How to Cite:
Bergin, R. V. B., & Geetha, P. (2022). Evaluation of knowledge attitude and practice towards hepatitis B and C infections and its impact among healthy volunteers in urban and rural areas of Kanyakumari District: A cross sectional survey based study. *International Journal of Health Sciences*, *6*(S2), 7552–7566. https://doi.org/10.53730/ijhs.v6nS2.6829

Evaluation of knowledge attitude and practice towards hepatitis B and C infections and its impact among healthy volunteers in urban and rural areas of Kanyakumari District: A cross sectional survey based study

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***Abstract*---**Background: Viral hepatitis is an infection caused by hepatotropic viruses that causes liver inflammation and additional liver damage. Hepatotropic viruses come in a variety of forms. Hepatitis B and C are the most dangerous viruses that cause significant sickness in people. The purpose of this study was to determine the public's understanding of Hepatitis B and C infection, as well as their attitudes regarding Hepatitis B and C illness and the importance of Hepatitis vaccination.Methodology: This study used a standardised questionnaire to survey healthy volunteers from Kanyakumari's urban and rural areas about their knowledge, attitudes, and practises about Hepatitis B and C infection and immunisation.Result: In our study, 218 healthy volunteers from Kanyakumari district's urban and rural areas participated, with 89 percent of the urban population and 75 percent of the rural population having strong awareness of hepatitis B and C infection, transmission, and prevention. About 56 percent of urban residents and 49 percent of rural residents believe that hepatitis can be prevented from spreading. 61.5 percent of the rural population and 15.6 percent of the urban population were screened for Hepatitis B infection, while 76.1 percent of the rural and 45.0 percent of the

urban population were vaccinated against the virus.Conclusion: Healthy volunteers in Kanyakumari district's urban and rural areas had a positive attitude regarding Hepatitis B and C infections. The attitude, practise, and vaccination status of the urban and rural populations were all below average, and more public awareness campaigns can improve public knowledge about the disease and improve community members' quality of life.

***Keywords*---**hepatitis B and C, hepatitis vaccination, knowledge, attitudes, practices.

Introduction

Inflammation of the liver is referred to as hepatitis. The liver is an important organ that helps the body digest nutrients, filter blood, and fight infections. The function of the liver might be harmed when it is inflamed or damaged. Hepatitis can be caused by excessive alcohol consumption, pollutants, certain drugs, and certain medical disorders.[1] Hepatitis A virus (HAV), hepatitis B virus (HBV), hepatitis C virus (HCV), and hepatitis E virus are the most leading triggers of hepatitis in India (HEV)[2.] India has an intermediate level of HBV endemicity, with a carrier frequency of 2% to 4%. Chronic liver disease(CLD) and Hepato cellular carcinoma (HCC)are both caused by HBV.[3-4] In India, chronic HBV infection is acquired through horizontal transmission in childhood, most likely before the age of five. HBV vertical transmission is thought to be uncommon in India. To minimize HBV carrier frequency and disease burden, HBV vaccine must be included in an expanded immunization programme. In India, HCV infection affects about 1% of the population and is spread mostly through blood transfusions and the use of contaminated glass syringes. In India, HCV infection is linked to ten percent to fifteen percent of CLD and HCC cases. HCV infection is also a common cause of hepatitis after blood transfusions.[4-6] Preventing the disease through better knowledge and awareness is one of the most effective ways to keep it away, and educating community members about management and prevention can help to eradicate Hepatitis B and C infections and improve hepatitis vaccination awareness to some extent, which is the main goal of the study among community members who belong to urban and rural areas of Kanyakumari district.

Materials and Methods

This survey included community members from the Kanyakumari district's urban and rural areas. To be eligible for the study, participants must be at least 18 years old. Each participant signed an informed consent form, and a patient information leaflet was issued to the community members who took part in the study.

Sample size calculation

The size of the required sample is calculated using the formula below.

