

Available Online at http://www.recentscientific.com

CODEN: IJRSFP (USA)

International Journal of Recent Scientific Research Vol. 10, Issue, 02(F), pp. 31062-31068, February, 2019

International Journal of Recent Scientific Research

DOI: 10.24327/IJRSR

Research Article

PREVALENCE OF HEPATITIS "C" AMONG HEALTH WORKERS

Nazia Amanat^{1*}, Shahnaz Ashraf², Zunira Amir³ and Firdous Hameed⁴

Nursing College, the Superior College Lahore

DOI: http://dx.doi.org/10.24327/ijrsr.2019.1002.3184

ARTICLE INFO

Article History:

Received 6th November, 2018 Received in revised form 15th December, 2018 Accepted 12th January, 2018 Published online 28th February, 2019

Key Words:

Prevalence, HCV, health workers

ABSTRACT

Background: The prevalence of Hepatitis C virus infection has been documented among health workers after needle stick injuries. Doctors and dentists with chronic Hepatitis C Infection have been found responsible for HCV infection transmission to their patients. The nurses and paramedical staff are at more risk of getting HCV than general population.

Aim: To evaluate the prevalence of Hepatitis-C infection among health workers.

Methods: The health care worker from the organizations Gulab Devi hospital Lahore were selected in this study after taking informed consent. Data collected from the participant through self-administered Questionnaire and the participants will be selected through simple random sampling method, the sample size for this study will be 114 which are calculated from the Slovins formula of sampling. Data was analyzed by using SPSS software.

Results: In terms of age, there was a direct association between increased age and increased likelihood of blood transfusion and recent hospitalization, and inverse relationship between age and tattoos, piercings and drugs. In the analysis of socioeconomic variables, a statistically significant difference between social class and piercing was observed prevalence among adults in social class. **Conclusion:** The prevalence of hepatitis c exist among the health worker of the organization. They were aware about the preventive measure and knowledge regarding hepatitisc.

Copyright © Nazia Amanat et al, 2019, this is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

Hepatitis C infection causes Hepatitis, hepatocellular carcinoma and cirrhosis. It is a blood borne disease and predominant in infusing drug clients, social insurance specialists and unprotected sex laborers. Specialists and Dentists are likewise in danger of getting HCV disease since they manage HCV positive patients, syringes, contaminated surgical instruments and mechanical assembly (Jindal *et al.*, 2006).

The ratio of hepatitis C was gradually increase in the people who have directly interaction with infected client which brought about the view that there is low word related danger of Hepatitis C contamination (Nakashima *et al.*,1993). Similar outcomes had been determined by another Pakistani examination led by Akhtar *et al.* (2015). Franciscus expressed that infusion tranquilize and non infusion medications, for example, funnels, straws, inking needles, needle therapy and body puncturing additionally spread hepatitis. Sharing of toothbrushes, razors or nail documents are more outlandish conceivable course of transmission. Needle stick wounds from Hepatitis C contaminated patient to social insurance laborer

may bring about disease, so this must be anticipated by legitimate dental cleanliness which in result can counteract draining gums.

Human services specialists should watch standard all inclusive precautionary measures while managing blood products.HCV couldn't be transmitted by easygoing contact, for example, embracing, hacking, wheezing, used chrochary of infected patient (Franciscus, 2008). Dental understudies had more successive percutaneous wounds than all other medicinal services understudies, which demonstrate that the dental specialists would be an imperative course of HCV transmission (Mahboobi *et al.*, 2010). The HCV positive specialists were in charge of contamination transmission to some of their patients. A performing medicinal service specialists were tried for HCV antibodies by resistant blotch examine. There ought, to be watchful follow-up of needle stick wounds to avert promote transmission (Zaaijer *et al.*, 2011)

Comprehensively, the total population is experiencing hepatitis C infection (Alter, 1997). The ailment is turning into a noteworthy medical issue of creating nations, including Pakistan that has the second most noteworthy prevalence rate of hepatitis C going from 4.5% to 8%. Concentrates in Pakistan

on little focused on bunches including blood benefactors, wellbeing experts, medicate abusers and endless liver illness patients show that the predominance of hepatitis C is as high as 40% (Jiwani 2011) . Be that as it may, writing is as yet insufficient to obviously mirror the general picture because of its constraint on distinguishing the occurrence in solid people.

