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Research Article

**THE OCCURENCE OF HBV & HCV IN THE PATIENTS
UNDERGOING SURGERY**Dr Muhammad Usman Arif, Dr Muhammad Zeeshan, Dr Muhammad Aftab Younas
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Abstract:

Objective: The purpose of this research work is to determine the occurrence of infection of hepatitis B virus & hepatitis C virus in the patients who were undergoing surgery in Faisalabad and compare it from other regions of the country.

Methodology: This was a descriptive research work conducted in Allied Hospital Faisalabad. The duration of this research work was from June 2017 to December 2018. ICT kit method was in use for the screening of both types of the hepatitis viruses. One hundred and fifty patients took part in the case work. Eighty-three were the male patients and 67 were the female patients. Male patients outnumbered the female patients.

Result: The combined occurrence of the hepatitis B virus and hepatitis C virus was 23.550%. Total 14.0% patients found with the infection of hepatitis C virus and 9.330% patients found with the infection of hepatitis B virus.

Conclusion: We found a great rate of occurrence of these viruses. Therefore, it is very important to carry out routine screening of hepatitis C virus & hepatitis B virus for all the patients who are undergoing the surgical procedures.

Key Words: Hemodialysis, Thalassemia, Infection, Hepatitis B, Surgery, Sufficiently, Patients.

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INTRODUCTION:

Hepatitis due to viruses is very serious issue of health in the whole world. It is also an increasing epidemic which is causing the suffering of billions of people in the world. About 2 billion people of the world have suffered with the infection of hepatitis B virus & three hundred and fifty million have a chronic infection of this virus for full time of their life [1]. The occurrence of the hepatitis C virus is very higher than the infection of HBV. There is an estimation that about one hundred and seventy million people have chronic infection where 3 to 4 million are acquiring the infection each year [2].

There is a great burden of infections of these viruses on our country Pakistan, the very frequent factors of risks are transfusion of the blood, hemodialysis, utilization of the infected or used syringes, thalassemia, getting shave from barbers, having tattoos on body parts and habits of sex abuse [3]. The infection of the hepatitis due to viruses is not sufficiently controllable although the patients with no signs and symptoms carriage the huge risk for the spread of these infections to other persons as well as patients & medical professionals [4, 5]. The objective of this case study was to find out the prevalence of the HBV & HCV among the patients who were undergoing surgery in our institute.

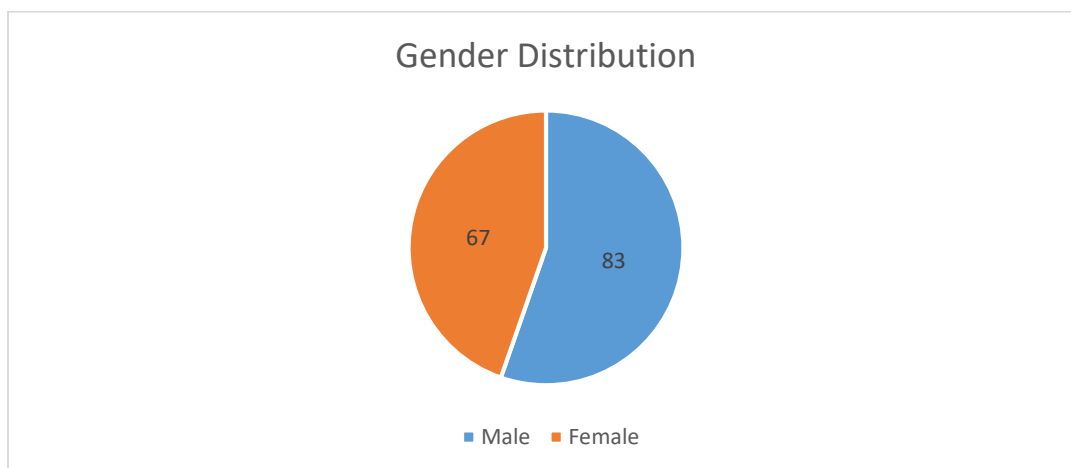
METHODOLOGY:

This research work carried out on the patients who were undergoing surgery in the Allied Hospital Faisalabad. The duration of this research work was from June 2017 to December 2018. All the patients with greater than thirteen year of age who got admission in emergency were the part of this research work. The close relatives of the patients undergoing surgery gave the permission of their participation in the research work. The ethical committee of the hospital gave the permission to conduct the research work. The patients who already had known infection of hepatitis B and Hepatitis C Patients, they were not the part of this research work.

The data record about having the signs & symptoms of the hepatitis due to viruses like severe pain in the upper part of right side of abdomen, loss of the weight, vomiting condition, high temperature and jaundice maintained for every patient. ICT Kit procedure was in use for the screening of the patients for the infection of hepatitis B virus or hepatitis C virus. SPSS V. 11 was in use for the data entry and analysis of the collected information.