$n = (z)^2\ p\ (1 - p)\ /\ d^2$

Where, n = sample size
z = level of confidence according to the standard normal distribution (for a level of confidence of 95%, z = 1.96,
p = estimated proportion of the population that presents the characteristic (when unknown we use p = 0.5)
d = tolerated margin of error (5%)
$n = (1.96)^2 \times (0.5)\ (1\text{-}0.5)\ /(0.05)^2$
$= 384$

New sample size = $\frac{\text{Sample size}}{1+(\frac{\text{Sample size}-1}{\text{P}})}$

P= Population P= 500
Sample size= 384

New sample size = $\frac{384}{1+(\frac{384-1}{500})}$ = 218 participants

Sample size distribution

Based on where they live, the 218 responses are separated into two groups: 109 healthy volunteers from the rural population and 109 healthy volunteers from the urban population.

Data collection

A pre validated explorative questionnaire containing close ended questions that evaluates the knowledge, attitude, and practices (KAPs) regarding hepatitis B and C infections among healthy volunteers who belong to urban and rural areas of Kanyakumari district

Statistical analysis and data management

SPSS statistical software is used to examine the data collected. Stratification will be used to analyse the responses to the questions. The significance of responses is determined by using the chi square test, with a p value of 0.05 being considered statistically significant. You can also utilize Pearson's test, t-test, and one-way analysis of variance (ANOVA).

Results

Table1:Demographic Details of Study Participants

S.NO	CHARACTERISTICS	RURAL N %	URBAN N %
1	Age		
	18-25 Years	19.3%	28.4%
	26-33Years	26.6%	19.3%
	34-41Years	18.3%	20.2%
	42-49Years	22.0%	22.9%

	Above 50Years	13.8%	9.8%
2	Gender		
	Male	45.0%	52.3%
	Female	55.0%	47.7%
3	Occupation		
	Government Servant	8.3%	14.7%
	Private Servant	15.6%	11.9%
	Self-Employed	23.9%	23.9%
	Un-Employed	20.2%	3 .7%
	Student	15.6%	25.8%
	House Wife	16.5%	21.1%
4	Education Level		
	Primary School	6.4%	10.1%
	High School	33.9%	18.3%
	Undergraduate	31.2%	34.9%
	Postgraduate	21.1%	28.4%
	Doctoral degree	7.3%	8.3%
5	Marital Status		
	Single	16.5%	34.9%
	Married	66.1%	59.6%
	Widowed	10.1%	1.8%
	Divorced	7.3%	3.7%
6	Locality		
	Urban	50%	
	Rural	50%	

Table 2 : Knowledge and understanding of subjects towards Hepatitis B and C Infection

S.NO	KNOWLEDGE QUESTIONS	RURAL						URBAN						Chi-Square Test
		YES		NO		DON'T KNOW		YES		NO		DON'T KNOW		A-Symptamatic Significance(2-Sided)
		N	%	N	%	N	%	N	%	N	%	N	%	
1.	Have you ever heard of the term "HEPATITIS"?	71	65.1%	4	3.7%	34	31.2%	100	91.7%	6	5.5%	3	2.8%	< 0.001
2.	Is Hepatitis B a Bacterial Infection?	59	54.1%	22	20.2%	28	25.7%	19	17.4%	80	73.4%	10	9.2%	< 0.001
3.	Hepatitis C infection	64	58.7%	21	19.3%	24	22%	99	90.8%	4	3.7%	6	5.5%	<

	causes liver cancer Do you agree with the statement?													0.001
4.	Jaundice, nausea, vomiting, loss of appetite are symptoms of hepatitis B infection ?	94	86.2%	3	2.8%	12	11%	100	91.7%	1	0.9%	8	7.3%	0.371
5.	Is there available vaccination for prevention of hepatitis B infection?	85	78%	11	10.1%	13	11.9%	97	89%	5	4.6%	7	6.4%	0.089
6.	Do you think Hepatitis C Infection is curable?	98	89.9%	5	4.6%	6	5.5%	81	74.03%	9	8.3%	19	17.4%	0.009
7.	Physical activity and special diet are required for treatment of hepatitis B and C?	99	90.8%	1	0.9%	9	8.3%	78	71.6%	8	7.3%	23	21.1%	< 0.001
8.	Can you tell a person who is infected with Hepatitis B or Hepatitis C virus from his/her appearance?	70	64.2%	20	18.3%	19	17.4%	17	15.6%	78	71.6%	14	12.8%	< 0.001
9.	Is Hepatitis B virus more easily transmitted than HIV/AIDS?	64	58.7%	13	11.9%	32	29.04%	66	60.6%	6	5.5%	37	33.9%	0.226
10.	0.01 ml of blood can transmit Hepatitis B Infection?	61	56.0%	4	3.7%	44	40.4%	39	35.08%	2	1.8%	68	62.4%	<0.005