Therefore the some examinations show that the rural areas are more involve then the urban areas of Pakistan (Jiwani,2011). It is troubling to take note of that 66% population of Pakistan is living in the rural area where overall population either worries about the concern of the sickness or they are at a high danger of getting the infection because of a few acts of neglect and misperceptions. It incorporates inaccessibility of appropriate medicinal services conveyance framework, unscreened blood transfusions, absence of training, or more all, abuse of medications. Accordingly, such disturbing circumstance has significant ramifications on patients, families, human services experts and the entire society.

They are likewise furnished with restricted assets which make them select elective methods for training. For instance, the confirmation of reusing syringes in Pakistan is stunning. In one of the examinations led in the year 2000 in Pakistan, the scientists found that out of ten enlisted social insurance experts, none of them could specify hepatitis C as an infection liable to be transmitted through unsterile syringes, just two said hepatitis B infection while over portion of them specified tuberculosis (Jiwani,2011) . The other contributing components are absence of reviews and observing framework in healing centers and poor administration order. A significant number of the day mind focuses like fundamental wellbeing units (BHU) and essential wellbeing focuses (PHC) are simply delicate structures with no strict arrangement, assets and even prepared staff

HCV represents a genuine word related danger to medicinal services specialists also Potential exposures incorporate contact of the eyes, mucous films, broken skin, or needle stick damage. In such manner, the circumstance of open clinics in Pakistan is admitted for the first time. intensifying when contrasted with day mind focuses. Preoperative screening of patients for hepatitis C isn't performed routinely regardless of whether the patient is. In this manner, it places medicinal services laborers and in addition different patients at a high danger of securing hepatitis B or C infection. An examination led in one of the showing clinics at Abbottabad, Pakistan announced that 30% of health care workers were having hepatitis C infection (Jiwani, 2011)

Once an individual obtains hepatitis C, it brings various difficulties that are not only limited to the physical suffering as well as influence the mental, social, sexual and money related issues for the duration of his life. Consequently, the part of human services experts is exceptionally huge in lightening the commonness and weight of hepatitis C from Pakistan. It is exceptionally significant that wellbeing experts get and disperse legitimate learning about the reasons for hepatitis B and C among overall population. This won't just decrease disgrace applicable to the ailment yet may likewise reduce the commonness of illness among future age. Medicinal and nursing schools must give legitimate learning about the ailment and underscore on quality practice. In addition, appropriate

checking and observing is exceptionally fundamental keeping in mind the end goal to mitigate unsafe practices from medical services settings. These days when multilingual media is accessible in each channel all through the nation, it is basic that overall population procures appropriate learning about the spread of the illness and its related safety measures. Most importantly, legitimate portion of assets and inspiration is very essential in general wellbeing part to decay these acts of neglect because of the accessibility of restricted assets.

Literature Review

The prevalence of Hepatitis C was generally found in the population but its gradually increase in that people who are drug users and multi-transfused. This data tell us that most important factor which contribute to increasing prevalence of hepatitis "c" is reuse of syringes and transfusion of blood which is not properly measured. The program regarding awareness play very important role to decreases the burden of the disease in the community of Pakistan. The people who are working in the circumstances of the hospital are at high risk to get this infectious disease because using infected instruments which have micro organism of that disease, they transfusing blood and blood related products, reuse of syringes and needle stick injury which increase the chance of getting disease. There for previous research shows that 1.2% of surgeons, dentists and orthopedic surgeon have this infectious disease (Polish et al., 1993). Another study also show that the antibodies regarding hepatitis

"c" were found in the some doctors ,nurses ,radiographer , dressers, operation theater assistance (Nakashima et al., 1993). In investigation commonness among specialists was 1.32% which is as per the examination led (Polish and Nakashima et al., 1993). There Another examination directed in the Pakistan revealed 0% of Prevalence Hepatitis "C" in specialists however nurture and other health care personnel were discovered Hepatitis "C" positive (Sarwar et al., 2008). In different investigations over the world announced 0.9 to 1.8% commonness of HCV in medicinal specialists (Thomas et al., 1996). Besides, in our investigation no dental specialist was discovered responsive for Anti Hepatitis c virus which is opposing to the outcomes got from the a considerable lot of above referred to studies. Hepatitis commonness was accounted for as 1.4 % in USA and 0.17 % in Turkey (Pasha et al., 1999). As indicated by WHO (1999), evaluated quantities of FICM's change from 35 million ascending to upwards of 100 million if all social insurance related staff is incorporated, not with standing the specialists, attendants, and birthing assistants in dynamic practice. (Jagger et al., 2002). Hepatitis C is viewed as the most predominant blood-borne ailment in medical services working environments (Lanphear., 1997).

