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A CROSS SECTIONAL STUDY TO ANALYZE THE KAP LEVELS OF HEPATITIS B & C PATIENTS REGARDING HEPATITIS

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Abstract:

Objective: *The aim of our study was to analyze the KAP (knowledge, Attitude and practice) levels of hepatitis B & C patients regarding hepatitis.*

Study Design: *A cross sectional study.*

Place and Duration: *This was carried out for the duration of one year at Nishtar Hospital, Multan starting from April, 2018 to March, 2019.*

Methodology: *Our study was consisting of 399 patients of hepatitis B & C with age of more than or equal to 18 years visiting the OPD of the hospital. Approval of the study was taken from ethical committee of the hospital. Took written consent from all selected patients. A pre-designed questionnaire was used to get informational data of the patients. Used SPSS 20 for the analysis of gathered data.*

Results: *The total number of patients of hepatitis B & C included in our study were 399. Gender distribution as male and female was as 169 and 230 respectively. The internet, Television and radio were the main information source for 138 patients about hepatitis. There were 103 patients without any formal education. With the mean average of 7.33±2.03 poor knowledge was observed in our study. Mean ± Standard deviation of practice and attitude in the patients was as 2.97±1.05 and 4.33±1.19 accordingly. With the P value less than 0.01 relationship among practice and knowledge was found statistically significant.*

Conclusion: *At the end of our study we concluded that the main reason behind poor practice and negative attitude of hepatitis B & C patients was the deficiency of necessary knowledge about the hepatitis.*

Keywords: *KAP study, OPD patients, Hepatitis clinic, Hepatitis B, Hepatitis C.*

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INTRODUCTION:

HBV and HCV are the main types of hepatitis which is known as a deadly disease, causing chronic liver disease (CLD) and having very high morbidity rate all over the world. In addition, hepatitis B & C infections, if not controlled, are the leading cause for liver failure and liver cirrhosis [1]. Taking into consideration healthcare cost and morbidity HBV alone exposes thoughtful hazard to public as out of >2 billion patients of hepatitis from all over the world 350 million are affected of this infection and 170 million are infected with hepatitis C yearly [2].

Hepatitis B & C also infecting people in developing countries like Pakistan. According to estimation hepatitis B prevalence in Pakistan is about 2% - 7% [3]. Yearly estimate of infection of hepatitis B virus in Pakistan is about ten million people. According to the findings of a study conducted in 2007-2008 by Pakistan Medical Research Council (PMRC) in Pakistan on the occurrence rate of hepatitis B & C, prevalence rate of HBV was <2.5% as compared to HCV which was 4.8% with the cumulative frequencies as 7.6% in both infections [4].

KAP (Knowledge, attitude and practice) analysis are very frequently used procedures in social health sciences. Knowledge is the statistics of public concerning specific topic or health-related issue. Attitude is a tendency or a predilection to react negatively or positively regarding a particular knowledge, situation, person or object. Attitude also effects choice of a person for certain response actions, and reaction regarding rewards, challenges. Practices in medical sciences allude to the specific treatment and preventive measures or actions in reaction to a certain medical situation [5]. KAP analyses leads to necessary effective preventive measures since KAP is directly related to prevalence [6]. Knowledge and attitude assessment of patients regarding their illness and consistent practice experience helps the doctors to do better treatment of their patients [7].

In 2016 World Health Assembly consented the Global Health Strategy to eliminate the hepatitis disease by the year 2030 and to achieve this goal WHO (World Health Organization) laid down specific world-wide objectives [8]. Such objectives comprise treatment of entitled patients of HCV diseases up to 80%, decrease of morbidity due to HCV up to 65% and to reduce the rate of new HCV cases up to 90%. Health and governments authorities have to emphasis on improving epidemiological evidence-based country-level policies to attain these goals [9]. KAP analysis data help in planning and implementation of appropriate treatment and prevention strategies [10]. Our study was conducted to analyze the KAP (knowledge, Attitude and practice) levels of hepatitis B & C patients regarding hepatitis.