Table 3 : Knowledge of subject towards HBV Transmission, Prevention

S.NO	KNOWLEDGE QUESTIONS	RURAL		URBAN		CHI-SQUARE TEST
		N	%	N	%	A- Symptamatic Significance(2-Sided)
1.	In which of the following practices Can Hepatitis B and C Virus can be transmitted?					
	Blood Transfusion	108	99.1%	109	100%	<0.001
	Sexual intercourse	108	99.1%	109	100%	
	Breastfeeding	103	94.5%	66	61.4%	
	From infected mother to unborn child	87	79.8%	74	67.8%	
	Sharing razor blade, nail cutter, clipper	60	55%	95	87.1%	
	Sharing toothbrush with infected persons	44	40.4%	101	92.6%	
	Scarification marks and tattoos	35	32.1%	100	91.7%	
	Male or female traditional circumcision	32	29.4%	94	86.2%	
	Sharing food with Hepatitis infected person	28	25.7%	55	50.4%	
	Eating food cooked by infected person	26	23.9%	39	35.7%	
	Hugging	59	54.1%	5	4.58%	
	Kissing	59	54.1%	4	3.66%	
	Hand shaking	59	54.1%	4	3.66%	
	Mosquito bites	38	34.9%	3	2.75%	
	Witchcraft	25	22.9%	-	-	
2.	How Can Hepatitis B virus be prevented					
	Through vaccination of HBsAg negative adults	101	92.7%	108	99.1%	<0.001
	If HBV positive mothers are treated	98	89.9%	106	97.24%	
	If infants born to HBV positive mothers receive vaccination and immunoglobulin at birth	88	80.7%	99	90.82%	
	If HBV positive mothers do not breastfeed their babies	54	49.5%	35	32.1%	
	If family members of HBV patients are screened for HBV	72	66.1%	-	-	

Table 4 : Attitude of subjects towards Hepatitis B and C Infection

S.NO	ATTITUDE QUESTIONS	RURAL		URBAN		Chi-Square test
		N	%	N	%	A-Symptamatic significance(2-sided)
1	Do you think you can have hepatitis B or C infection?					
	Yes	101	92.7%	85	78.0%	<0.002
	No	8	7.3%	24	22.0%	
2	What would be your reaction if you have hepatitis?					
	Sadness	51	46.8%	55	50.5%	❑
	Fear	58	53.2%	54	49.5%	0.588
3.	What would worry you if you have hepatitis B or C Infection?					
	Fear of death	65	59.6%	73	67%	
	Fear from the treatment costs	19	17.4%	4	3.7%	0.010
	Fear from being isolated from the society	16	14.7%	22	20.2%	
	Fear from transmitting the disease to your family	9	8.3%	10	9.2%	
4	Who would you talk to about your illness first if you have hepatitis infection?					
	Physician	62	56.9%	53	48.6%	
	Spouse	12	11.0%	16	14.7%	
	Parents	22	20.2%	39	35.8%	0.010
	Child	1	0.9%	0	-	
	Other Relatives	4	3.7%	1	0.9%	
	Friends	7	6.4%	0	-	
	No one	1	0.9%	0	-	
5.	If you had symptoms of Hepatitis B or C infection at what stage you will go to the healthfacility					
	Own treatment fails	36	23.9%	10	9.2%	0.011
	After 3-4 weeks of the appearance of symptoms	28	25.7%	31	28.4	
	Soon as I realize the symptoms are of Hepatitis B	53	48.6%	68	62.4%	