In Pakistan there is a scarcity of information about Hepatitis "C" virus contamination in social insurance laborers. By taking this in see we chose to discover the commonness of Hepatitis "C" virus in dental surgeons workers shape solid populace of Lahore dwelling in various zones .An examination led in Pakistan revealed exceptionally intriguing certainties about Hepatitis "C" virus commonness in wellbeing experts i.e. 12% had Hepatitis "C" virus contamination, 18% specialists had Hepatitis" B" and 6% specialists had Hepatitis "C" virus disease. Besides they additionally announced that Hepatitis" B" and Hepatitis "C" alone were seen in 5.6% of members.

Hepatitis" B" and Hepatitis "C" together were seen in 3.2% of positive cases (Sarwar *et al.*, 2008). Their discoveries are relatively like the discoveries of the present investigation and some different reports in writing (Khokhar, Gill and Malik., 2004). Ones (Alam *et al.*, 2002) talked about that commonness of Hepatitis "C" among the health personnel was around 40% that relates to our outcomes.

The frequency of clinical health care personnel in this investigation is around three times increase than that of the overall public. From 1980 through 1989, six instances of word related NANBH were analyzed, for an occurrence of 21 for every 100,000 health care personnel every year (Lanphear, Linnemann et al., 1994) The fundamental determination of a source tolerant can't be utilized to anticipate the nearness of Hepatitis "C" virus contamination dependably. With the end goal of documentation, Hepatitis "C" virus screening ought to be normal for the assessment of blood and body liquid exposures. Exposures that happened in the crisis office in this healing facility are just about two times more prone to have been hostile to Hepatitis "C" virus positive than were exposures that happened in different areas. The pervasiveness of Hepatitis "C" virus in patients assessed in the crisis leave meant at this healing facility (20.5%) is like that found at Johns Hopkins, where 18% of patients found in the crisis office were Hepatitis "C" virus positive (Kelen et al.,1992). It isn't clear why the commonness of Hepatitis "C" virus among patients who are assessed in the crisis leave meant at our doctor's facility is higher than that of different areas. It might speak to a genuine distinction or an announcing inclination. A mid the period 1987 through 1989, 50 health workers had Hepatitis "C" virus -positive needle stick wounds and had sera accessible for development; three seroconvert. One extra health care personnel who had a Hepatitis "C" virus-positive expo beyond any doubt including a surgical blade gash created clinical however had not seroconverted a half year after the introduction.

The rate of Hepatitis "C" virus transmission among Japanese has been accounted for to be from 3.3% to 10%.4,9 (Sodeyama et al.,1992) found that clinical Hepatitis "C" virus created in 3 of 90 health care worker who managed needle stick wounds tainted with blood from patients who had (Mitsui et al.1992) found that seven of 68 health care worker who had a HCV RNA-positive needle stick-gained Hepatitis "C" virus disease. The rates of transmission don't altogether contrast between these investigations. Both (Mitsui et al and Sodeyama et al., 1992) chose patients who will probably be viremic, though we assessed all Hepatitis "C" virus positive exposures. All in all, these investigations suggest that the transmission rate of Hepatitis "C" virus following needle stick damage is from 3.3% to 10% and that Hepatitis "C" virus tests ought to be done routinely.

They likewise show that a few instances of occupationally obtained Hepatitis "C" virus disease will be remembered fondly unless tests, for example, PCR examination for Hepatitis "C" virus RNA are used.9,22 The rate of clinical Hepatitis "C" virus contamination from 1987 through 1989 was 32 for every 100,000 health care worker every year, except on the off chance that we incorporate the two instances of subclinical Hepatitis "C" virus disease that were identified by follow-up of uncovered health care personnel the rate of Hepatitis "C" virus

contamination was 54 for every 100,000 health care worker every year.

In light of this frequency, assess that 2,190 instances of occupationally gained Hepatitis "C" virus diseases happen every year among doctor's facility based health care in the United States. In the present examination, 2% of clinical and research center based health care personnel were certain for Hepatitis "C" virus antibodies, a rate four times higher than the pervasiveness in volunteer blood givers. As opposed to these examinations, (Thomas et al.1993) found that exclusive 7 (0.7%) of 943 were hostile to Hepatitis "C" virus positive. At long last, this investigation proposes that, to report and decide any requirement for follow-up screening, hostile to Hepatitis "C" virus tests should be done routinely for both source patients and uncovered health care personnel after a recognized exposure. (Lanphear, Linnemann *et al.* 1994).