METHODOLOGY:

Our study was consisting of 399 patients of hepatitis B & C visiting the OPD of Nishtar Hospital, Multan. Ethical committee of hospital approved our study. All those patients of hepatitis B & C were included in the study who were visiting the OPD and having age of more than 18 years. Excluded all those patients who were visiting for the 1st time and were not in possession of PCR (Polymerase Chain Reaction) report for hepatitis diagnosis. Obtained verbal consent from every patient. Carried out interview with all patients. Information was gathered by means of a 30-item, structured, close-ended questionnaire.

In addition to the questions concerned to patients' demographic characteristics, for the knowledge section quoted 16 questions. 'Yes', 'No' and 'Do Not Know' were the three options for answer of every question. Assigned one and zero score for every wright or wrong answer respectively. According the range of 0-16 scores, patients who scored more than 9 were considered as having adequate knowledge, whereas, patients who scored less than 9 were considered as having poor knowledge. Related to attitude there were seven questions and according to the positive and negative attitude allotted one score and zero score respectively. Overall positive attitude was considered with a score of equal to or more than 4 with a range of 0-7 scores. Related to practice there were also seven questions and according to the positive and negative practice response assigned one score and zero score respectively. Overall positive practice response was considered with a score of equal to or more than 4 and poor practice response as less than 4 within a range of 0-7 scores. In our study correlations of variables were explained as >0.75 for excellent correlation, good correlation as 0.5 to 0.75, fair correlation for 0.25 to 0.5 and weak correlation as zero to 0.25.

Predesigned questionnaire was used to gather the data during interview from all selected patients. SPSS 20 was used for analysis of collected data. Descriptive statistics were used for analysis of demographic characteristics. Continuous variables were measured in Mean±SD and percentages and frequencies were used to measure categorical variables. Kolmogorov Smirnov Test was used to assess nature of data distribution. Kruskal Wallis H test, Mann Whitney U test and inferential statistics were used to analyze the difference among study variables and patient

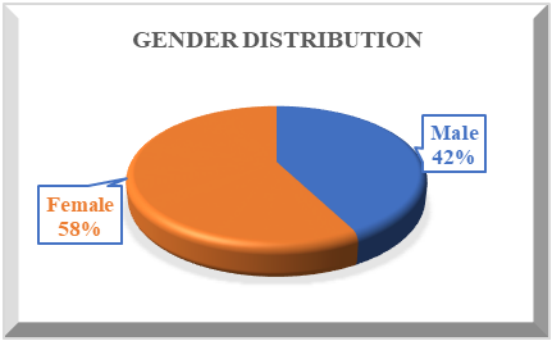
characteristics because of small sample size of study. For the elaboration of association/correlation among KAP items used Spearman's correlation. Results of Kruskal Wallis H test, Mann Whitney U test and inferential statistics were considered significant with the probability level as 95% with P value of less than 0.05.

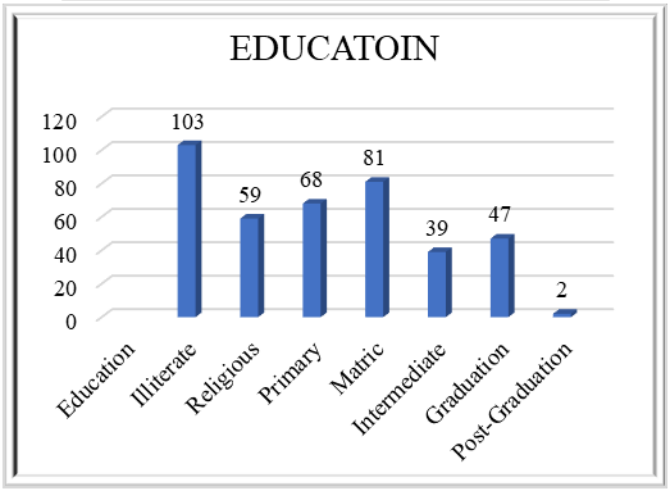
RESULTS:

The total number of patients of hepatitis B & C included in our study were 399. The average age of the selected patients was 42.82±11.78 years. Gender distribution as male and female was as 169 and 230 respectively. The internet, Television and radio were the main information source for 138 patients about hepatitis. There were 103 patients without any formal education. Statistics are depicted in tabular form below.