	Will not go to physician	2	1.8%	0	-	
6.	How expensive do you think is the diagnosis and treatment of Hepatitis B?					
	Free	6	5.5%	1	0.9%	<0.001
	Reasonable	22	20.2%	7	6.4%	
	Somewhat expensive	24	22%	14	12.8%	
	Expensive	41	37.6%	65	59.6%	
	Don't know	16	14.7%	22	20.2%	
7.	Should Hepatitis patients be allowed to do strenuous exercise?					
	Yes	60	55%	11	10.1%	<0.001
	No	49	45%	98	89.9%	
8.	Should Hepatitis patients be isolated?					
	Yes	68	62.4%	104	95.4%	<0.001
	No	41	37.6%	5	4.6%	
9.	Are you aware of Hepatitis Vaccination before?					
	Yes	67	61.5%	99	90.8%	<0.001
	No	42	38.5%	10	9.2%	
10.	Do you think everyone must know the importance of Hepatitis vaccine and get vaccinated to prevent hepatitis infection?					
	Yes	100	91.7%	108	99.1%	0.010
	No	9	8.3%	1	0.9%	

Table 5: Practice of subjects towards Hepatitis B and C Infection

S.NO	PRACTICE QUESTIONS	URBAN		RURAL		Chi-Square test
		N	%	N	%	A-Symptamatic significance(2-sided)
1	Have you ever screened for hepatitis B?					
	Yes	67	61.5%	17	15.6%	<0.001
	No	42	38.5%	92	84.4%	
2	Have you been vaccinated against hepatitis B?					
	Yes	83	76.1%	49	45.0%	<0.001
	No	26	23.9%	60	55.0%	
3	Do you even sterilize equipment before use and don't use other people equipment?					
	Yes	86	78.9%	57	52.3	<0.001
	No	23	21.1%	52	47.7%	

4	Have you ever participated in health education programs related to hepatitis B or hepatitis Cinfection?					
	Yes	71	65.1%	25	22.9%	<0.001
	No	38	34.9%	84	77.1%	
5	Do you avoid patients with hepatitis Bor C infection?					
	Yes	95	87.2%	94	86.2%	0.842
	No	14	12.8%	15	13.8%	

Discussion

Hepatitis B is an infectious disease caused by Hepatitis B Virus (HBV) and Hepatitis C infection is caused by Hepatitis C virus (HCV). Both Hepatitis B and C infections are considered as the global disease of humanity.[7-9] Hepatitis B infection is estimated to have a prevalence rate of 30% around the world and it is the tenth cause of death in the world .While Hepatitis C has the prevalence of 3%across the world. Both Hepatitis B and C Virus gets transmitted through contaminated blood and blood products; body secretions and; unsafe sex [9--12].These infections occurs in two phases as Acute and Chronic infection in acute infection it could result in fulminant hepatitis which needs immediate liver transplant and in chronic type it lead to death due to cirrhosis and failure of liver as a result of hepatocellular carcinoma. The incidence of Hepatitis B and C infection is very high among hospital workers and most of them gets hepatitis b and c infection as a nosocomial infection as hepatitis B virus can also spread through 0.01 ml of blood the awareness towards the infection makes the people aware about the disease and makes them know the importance of hepatitis vaccination. [13-15]

This study on knowledge attitude and practice towards hepatitis b and c infection among healthy volunteers belonging to urban and rural areas of Kanyakumari district can help to assess the KAP status of healthy individuals towards Hepatitis b and c infections so that the information can be used to develop a better and need based program for the society

Knowledge and understanding of subjects towards Hepatitis B and C Infection

The knowledge about Hepatitis B and C infections among Urban and Rural Population of Kanyakumari district is analysed with(65.1%)of rural population and (91.7%) of Urban population heard the term called hepatitis and (3.7%)of rural population and (5.5%)of urban population had not heard about Hepatitis were as (31.2%) of rural and (2.8%) of urban population had no idea of the term Hepatitis. The results of chi-square test showed significant difference between urban and rural population. The participants were asked whether Hepatitis is caused due to bacterial infection for which (54.1%) of rural population and (17.4%) of urban population stated as hepatitis is caused due to bacterial infection and (20.2%) of rural population and (73.4%)of urban population stated Hepatitis is not caused due to bacterial infection where as (25.7%) of rural and