Significance & problem statement

The person who is suffering from hepatitis "C" have lot of effects and challenges which are not only related to physical but its also involved socially, mentally, and physical activities which disturb a person for whole his life, therefore the doctors and other health care providers play very important role minimizing the spread of infectious disease like hepatitis "C" in the developing countries. It is very necessary for the health care personnel to understand the problem and phases regarding hepatitis "C" are very important they have proper information, detail and knowledge about the etiology and effect of hepatitis c in common person.

This will to help to minimize the stigma and spread of hepatitis c in the next generation. It is the responsibility of the medical institute to educate properly regarding the disease and keen observation on the practical measures. Moreover, to alleviate the harmful practice checking and monitoring is required at high level. Now a day's social media is available everywhere of the country. It is very crucial that multimedia educate the people regarding the precaution and spread of disease, what are the causes and symptoms of disease, when they can meet with the doctors. It is also the responsibility of the government to provide funds to the medical department to minimize these above mention malpractice due to the known availability or limited resources.

RESEARCH METHODOLOGY

The study is carried out to observe "The prevalence of Hepatitis-C among health workers".

Study Design

A descriptive research design will be used for this study to observe "The prevalence of Hepatitis-C in among health workers"

Setting

Setting of the study is the Gulab Devi Hospital Lahore.

Target Population

This study target population will be the students of superior college of Nursing and employee of Gulab Devi hospital Lahore. The participants will be belonging to different

socioeconomic level and different demographical background; the participants will be male and female.

Sample Size and Sampling Techniques

Data collected from the participant through self-administered Questionnaire and the participants will be selected through simple random sampling method, the sample size for this study will be 114 which are calculated from the *Slovins formula of sampling*.

Research Tool

A self-administered and modified version questionnaire was adopted from the article "Hepatitis c virus infection in healthcare workers: risk of exposure and infection" by (Akhtar, Majeed *et al.* 2015) .A structured questionnaire to obtain biodata and exposure risks such as blood transfusion, organ transplantation, living with HCV infected patients, hospital admission, previous surgery, and hospitalization; accidental needle stick injuries treated by traditional doctor and travelling outside were also administered. It will be survey method. Nominal data (yes/no) will be use in this study.

Data Collection Plan

Data collection plan is one of the main sources to collect data. A self-administered questionnaire will be used to collect data from the study participants. There will be given a free hand to complete it and return it.

Data Analysis

This is a descriptive study and all the descriptive statistics will be obtained through the SPSS software.

RESULTS

The estimated results of "prevalence of hepatitis c among health worker" are given in the following table .The total respondents are 114 which are related from the hospital.

Table 1 Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
	Male	41	36.0	36.0	36.0
Valid	Female	73	64.0	64.0	100.0
	Total	114	100.0	100.0	

Table no. 01 shows the results of frequency distribution of gender of the respondents. The result in table no. 1 depicts that 41 (36.0%) of the respondents were male and 73 (64.0%) of the respondents were female.

Table 2 Marital status

		Frequency	Percent	Valid Percent	Cumulative Percent
	married	64	56.1	56.1	56.1
Valid	Single	50	43.9	43.9	100.0
	Total	114	100.0	100.0	

Table no.2 shows the results of frequency distribution of marital status of the respondents. The result in table no. 2 depicts that 64 (56.1%) of the respondents were married and 50 (43.9%) of the respondents were single.

Table 3 Age group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25yrs	29	25.4	25.4	25.4
	25-35yrs	51	44.7	44.7	70.2
vanu	25-35yrs 35-50yrs	30	26.3	26.3	96.5
	above50yrs	4	3.5	3.5	100.0

Total	114	100.0	100.0

Table no. 3 shows the results of frequency distribution of age group of the respondents. The result in table no. 3 depicts that 18 to 25 yrs respondents were 29 (25.4%), 25 to 35 yrs respondent were 51 (44.7),35 to 50 yrs were 30(26.3) and 4 (3.5%)of the respondents were above 50 yrs.