Table No 01: Demographic characteristics of the patients

Characteristics	Frequency	Percentage
Mean Age (years)	(42.82 ± 11.78)	
18-27	48	12%
28-37	95	23.80%
38-47	113	28.30%
48-57	102	25.60%
58 and above	41	10.30%
Gender Distribution		
Male	169	42.40%
Female	230	57.60%
Education		
Illiterate	103	25.80%
Religious	59	14.80%
Primary	68	17%
Matric	81	20.30%
Intermediate	39	9.80%
Graduation	47	11.80%
Post-Graduation	02	0.50%
Occupation		
Unemployed	239	59.90%
Government Servant	38	9.50%
Private Servant	30	7.50%
Self Employed	92	23.10%
Locality		
Urban	207	51.90%
Rural	192	48.10%
Source of Hepatitis Information		
Newspapers and magazines	56	14%
Health workers	60	15%
Family/friends/neighbors	105	26.30%
TV, radio and internet	138	34.60%
Religious teachers/leaders	21	5.30%
Leaflets, brochures posters	19	4.80%





Statistics of poor knowledge, adequate attitude and poor practice with mean scores were as 7.33±2.03, 4.33±1.19 and 2.97±1.05 respectively. Among practice and knowledge correlation was found statistically significant with P value of less than 0.01. All characteristics are shown below in tables number 2, 3, 4 and 5.

Table No 02: Knowledge of patients regarding hepatitis

Questionnaire	Hepatitis Knowledge Items		
	Yes N (%)	No N (%)	Don't Know N (%)
Have you heard of a disease termed as hepatitis before?	258(64.7)	140(35.1)	1 (0.3)
Is hepatitis a viral disease?	61 (15.3)	17 (4.3)	321(80.5)
Can hepatitis affect liver function?	212(68.2)	22 (5.5)	105(26.3)
Can hepatitis affect any age group?	40 (10.0)	42 (10.5)	317(79.4)
Do you know the early symptoms of hepatitis?	55 (13.8)	324(81.2)	20 (5.0)
Jaundice is one of the common symptoms of hepatitis?	346(86.7)	31 (7.8)	22 (5.5)
Is nausea, vomiting and loss of appetite common symptoms of hepatitis?	92 (23.1)	131(32.8)	176(44.1)
Are there no symptoms of hepatitis in some patients?	27 (6.8)	144 36.1)	228(57.1)
Can un-sterilized syringes, needles and surgical instruments transmit hepatitis?	355(89.0)	23 (5.8)	21 (5.3)
Can contaminated blood and blood products transmit hepatitis?	327(82.0)	18 (4.5)	54 (13.5)
Can blades of the barber/ear and nose piercing transmit hepatitis?	281(70.4)	40 (10.0)	78 (19.5)
Can hepatitis be transmitted from mother to child?	121(30.3)	152(38.1)	126(31.6)
Can hepatitis be transmitted by contaminated water/food prepared by person suffering with these infections?	297(74.4)	37 (9.3)	65 (16.3)
Is hepatitis curable/treatable?	192(48.1)	104(26.1)	103(25.8)
Is vaccination available for hepatitis?	84 (21.1)	153(38.3)	162(40.6)
Is specific diet required for the treatment of hepatitis?	118(29.6)	131(32.8)	150(37.6)