(9.2%) of urban population had no idea of the term Hepatitis and the results of chi-square test showed statistically significant results between the population. The knowledge of responders towards Hepatitis C infection and its association with liver cancer is analysed and (58.7%) of rural and (90.8%) of urban population are aware that Hepatitis C infection can cause liver cancer , while(19.3%) of rural and (3.7%) of urban population are not aware about liver cancer can be caused due to hepatitis c infection and about (22.0%) of rural and (5.5%) of urban population had no clear cut idea about Hepatitis C infection and liver cancer; The results shows significant results between the population. (86.2%) of rural and (91.7%) of urban population Of responders have a clear idea that Jaundice, Nausea, Vomiting,Lossof appetite are the symptoms of Hepatitis B Infection where (2.8%) of rural and (0.9%) of urban population states Jaundice, Nausea, Vomiting,Lossof appetite are not the symptoms of Hepatitis B Infection and (11.0%) of rural and (7.3%) of urban population has no idea regarding the signs and symptoms of jaundice. The results are not statistically significant as per chi-square test.The responders were asked about the availability of vaccine to prevent Hepatitis infection (78.0%) of rural and (89.0%) of urban population knows that vaccination is available for prevention of hepatitis B infection ;and (10.1%) of rural and (4.6%) of urban population don't know about vaccination available for prevention of hepatitis B infection also(11.9%) of rural and (6.4%) of urban population has no idea about the availability of vaccination for the prevention of Hepatitis B infection. The results are not statistically significant as per chi-square test. The study participants asked for their knowledge towards hepatitis Ccure (89.9%)of rural population and (74.3%) of urban population states there is a cure for hepatitis C infection and (4.6%) of rural and (8.3%) of urban population thinks hepatitis c infection is incurable where as (5.5%) of rural and (17.4%) of urban population has no idea about the cure of hepatitis c infection.The results are not statistically significant as per chi square test. The responders asked regarding their views in physical activity and special diet in the treatment of hepatitis b and c infection (90.8%) of rural and (71.6%) of urban population stated physical activity and special diet is needed in the treatment of hepatitis b and c infection, (0.9%) of rural and (7.3%) of urban population stated physical activity and special diet is not needed in the treatment of hepatitis b and c infection where as (8.3%) of rural and (21.1%) of urban population have no idea about the role of physical activity and special diet is needed in the treatment of hepatitis b and c infection The results are statistically significant .(80.5%) of rural and (19.5%) of urban population of responders told that we can tell a person who is infected with hepatitis from his / her appearance where as (18.?3%) of rural and (71.6%) of urban population disagree the statement and (17.4%) of rural and (12.8%) of urban population has no clear cut idea about the statement .The results of chi square shows statistically significant between urban and rural population. The responders were asked regarding Hepatitis B more easily transmitted than HIV (58.7%) of rural and (60.6%) of urban population responded as Hepatitis B is transmitted more easily than HIV and (11.9%) of rural and (5.5%) of urban population responded s Hepatitis B is not transmitted more easily than HIV where as (29.4%) of rural and (33.9%) of urban population has no idea about easy transmission of Hepatitis B infection than HIV. The chi-square test shows no significant differences between urban and rural population. (56.0%) of rural and (35.8%) of urban population stated 0.01 ml of blood can transmit hepatitis b infection where as (3.7%) of rural and (1.8%) of urban population stated as

0.01ml of blood cannot transmit the Hepatitis B infection and (40.4%) of rural and (62.4%) of urban population has no idea about the statement .The results of chi-square test shows significant differences between urban and rural population.