Table 4 Qualification

		Frequency	Parcent	Valid Parcent	Cumulative Percent
		Frequency	r er cent	vanu i ercent	Cumulative refeelt
	nursing diploma	56	49.1	49.1	49.1
	M.b.b.s	5	4.4	4.4	53.5
Valid	surgical diploma	2	1.8	1.8	55.3
	Others	51	44.7	44.7	100.0
	Total	114	100.0	100.0	

Table no. 04 shows the results of frequency distribution of qualification of the respondents. The result in table no. 4 depicts that 56 (49.1%) of the respondents were nursing diploma, MBBS were 5 (4.4%), surgical diploma were 2 (1.8%) and 51 (44.7%) were other respondent.

Table 5 Stay in organization

		Frequency	Percent	Valid Percent	Cumulative Percent
	less then 1 yr	18	15.8	15.8	15.8
	1-5yrs	37	32.5	32.5	48.2
Valid	6-10yrs	23	20.2	20.2	68.4
	above 10yrs	36	31.6	31.6	100.0
	Total	114	100.0	100.0	

Table no.5 shows the results of frequency distribution of stay in organization of the respondents. The result in table no.5 depicts that 18 (15.8%) of the respondents were less than 1 year,37 (32.5%) were 1 to 5 yrs, 6 to 10 yrs were 23(20.2%) and above 10 yrs respondent were 36 (31.6%).

Table 6 Socio economics

		Frequency	Percent	Valid Percent	Cumulative Percent
	normal	32	28.1	28.1	28.1
Valid	Good	66	57.9	57.9	86.0
vana	average	16	14.0	14.0	100.0
	Total	114	100.0	100.0	

Table no.6 & figure 06 shows the results of frequency distribution of socio economics status of respondents. The result in table no. 6 depicts that 32 (28.1%) of the respondents were in normal 66 (57.9) were good and 16 (14.0%) were average respondents.

 Table 7
 1. Self-referred skin color

		Frequency	Percent	Valid Percent	Cumulative Percent
	White	63	55.3	55.3	55.3
Valid	not white	51	44.7	44.7	100.0
	Total	114	100.0	100.0	

This frequency distribution shows that responses of the respondents about self referred skin color the result shows that 63(55.3%) Of the respondents were have white color and 51 (44.7%) of that respondents were have not white color.

Table 8. 2. Self perception of health status

		Frequency	Percent	Valid Percent	Cumulative Percent
	Good	80	70.2	70.2	70.2
Valid	Regular	31	27.2	27.2	97.4
vanu	Bad	3	2.6	2.6	100.0
	Total	114	100.0	100.0	

This frequency distribution shows that responses of the respondents about Self perception of health status. The result shows that 80(70.2%) 0f the respondents were have good health status, 31(27.2%) and 3 (2.6%) of that respondents have bad health status.

Table 9. 3 Is there any H/O road side accident

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	41	36.0	36.0	36.0
Valid	No	73	64.0	64.0	100.0
	Total	114	100.0	100.0	

This frequency distribution shows that responses of the respondents about Is there any H/O road side accident. The result shows that 41(36.0%) 0f the respondents were have road side accident and 73(64.0%) of that respondents were do not have any accident.

Table 9. 4. Have you received any dental treatment

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	50	43.9	43.9	43.9
Valid	No	64	56.1	56.1	100.0
	Total	114	100.0	100.0	

This frequency distribution shows that responses of the respondents about Have you received any dental treatment .the result shows that 50 (43.9%) 0f the respondents were have dental treatment and 64 (56.1%) of that respondents were don't have it.

Table 10. 5. Any H/O needle stick injury

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	49	43.0	43.0	43.0
Valid	No	65	57.0	57.0	100.0
	Total	114	100.0	100.0	

This frequency distribution shows that responses of the respondents about Any H/O needle stick injury .the result shows that 49 (43.0%) 0f the respondents were have needle stick and 65 (57.0%) of that respondents were don't have needle stick injury.

Table 11 6. Have you ever received blood transfusion

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	18	15.8	15.8	15.8
Valid	No	96	84.2	84.2	100.0
	Total	114	100.0	100.0	

This frequency distribution shows that responses of the respondents about ever received blood transfusion. The result shows that 18 (15.8%) 0f the respondents were have received blood transfusion and 96 (84.2%) of that respondents were don't have blood transfusion.

Table 12.7.Any H/o surgical intervention

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	44	38.6	38.6	38.6
Valid	No	70	61.4	61.4	100.0
	Total	114	100.0	100.0	

This frequency distribution shows that responses of the respondents about Any H/o surgical intervention the result shows that 44(38.6%) 0f the respondents were have surgical intervention and 70(61.4%) of that respondents were don't have surgical intervention

Table 13. 8. Any H/O tattooing

				-	_
		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	9	7.9	7.9	7.9
Valid	No	105	92.1	92.1	100.0
	Total	114	100.0	100.0	

This frequency distribution shows that responses of the respondents about Any H/O tattooing. The result shows that 09(7.9%) 0f the respondents were have H/O tattooing and 105(92.1%) of that respondents were don't have it.

