56.7%)** in the age group less than 20 years and **13(43.3%)** in the age group greater than 20 years.

Figure 2: Distribution of study subjects (Nursing Students) according to their education in experimental and control group:



The data presented in figure 2 revealed that maximum number of study subjects **30(100%)** and **30(100%)** were belonged B.sc second Nursing students in experimental and control group respectively.

Figure 3: Distribution of study subjects (Nursing Students) according to source of information in experimental and control group.

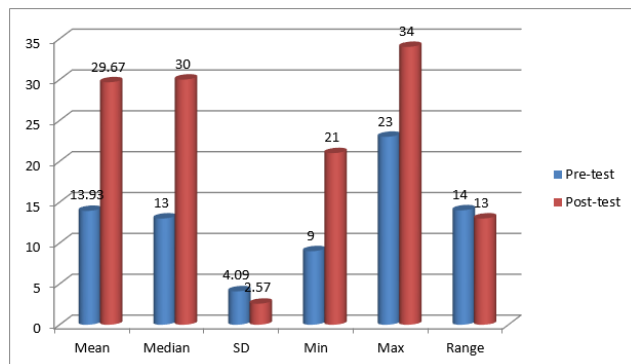


The data presented in figure 3 revealed that maximum number of study subjects (Nursing Students) 4(13.3%) and 7(23.3%) were having source of information parents/friends, 23(76.7%) and 21(70%) were having source of information teachers/books, 03(10%) and 02(6.6%) were having source of information mass media in experimental and control group respectively.

Table 5: Shows Mean, Median & Standard Deviation of Pre and Post-Test Knowledge In Experimental Group On Management Regarding Hepatitis C Among Students Of Nursing College Kishtwar.

Knowledge Score	Mean	Median	Standard Deviation	Minimum Score	Maximum Score	Range
Pre-test	13.93	13.00	4.09	9	23	14
Post-test	29.67	30.00	2.57	21	34	13

Figure 4: Bar Diagram showing Mean, Median & Standard Deviation of Pre and Post-Test Knowledge Scores in experimental group on management regarding Hepatitis C among students of nursing college kishtwar.



• The data presented in figure 4 revealed that zero percent had excellent knowledge, 5(16.7%) had god knowledge, 20(66.7%) had average knowledge and 5(16.7%) had below average knowledge while as 29(96.7%) had excellent knowledge, 1(3.3%) had good knowledge and none of them had neither average nor below average knowledge in experimental group.

• The mean posttest knowledge score 29.67 was significant higher than mean pretest knowledge score 13.93 in experimental group which indicates that structured teaching program was highly effective in enhancing the knowledge in experimental group at mean difference 15.74.

• By using chi-square only education of study subjects (Nursing Students) was found to have significant association with the pretest knowledge score in experimental group.

5. RECOMMENDATIONS

The Following studies can be undertaken in relation to present study:

- Similar study need to be undertaken with a large number of samples for better generalization.
- A similar study can be conducted by seeking other variables.
- The study can be conducted on the staff-nurses to assess the knowledge regarding Hepatitis C.
- True Experimental research approach can be used.

• The study can be conducted among non-nursing personnel to assess their knowledge regarding practice to prevent Hepatitis C infection.

• Setting can be changed by involving more hospitals and nursing homes.

6. CONCLUSION

The following conclusions were drawn on the basis of the findings of the study.

• Pretest findings showed the Knowledge of students in Nursing College Kishtwar was found poor regarding management of hepatitis C in both experimental and control group.

• There was improvement in knowledge of study subjects after the implementation of structured teaching programme regarding management of hepatitis C in experimental group as compared to control group which lacks structured teaching programme.

• The structured teaching program was found effective in improving the knowledge regarding management of hepatitis C as it was evident from posttest knowledge scores and when compared with control group which lacks STP.

• There was found significant association between educational qualification of students with their pre-test knowledge as (p-value<0.001) and there was no association between pre-test knowledge and other variables i.e. age, residence, source of information. This indicates that an effective program of health education programme regarding hepatitis C must be imparted on regular basis to pre-clinical nursing students in order to increase the knowledge regarding hepatitis C because they are more prone for getting infected with Hepatitis-C as they are in close contact with the patients and there by so as to prevent the disease and reduce morbidity and mortality.

7. AKNOWLEDGEMENT

With profound gratitude I am deeply indebted to my Esteemed teacher and Guide Professor (Dr.) Mehmooda Regu principal Alamdar College of Nursing IUST Chadoora Budgam, who helped me to stimulating, suggestions, knowledge, experience and encouragement and helped me in all the times of research period. I am also grateful to all my family members who morally supported through the construction of view successfully.

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Article Citation:

Authors Name. Masood Ahmad Sheikh. Quasi-experimental study to assess the effectiveness of structured teaching program on knowledge regarding Management of Hepatitis C among students in selected Nursing college kishtwar - SJNR 2021;2(1): 01-05
DOI: 10.46978/sjnr.21.2.1.01