Knowledge of subject towards HBV&HCV Transmission, Prevention

The knowledge of participants towards Hepatitis B and C transmission is assessed and the results are following (99.1%) of rural and (100%) of urban population states for Blood transfusion. (99.1%) of rural and (100%) of urban population states the spread through sexual intercourse .(94.5%) of rural and (61.4%) of urban population states for transmission through breastfeeding.(79.8%) of rural and (67.8%) of urban population states for transmission through infected mother to unborn child.(55%) of rural and (87.1%) of urban population states for transmission through sharing of blade razor nailcutter clipper.(40.4%) of rural and (92.6%) of urban population states for transmission through sharing of toothbrush .(32.1%) of rural and (91.7%) of urban population states for transmission through sacrification marks and tattoos .(29.4%) of rural and (86.2%) of urban population states the transmit through male and female circumcision .(25.7%) of rural and (50.4%) of urban population states for transmission through sharing food with Hepatitis infected person.(23.9%) of rural and (35.7%) of urban population states the transmit through eating food cooked by infected person.(54.1%) of rural and (4.58%) of urban population states the transmit through Hugging.(54.1%) of rural and (3.66%) of urban population states the transmit through kissing.(54.1%) of rural and (3.66%) of urban population states the transmit through hand shaking.(34.9%) of rural and (2.75%) of urban population states the transmit through Mosquito and (22.9%) of rural population States the spread through witch craft. The chi-square test result show significant differences between urban and rural population. The responders were asked regarding practices through which hepatitis is prevented (92.7%) of rural and (99.1%) of urban population said prevention is done through vaccination of HBsAg negative adults .(89.9%) of rural and (97.24%) of urban population said prevention is done through HBV positive mothers treated.(80.7%) of rural and (90.82%) of urban population said prevention is done through infants born to HBV positive mothers recieve vaccination and immunoglobulin at birth.(49.5%) of rural and (32.1%) of urban population said if HBV positive mothers donot breastfeed their babies .(66.1%) of rural population said prevention can be done if family members of HBV patients screened for HBV infection.The chi square test shows no significant results between urban and rural population.

Attitude of subjects towards Hepatitis B and C Infection

The responders of urban and rural population of Kanyakumari district was asked for their attitude towards getting hepatitis B or C infection(7.3%) of rural and (22.0%) of urban population stated that they can have hepatitis B or C infection where as(92.7%) of rural and (78.0%) of urban population stated they cannot get hepatitis B or C infection.The results of chi-square test showed significant differences between urban and rural population. The reaction of the subject if they get hepatitis (46.8%) of rural and (50.5%) of urban population said that they will be sad after getting hepatitis and(53.2%) of rural and (49.5%) of urban

population said they have fear after getting hepatitis infection the statistical results shows no significant differences between urban and rural population. The responders were asked for the nature of worry after getting hepatitis (59.6%) of rural and (67.0%) of urban population had fear of death ,(8.3%) of rural and (9.2%) of urban population had fear of treatment costs,(17.4%) of rural and (3.7%) of urban population had fear of being isolated from the society and(14.7%) of rural and (20.2%) of urban population had fear of transmitting disease to the family members .The test result show there is no significant differences between urban and rural population. The participants where asked regarding who would they talk about the illness first if they have hepatitis infection(56.9%) of rural and (48.6%) of urban population said that they will report to physician,(11.0%) of rural and (14.7%) of urban population said they will talk to their spouse regarding the illness, (20.2%) of rural and (35.8%) of urban population said they will talk to parents regarding the illness,(0.9%) of rural population said they will talk to their children regarding the illness,(3.7%) of rural population will talk to other relatives regarding the disease illness,(6.4%) of rural population will talk to friends regarding the illness, and about(0.9%) of rural population will not say their infection to anyone And the chi-square test result show there is a significant differences between urban and rural population. The study participants where asked at what stage they will go to the health care facility and (23.8%) of rural and (9.2%) of urban population stated that they go to healthcare facilities when own treatment fails,(25.7%) of rural and (28.4%) of urban population stated they will go to healthcare facilities after 3-4 weeks after the appearance of the symptoms ,(48.6%) of rural and (62.4%) of urban population stated that they will go to healthcare facilities as soon as they realise the symptoms is hepatitis B and about (1.8%) of rural population will not go to healthcare facilities and the statistical results showed that there is no significant differences between urban and rural population. The responders were asked how much is the cost for hepatitis B diagnosis and treatment (5.5%) of rural and (0.9%) of urban population told that the diagnosis and treatment of hepatitis B is free while (20.2%) of rural and (6.4%) of urban population said hepatitis B diagnosis and treatment have reasonable price about (22.0%) of rural and (12.8%) of urban population said that the diagnosis and treatment of Hepatitis B is somewhat expensive while (37.6%) of rural and (59.6%) of urban population tells it is expensive for diagnosis and treatment of Hepatitis B and (14.7%) of rural and (202%) of urban population has no idea about cost of Hepatitis B diagnosis and treatment. The statistical test result show significant differences between urban and rural population. The attitude of participants towards hepatitis patients were analysed by asking questions such as should hepatitis patients allowed to do strenuousexcercise (55.0%) of rural and (10.1%) of urban population replied as hepatitis patients allowed to do Strenuous exercise where as (45.0%) of rural and (89.9%) of urban population replied as hepatitis patients are not allowed to do strenuous exercise and there occours significant differences between urban and rural population. The responders were asked regarding hepatitis patients and isolation (37.6%) of rural and(4.6%) of urbanpopulation stated they should not be isolated and (65.4%) of rural and (95.4%) of urban population stated that hepatitis patients should be isolated .And chi-square test result show significant differences between the two population. Awaness about hepatitis vaccination is assessed (61.5%) of rural and (90.8) of urban population are aware about hepatitis b vaccine before and (38.5%) of rural and (9.2 %) of urban population

