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Letter to the Editor

Socio-Economic Factors Affecting Hepatitis C and Lack of Awareness: A Case Study of Pakistan

Muhammad Rizwan YASEEN, Shumaila AZIZ, Shafaq AFTAB

Dept. of Economics, Government College University, Faisalabad, Pakistan

***Corresponding Author:** Email: rizwany2001@yahoo.com

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Dear Editor in-Chief

The main objective of this study was to identify the socio-economic factors affecting the hepatitis C and to investigate the awareness of the individuals about the ways of transmission of HCV in Pakistan where about 10 million people are affected with hepatitis C, with high rate of mortality (1). In Pakistan, the prevalence of HCV is 4-6% (2) while in another study, it is about 5-8% (3). Data of 274 persons (Out of which 137 are cases (positive) and 137 are controls (negative)) were collected through questionnaire from Liver Center Faisalabad and different localities. Binary logistic Regression model was applied to determine social and economic factors associated with hepatitis C. We used the following model

$$HEPC = \beta 0 + \beta 1 * AGE + \beta 2 * TIOHH + \beta 3 * PHOJ + \beta 4 * FHOHCV + \beta 5 * HOBLTR + \beta 6 * SOPT \quad [1]$$

Our results from equation [1] are given in Table 1.

Table 1: Estimated results from equation 1

Variables	B	S.E.	Wald	df	Sig.	Exp(B)
AGE	.037	.011	12.004	1	.001	1.037
TIOHH [1]			28.041	3	.000	
TIOHH(1)	2.093	.436	22.997	1	.000	8.111
TIOHH(2)	1.999	.459	19.014	1	.000	7.384
TIOHH(3)	1.163	.437	7.074	1	.008	3.201
PHOJ [2]	1.111	.295	14.160	1	.000	3.037
FHOHCV [3]	.183	.408	.201	1	.654	1.201
HOBLTR [4]	.877	.299	8.612	1	.003	2.404
SOPT [5]	1.613	.414	15.203	1	.000	5.018
Constant	-4.746	.702	45.638	1	.000	.009

1.Total income of household
2. Patient's history of jaundice
3. Family history of HCV
4. history of blood transfusion
5. sharing/using the HCV patient's toilet

It is clear from our results that as total income of households increase then the chance of hepatitis C decrease. Patient's history of jaundice, family history of HCV, blood transfusion and sharing/using

the HCV patient's toilet are risk factor (Risk factors are those which have positive impact on hepatitis C.eg who shared patient toilet has more chances of hepatitis C.) of hepatitis C.

Then we used following model with other variables

$$HEPC = \beta 0 + \beta 1 * KATOHCV + \beta 2 * GEOLOC + \beta 3 * FSTATUS \quad [2]$$

It is clear from our results (Table 2) that KATOHCV (knowledge about transmission of HCV) has negative effect on HCV which means that persons having awareness about transmission has less chances of hepatitis C while GEOLOC (geographical location) and FSTATUS (family status) have positive effect (People living in rural areas have more chance of hepatitis C while people who live in joint family system has more chance of hepatitis C as compare to those who live in single family.) on hepatitis C.

Table 2: Estimated results of equation 2

Variables	B	S.E.	Wald	d.f.	Sig.	Exp(B)
KATOHCV	-.740	.334	4.910	1	.027	.477
GEOLOC	1.529	.317	23.302	1	.000	4.614
FSTATUS	.628	.265	5.625	1	.018	1.875
Constant	-.595	.229	6.769	1	.009	.551

Factors like surgical operation and blood transfusion are mainly concerned with doctors and hospitals but still people are getting this infection due to these factors. That may be due to the negligence of the doctors and the other paramedical staff. Hence, the strict actions should be taken by the hospital management to ensure that proper sterilized instruments are used during the surgical operations by the doctors. It is quite surprising that people were largely unaware about the ways of transmission of hepatitis C virus even they were educated. More than 50% respondents in the view that contaminated water and some other diseases (like tension, diabetes, stomach problems etc.) were the main reasons of HCV, which is wrong. There is an immediate need of crucial steps by the Government to spread awareness and information about the risk factors of HCV. There is lack of knowledge about the virus. Therefore, more vigorous education programs are necessary to raise awareness of hepatitis C virus in Pakistan.

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