Table 14. 09. Any H/O ear piercing

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	37	32.5	32.5	32.5
Valid	No	77	67.5	67.5	100.0
	Total	114	100.0	100.0	

This frequency distribution shows that responses of the respondents about Any H/O ear piercing. The result shows that 37(32.5%) of the respondents were having ear piercing and 77 (67.5%) of that respondents were have not ear piercing.

Table 15 10. Any H/O of sharing of razor or blade

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	23	20.2	20.2	20.2
Valid	No	91	79.8	79.8	100.0
	Total	114	100.0	100.0	

This frequency distribution shows that responses of the respondents about Any H/O of sharing of razor or blade .the result shows that 23 (20.2%) 0f the respondents were have shared of razor with others and 91 (79.8%) of that respondents were have do not share.

Table 16 11. Have you ever taken care of a patient with HCV,

		Frequency	Percent	Valid Percent (Cumulative Percent
	Yes	78	68.4	68.4	68.4
Valid	No	36	31.6	31.6	100.0
	Total	114	100.0	100.0	

This frequency distribution shows that responses of the respondents about ever taken care of a patient with HCV. The result shows that 78 (68.4%) of the respondents were have take care of the hepatitis c patient and 36 (31.6%) of that respondents were don't interaction with hepatitis c patient.

Table 17 12. Does anyone in your family have ,HVC,

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	18	15.8	15.8	15.8
Valid No	96	84.2	84.2	100.0
Total	114	100.0	100.0	

This frequency distribution shows that responses of the respondents about anyone have hepatitis c in your family .the result shows that 18(15.8%) 0f the respondents were have HCV in their family and 96 (84.2%) of that respondents were do not have HCV.

Table 18 13. Have you investigated your spouse for hepatitis B,C or HIV

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	54	47.4	47.4	47.4
Valid	No	60	52.6	52.6	100.0
	Total	114	100.0	100.0	

This frequency distribution shows that responses of the respondents about investigated your spouse for hepatitis B,C or HIV .the result shows that 54(47.4%)0f the respondents were have investigated the spouse and white color and 60(52.6%) of that respondents were don't investigated.

Table 19 14. Have you ever shared syringes while injecting a drug

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	11	9.6	9.6	9.6
Valid	No	103	90.4	90.4	100.0
	Total	114	100.0	100.0	

This frequency distribution shows that responses of the respondents about ever shared syringes while injecting a drug. The result shows that 11 (9.6%) 0f the respondents were have shred the syringes and 103(90.4%) of that respondents were don't shred the syringes while injecting a drug.

Table 20 15. Do you use syringe cutter to destroy them

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	87	76.3	76.3	76.3
Valid	No	27	23.7	23.7	100.0
	Total	114	100.0	100.0	

This frequency distribution shows that responses of the respondents about to use syringe cutter to destroy them. The result shows that 87(76.3%) Of the respondents were used it and 27 (23.7%) of that respondents were don't use it.

Table 21 16. Hepatitis B vaccination status

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	70	61.4	61.4	61.4
Valid No	44	38.6	38.6	100.0
Total	114	100.0	100.0	

This frequency distribution shows that responses of the respondents about hepatitis B vaccination status .the result shows that 70(61.4%) 0f the respondents were have hepatitis B vaccination and 44(38.6%) don't have vaccination of hepatitis B.

Table 22 17. Have you attended any training workshop about Preventive measure?

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	62	54.4	54.4	54.4
Valid No	52	45.6	45.6	100.0
Total	114	100.0	100.0	

This frequency distribution shows that responses of the respondents about any training workshop about preventive measure. The result shows that 62 (54.4%) 0f the respondents were attend this workshop and 52 (45.6%) were have don't attend the workshop.

Table 23 18. Have you attended refresher courses about Safety practices?

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	59	51.8	51.8	51.8
Valid No	55	48.2	48.2	100.0
Total	114	100.0	100.0	

This frequency distribution shows that responses of the respondents about attended refresher courses about safety practice. The result shows that 59(51.8) respondents were attend the course and 55(48.2%) don't have attend the course.