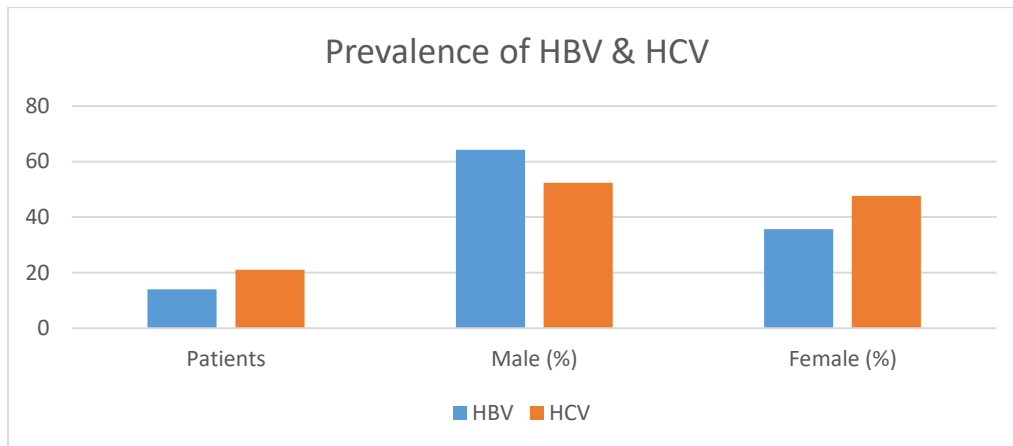
RESULTS:

During the period of this research work, screening of 150 patients carried out. There were 83 male patients and 67 were female patients. About 23.50% (n: 35) patients found with the infections of hepatitis B virus .



and hepatitis C virus, among the patients 14% (n: 21) found positive for hepatitis C virus & 9.330% (n: 14) found positive for having the infection from hepatitis B virus. The very common infected age group consisted the patients from 20 to 30 years of age, among them HBV was 35.770% & HCV was 33.30%. Among positive hepatitis B virus patients, 64.280% were the male patients & 35.710% were the female patients. Among the patients suffering from infection of HCV, 52.330% were men & 47.6% were women. We found only 8.570% (n: 3) patients with a past background of jaundice & 14.28% (n: 5) patients found with signs and symptoms as malaise & dyspepsia.

| | Patients | Male (%) | Female (%) |
|-----|----------|----------|------------|
| HBV | 14 | 64.28 | 35.71 |
| HCV | 21 | 52.33 | 47.6 |



Among positive patients, 14.28% (n: 5) found with the previous background history of the surgical procedures & 5.71% (n: 2) found with the history of the transfusion of blood in past. Only one patient was the drug addict who was taking these drugs through veins with the help of contaminated syringes. None of the patient was getting vaccination for the infection of hepatitis B virus. But after the results of this research work, most of the patients were agree to screen and vaccinate their members and close relatives in the family to control & mitigate the diseases from these viruses.

DISCUSSION:

Many case studies have shown that carrier rate of HBsAg is about 10.0% in various regions of our country Pakistan [6]. In this research work, the prevalence of HBV and HCV was 9.330% which was a little bit less than the concluded by Yousuf [6] in his research work. Various research works conducted in various regions of our country Pakistan by Shaikh [7], Talpur AA [8] & Malik [9] reported the condition of carrier of HBsAg as 2.80%, 8.60% & 10.0% correspondingly. The findings of research report of Shaikh [6] was much different from the other two case studies. The prevalence of infection due to hepatitis C virus in our country Pakistan varies from 4.0% to 7.0% [10], 11.60% was prevalence of HCV as reported by Talpur AA [8] & 11.260% prevalence of HCV as reported by Chaudhary [4], but the outcome of this research work in this matter is much higher than the outcomes of the other research works conducted in the same subject matter.

Total HBV & HCV prevalence was 23.330% in this current research work which is same as compared to

the figures concluded from other regions of the Pakistan.

Zubia [11] in his research work examined 387 patients who got admission in the hospital for elective surgical treatment. After the completion of the screening, they discovered that 6.0% patients out of total patients were suffering from the infections of HBV and HCV. HBsAg was available as positive in 6.50% patients while 11.30% found with infection for HCV. The risk features in their research work were use of the used or polluted syringes, contaminated instruments for the surgery & other products of the blood. They found that the prevalence of the HBsAg & anti hepatitis C virus in the patients who were going under surgery in the patients is high. They recommended that the screening for hepatitis B virus and hepatitis C virus should be a regular part of the before operation investigation [11]. Chaudhry also carried out other research work among the patients reporting in outpatient department of surgery unit of FFH (fauji foundation hospital) located in Rawalpindi in the year of 2006. He screened more than two thousand patients & found the occurrence of infection of hepatitis B as 2.80% and the prevalence of

the infection due to HCV was 7.560%. Males were dominating females in quantity in HCV and HBV groups [12]. Khan from a city of KPK province of Pakistan [13] and Amin [14] from Faisalabad have concluded the occurrence of hepatitis C virus as 9.0% and 13.50% correspondingly.

CONCLUSIONS:

The very high occurrence of infections due to hepatitis B virus and hepatitis C virus in this research work as well as in many other research works show that before surgery the screening of the patients who are undergoing surgery should be compulsory for the identification and tackling of his problem in the initial stages. Additionally, with respect to the very high prevalence of infection & carrier rate, all the measures for its prevention adopted to assess, control & tackle the complications due to these viruses. Further research studies on a large sample size are the requirement to generalize the findings of this research work for whole country.

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