are not aware of hepatitis b vaccine before and the chi square test result show there is a significant difference between the urban and rural population. (91.7%) of rural and (99.1%) of urban population think everyone must know the importance of Hepatitis B vaccine and get vaccinated to prevent hepatitis B infectionwhere as (8.3%) of rural and (6.9%) of urban population disagree with the statement The chi-square test result show there is no significant differences between urban and rural population.

Practice of subjects towards Hepatitis B and C Infection

Among the study participants (61.5%) of rural and (15.6%) of urban population screened for Hepatitis B infection where as (38.5%) of rural and (84.4%) of urban population have not screened for hepatitis B the chi-square test result showed significant results between urban and rural population and (76.1%) of rural and (45.0%) of urban population had vaccinated against Hepatitis B and (23.9%) of rural and (55.0%) of urban population has not yet vaccinated against Hepatitis B infection this showed significant results between urban and rural population. The responders were asked for the practice of sterilization of equipment before use(78.9%) of rural and (52.3%) of urban population sterilize equipment before use and (21.1%) of rural and (47.7%) of urban population donot sterlize equipment before use. (34.9%) of rural and (77.1%) of urban population of responders had not participated in health education program regarding Hepatitis where as (65.1%) of rural and (22.9%) of urban population had participated in health education program regarding hepatitis this showed significant differences between urban and rural population. The study participants where asked for practice which they do to hepatitis infected patients (87.2%) of rural and (86.2%) of urban population avoid patients with hepatitis B infection and (12.8%) of rural and (13.8%) of urban population doesn't avoid patients with Hepatitis B infection.

Conclusion

According to the findings of this study, community people need to be aware of hepatitis. According to the findings, the study participants have a good understanding, fair attitude, and practice of hepatitis. Although the majority of our study participants were aware of the vaccination and had been vaccinated, there is still a considerable disparity in knowledge, attitude, and practice regarding hepatitis between the urban and rural populations. The urban population is more aware about hepatitis than the rural population.

Limitation

The sample size is limited; a larger study with a larger sample size could better predict the knowledge, attitudes, and practices of healthy volunteers from Kanyakumari district's urban and rural areas regarding hepatitis B and C infection.

Ethical Approval

The research was carried out with the authorization of the VISTAS Ethics Committee (Ref:VISTAS-SPS/IEC/III/2020/10).

Competing interests
Nil

Funding Statement
Nil

Authors' contributions
Nil

Acknowledgments

We would like to express our gratitude to all of the members of our community who took part in this study, as well as IEC VISTAS SPS for approving our study.

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