Table 24 19. Do you observe preventive measure While handling Patient's infectious material?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	90	78.9	78.9	78.9
	No	24	21.1	21.1	100.0
	Total	114	100.0	100.0	

This frequency distribution shows that responses of the respondents about observation of preventive measure while handling patient's infectious material. The result shows that 90 (78.9%) of the respondents were have observe it and 24 (21.1%) don't observe it.

Table 24 20. Have you used proper technique for blood transfusion in HEP C client?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	88	77.2	77.2	77.2
Valid	No	26	22.8	22.8	100.0
	Total	114	100.0	100.0	

This frequency distribution shows that responses of the respondents about proper technique for blood transfusion in hepatitis c. the result shows that 88(77.2%) of respondent were use this technique and 26 (22.8%) respondents don't use this technique.

DISCUSSION

Hepatitis C is a major public health issue across the world. The prevalence of HCV among health worker is very common because they are at risk.

In terms of age, there was a direct association between increased age and increased likelihood of blood transfusion and recent hospitalization, and inverse relationship between age and tattoos, piercings and drugs. In the analysis of socioeconomic variables, a statistically significant difference between social class and piercings was observed; prevalence among adults in social class. In the same way, it was observed that the higher the educational level, the higher the prevalence of tattoos and piercings. Tattoos and piercings were less frequent among respondents who declared that their self-perception of health status was poor or very poor. This group, however, showed a higher frequency of recent hospitalization. Heavy alcohol consumption was directly associated with the risk factor for drug users. It is very important that the spouse should be investigated for vaccination. Because it is one of the source to transmit hepatitis c . in this study it was observed that the health workers used proper technique to use syringes and how to destroyed them which minimize the prevalence of hepatitis c. To attend the training workshop about preventive measure helpful to to decrease the spread of hepatitis c

CONCLUSION

The risk of contamination by HCV is approximately 10 times greater in individuals who received transfusions before the implementation of screening in blood banks than in those who did not get any transfusions. Furthermore, higher age groups were those who were exposed more times to this procedure. The profile of the individuals who are at risk of getting infected by HCV in specific populations, such as blood donors, drugs users, hemodialysis patients, and inmates, is well documented in the literature. It is believed that new studies like this must be conducted to identify the prevalence of risk factors for hepatitis C in the general population as they are rare in the literature and are important to plan public health programs.

Hepatitis C is a severe public health problem nowadays. New and correct programs of screening and patient orientation are necessary to reduce the disease dissemination. These kinds of programs are only possible if the public health systems are aware of the risks and are ready to deal with HCV, warning and educating target populations. Thus, recognizing the magnitude of the risk factors for this disease in a community allows the correct screening of potential carriers of HCV.

Limitation

- Shortage of time.
- The collection of data was quite difficult.
- The respondent of this study don't want to explore their self.
- The data was collected from the single hospital

Recommendations

- The educational and health awareness regarding hepatitis should be arranged.
- The media can play very important role.
- Encourage the health care personnel to do health education session during their practice.

References

- Alter, M. J. (1997). "Epidemiology of hepatitis C." Hepatology 26 (S3).
- Jiwani, N. (2011). "A Silent Storm: Hepatitis C in Pakistan."
- Polish, L. S., *et al.* (1993). "Risk factors for hepatitis C virus infection among health care personnel in a community hospital." *American journal of infection control* 21(4): 196-200.
- Jindal N, Jindal M, Jilani N, Kar P. 2006. Seroprevalence of hepatitis C virus (HCV) in health care workers of a tertiary care centre in New Delhi. Indian J Med Res. 123:179-180.
- Akhtar, A. M., *et al.* (2015). "Prevalence and Associated Risk Factors of Hepatitis C Infection among Doctors and Dentists in Lahore." PAKISTAN JOURNAL OF MEDICAL & HEALTH SCIENCES9(2): 653-657.
- Alter, M. J. (1997). "Epidemiology of hepatitis C." Hepatology 26 (S3).
- Jiwani, N. (2011). "A Silent Storm: Hepatitis C in Pakistan."
- KVITKO, D. T., *et al.* (2013). "Prevalence of risk factors for hepatitis C and associated factors: a population-based study in southern Brazil." Arquivos de gastroenterologia 50 (2): 117-122.
- Lanphear, B. P., et al. (1994). "Hepatitis C virus infection in healthcare workers: risk of exposure and infection." Infection Control & Hospital Epidemiology15(12): 745-750.
- Nakashima K, Kashiwagi S, Hayashi J, Noguchi A, Hirata M, Ikeda S, Sakota I and Shingu T. 1993. Low prevalence of hepatitis C virus infection among hospital staff and acupuncturists in Kyushu, Japan. J Infect. 26(1):17-25.
- Abdul Mujeeb S, Zubari SJ, Lodhi TZ, Mehmood K. 1994. Prevalence of HBV infection in health care personals. *J Pak Med Assoc.* 44:265.
- Mahboobi N, Agha-Hosseini F, Mahboobi N, Safari S, Lavanchy D and Alavian SM. 2010. Hepatitis B virus infection in dentistry: A forgotten topic. J Viral Hepat. 17:307–316.
- Krawczyk P, Białkowska J, Dworniak D, Kamerys J, Szosland D and Jabłkowski M. 2010. Is healthcare personnel the only professional group exposed to the risk of occupational HBV, HCV or HIV infections? Med Pr. 61(1):15-22.

