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ORIGINAL ARTICLE

Prevalence of Hepatitis B & C in a General Population

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ABSTRACT

Introduction: Hepatitis is characterized by the inflammation of the liver creating swelling and in numerous cases permanent damage to liver tissue. The foremost common types of Hepatitis are Hepatitis A, B, and C. Both Hepatitis B and C can lead to lasting liver damage and in numerous cases 'death'. In all over the world around 300 million individuals are contaminated with hepatitis B infection, and 75% of Hepatitis C infection. The significance of hepatitis B and hepatitis C is outlined by the truth that these infections are forcing a overwhelming burden on national economy and person families due to considerable morbidity and mortality from both acute contamination and persistent sequelae including chronic hepatitis, cirrhosis and hepatocellular carcinoma.

Objective: To determine the frequency of Hepatitis B & C in a general population of Rawalpindi

Material and Methods

Study Design: Quantitative cross sectional

Duration: Three months i.e. 1st January 2022 to 30th March 2022

Data Collection procedure: There were 400 subjects were reported in two different regions of Rawalpindi in a free medical camp in which 241 were males and 159 were females. All subjects were asked about previous screening of hepatitis B & C and family history regarding any previous infection. After taking informed consent and briefing collect the blood sample in a tube.

Results: Among 400 subjects the overall prevalence of Hepatitis B and C was 6.4%. 2.4% males and 1.2% females were in HBV infection whereas 1.6% males and 1.2% females in HCV infection.

Conclusion: This study audits predominance of HBV and HCV in two different ranges of Rawapindi Pakistan, along with awareness status, risk factors in Pakistani population. Prevalence of HBV and HCV contamination shifts with population residing totally different regions of Pakistan.

Keywords: Prevalence, Hepatitis B, Hepatitis C, Population

INTRODUCTION

Viral hepatic diseases (HBV and HCV) have ended up common and the most important cause of liver illness. It is posing a great health issue particularly within the developing world. The significance of hepatitis B and hepatitis C is outlined by the truth that these infections are forcing an overwhelming burden on national economy and person families due to considerable morbidity and mortality from both acute contamination and persistent sequelae including chronic hepatitis, cirrhosis and hepatocellular carcinoma[1, 2]. Hepatitis is characterized by the inflammation of the liver creating swelling and in numerous cases permanent damage to liver tissue. The foremost common types of Hepatitis are Hepatitis A, B, and C. Both Hepatitis B and C can lead to lasting liver damage and in numerous cases 'death'. In all over the world around 300 million individuals are contaminated with hepatitis B infection, and 75% of Hepatitis C infection. Hepatitis B was recognized amid World War II though Hepatitis C was progressively recognized in 1989[3]. The World Health Organization (WHO) estimates that more than 2 billion individuals appear prove of past or current HBV contamination[4]. This accounts for the fact that numerous signs and side effects for the different types are comparative and not particular to the causative agent. The clinical picture of viral hepatitis is extremely variable, extending from asymptomatic contamination without jaundice to a fulminating illness and death in a few days[5]. Diagnosing the particular agent responsible for viral hepatitis isn't conceivable clinically and an unequivocal conclusion of viral hepatitis is as it was achievable only by the utilization of viral-specific hepatitis markers[6]. Around 12 million people have been suffering from Hepatitis B or C in Pakistan and around two hundred thousand cases reported every year. The prevalence of HCV was 6.21% at the Rawalpindi Islamic Centre.

MATERIAL AND METHODS

There were 400 subjects were reported in two different regions of Rawalpindi in a free medical camp in which 241 were males and 159 were females. All subjects were asked about previous screening of hepatitis B & C and family history regarding any previous infection. After taking informed consent and briefing collect the blood sample in a tube.

RESULTS

Among 400 subjects the overall prevalence of Hepatitis B and C was 6.4%. 2.4% males and 1.2% females were in HBV infection whereas 1.6% males and 1.2% females in HCV infection (Table-1) among both the infection as carrier no one marked vaccinated against Hepatitis B. However 50% each males and females having awareness regarding HBV with 16.7% family history in males join with blood donation. About 33.3% having blood transfusion and 100% having history of any sort of operation in females regarding hepatitis B infection(Table-2) In Hepatitis C infection 25% males were aware with any sort of surgery while 50% of females having surgery in HCV infection(Table-2).

Table 1: Prevalence of Hepatitis B & C in general Population of Rawalpindi

No.	Parameter	Number	HBV +ve	%age	HCV +ve	%age	Infection
1	Male	241	6	2.4%	4	1.6%	4.0
2	Female	159	2	1.2%	2	1.2%	2.4
3	Total	400	8	3.6%	6	2.8%	6.4

Table 2: Percentage of General awareness and Past history in the general population of Rawalpindi among Hepatitis B & C Infection

No.	Parameter	HBV +ive				HCV +ive			
		Male	%age	Female	%age	Male	%age	Female	%age
1	General Awareness	3	50	1	50	1	25	-	-

2	Family history	1	16.7	-	-	-	-	-	-
3	Blood Donor	1	16.7	-	-	-	-	-	-
4	Blood transfusion	2	33.3	-	-	-	-	-	-
5	Any Operation	-	-	2	100	1	25	1	50
6	Vaccinated	-	-	-	-	-	-	-	-

DISCUSSION

Approximately 350 million individuals for hepatitis B infection (HBV) in Asia and Pacific countries have been detailed due to his rate of infectiousness, pre-birth transmission, and chronic contamination from early age[7-9]. Agreeing to most recent data tremendous number of individuals was hepatitis C infection contaminated in all over the world. Pakistan has been evaluated among the nations with tall hazard of viral B disease. In Pakistan the predominance of HBV expanded continually due to need of legitimate research facility offices for analyze HBV. In Northern Regions of Pakistan the overall prevalence of HBV was 37%. The HBV prevalence (%) in healthy children was 3.6 in Pakistan. In present study the generally prevalence (%) of Hepatitis B infection (HBV) among the common population in Rawalpindi was 3.6 this lower rate may be due to selected community people and majority belongs to good socio economic group[10].

HCV is more endemic in Pakistan but predominance shifts from 1.18 – 4.8%. In present study the prevalence (%) of HCV was 2.8 as and it was highs among male as compared to female (male: female = 4:2). Blood transfusion could be cause of infection. In this study 33.3% reported HBV positive cases as blood transfusion and more importantly in females 100% reported having HBV infection as any surgery could be high risk factor. Need of awareness was the most noteworthy reason for not being inoculated same circumstance was in present study that due to high rate of unawareness total inoculation and appropriate blood screening at the time of blood transfusion must be given thought to diminish its future episodes[11]. The study took place in Rawalpindi therefore results may not inculcate to other regions of Pakistan.

CONCLUSION

This article audits predominance of HBV and HCV in two different ranges of Rawalpindi Pakistan, along with awareness status, risk factors in Pakistani population. Prevalence of HBV and HCV contamination shifts with population residing totally different regions of Pakistan. This study moreover highlighted awareness issues with respect to immunization against HBV infection which was neglected at elderly level however at birth hexa administration immunization which contain antibodies against HBV infection begun at huge level for the anticipation of HBV contamination.

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