- Zaaijer HL, Appelman P and Frijstein G. 2011. Hepatitis C virus infection among transmission-prone medical personnel, Eur J Clin Microbiol Infect [Epub ahead of print], PMID: 22045049.
- Alter, M. J. (2007). Epidemiology of hepatitis C virus infection. *World Journal of Gastroenterology*, 13(17), 2436-2441. Retrieved April 6th, 2010, from: http://www.wignet.com/1007-9327/13/2436.asp
- Khattak, M.F., Salamat, N., Bhatti, F.A., & Qureshi, T.Z. (2002). Seroprevalence of hepatitis B, C and HIV in blood donors in northern Pakistan. *Journal of Pakistan Medical Association*, 52, 398–402.
- Abbas Z., Jeswani, N.L., Kakepoto, G.N., Islam, M., Mehdi, K., & Jafri W. (2008). Prevalence and mode of spread of hepatitis B and C in rural Sindh, Pakistan. *Journal of trop Gastroenterol*, 29(4), 210-6.
- Aziz, S., Khanani, R., Noorulain, W & Rajper, J. (2010). Frequency of Hepatitis B and C in rural and periurban Sindh. Retrieved on 25th April, 2011from: www.jpma.org.pk/Pdf Download/2339.pdf
- Shaikh, B. T., & Hatcher, J. (2004). Health seeking behaviour and health service utilization in Pakistan: challenging the policy makers. *Journal of Public Health Advance Access* published. 12, 1-6.
- Khan, A. J., Luby, S.P., Firkee, F., Karim, A., Obaid, S., & Dellawala, S., *et al* (2000).Unsafe injections and the transmission of hepatitis B and C in a periurban community in Pakistan. Bulletin of the World Health Organization, 78 (8).
- Sarwar, J., Gul, N., Idris, M., Rehman, A., Farid, J., et al. (2008). Seroprevalence of hepatitis B and Hepatitis C in health care workers in Abbottabad. *Journal of Ayub medical college Abbottabad*, 20(3), 27-29.
- Thomas DL, Cannon RO, Shapiro CN, Hook EW 3rd, Alter MJ and Quinn TC. 1994. Hepatitis C, hepatitis B, and human immunodeficiency virus infections among non-intravenous drug-using patients attending clinics for sexually transmitted diseases. J Infect Dis.169:990–995.
- Jagger, J., Puro, V. and De Carli, G. 2002. Occupational transmission of hepatitis C virus. J. A. M A., 288:1469.
- Lanphear, B. P. 1997. Transmission and control of blood borne viral hepatitis in healthcare workers. Occup. Afed, 12:717-730
- Lipscomb, J. and Rosenstock. L. 1997. Healthcare workers: Protecting those who protect our health. Infect. Control. Hosp. Epiderniol., 18: 397-399.
- Khokhar, N., Gill, M. L. and Malik, G. J. 2004. General seroprevalence of Hepatitis C and Hepatitis B virus infection in population. *J. Coll. Physicians. Surg. Pak.*, 14(9): 534-536.
- Craig FE, Harrison CR. Epidemiology of acute non-A, non-B hepatitis in a large county hospital outpatient population. Labora tory Medicine 1991;22:401-404.
- Mitsui T Iwano K, Masuko K, *et al.* Hepatitis C virus infection in medical personnel after need lestick accident. Hepatology 1992; 16:1109-1114.
- Gerberding JL, Henderson DK. Management of occupational exposures to bloodborne pathogens: hepatitis B virus, hepatitis C virus, and human immunodeficiency virus. 1992;14:1179-1185.