Table No 03: Attitude of patients regarding hepatitis

Questionnaire of attitude	Frequency	Percentage
Did you think before that you could get hepatitis?		
Yes*	123	30.8
No	27	69.2
What was your reaction when you first found out that you had hepatitis?		
Fear*	147	36.8
Shame	72	18
Surprise	77	19.3
Sadness	103	25.8
Who did you first talk to about your illness?		
Parents	48	12
Spouse	112	28.1
Physician	68	17
Other relative	52	13
Friends	22	5.5
Child	28	7
No one¥	69	17.3
What did you do first when you found out that you had symptoms of hepatitis?		
Visited hospital*	181	45.4
Visited Hakeem	62	15.5
Visited homeopathic center	39	9.8
Done nothing	117	29.3
If you had symptoms of hepatitis, at what stage you will go to the health facility?		
Own treatment fails	21	5.3
After 3-4 weeks of symptoms	46	11.5
As soon as I realize the symptoms of hepatitis*	308	77.2
Will not go to the physician	24	6
How expensive do you think is the diagnosis and treatment of hepatitis?		
Free	88	22.1
Reasonable	32	8
Somewhat expensive	24	6
Very expensive	174	43.6
Don't know¥	81	20.3
What worries you most of your illness?		
Fear of death	176	44.1
Fear of spread into family	73	18.3
Cost of treatment	72	18
Isolation from the society¥	78	19.5

Table No 04: Practices of patients regarding hepatitis

Questionnaire of attitude	Yes		No	
	N	%age	N	%age
Would you recommend your other family members for hepatitis screening?	352	88.2	47	11.8
Do you ask for new syringe every time before use?	51	12.8	348	87.2
Do you ask for screening of donor before blood transfusion?	91	22.8	308	77.2
Do you ask your barber to change blade/or for safe equipment for ear and nose piercing?	125	31.3	274	68.7
In case your family member is diagnosed with hepatitis, would you go for further investigation and treatment?	388	97.2	11	2.8
Do you avoid meeting hepatitis patients?	91	22.8	308	77.2
Have you ever participated in health education programme related to hepatitis?	89	22.3	310	77.7

Table No 05: Comparison of demographic characteristics and mean knowledge (MKS), attitude (MAS) and practice (MPS) scores

Description	N (399)	MKS	P-value	MAS	P-value	MPS	P-value
Age*			0.001		0.149		0.007
18-30	48	8.0		4.0		3.0	
31-40	95	8.0		5.0		3.0	
41-50	113	8.0		4.0		3.0	
51-60	102	6.0		4.0		3.0	
> 60	41	7.0		4.0		2.0	
Gender**			0.005		0.003		0.001
Male	169	8.0		5.0		3.0	
Female	130	7.0		4.0		3.0	
Education*			0.001		0.006		0.001
Illiterate	103	6.0		4.0		3.0	
Religious	59	7.0		4.0		2.0	
Primary	68	7.0		4.0		3.0	
Matric	81	8.0		4.0		3.0	
Intermediate	39	8.0		4.0		3.0	
Graduation	47	10.0		5.0		4.0	
Post-Graduation	02	11.0		5.5		5.5	
Occupation**			0.001		0.001		0.001
Unemployed	239	7.0		4.0		3.0	
Government Servant	38	9.0		5.0		4.0	
Private Servant	30	9.5		5.0		3.0	
Self Employed	92	8.0		5.0		3.0	
Locality**			0.001		0.006		0.001
Urban	206	8.0		5.0		3.0	
Rural	193	7.0		4.0		3.0	

*Kruskal Walls H test

** Mann Whitney U test

In our study we found weak correlation among practice and attitude, also weak among attitude and knowledge and fair correlation among practice and knowledge. Data is presented below in table number 6.

Table No 06: Correlation among knowledge, attitude and practice

Variable	Correlation coefficient	P-value*
Knowledge-Attitude	0.128	<0.05
Knowledge-Practice	0.383	<0.01
Attitude-Practice	0.192	<0.01

*Correlation significant at 0.01 level (2 tailed).

DISCUSSION:

Poor score of mean knowledge reveal deficiency of necessary information in the patients about prevention, management, transmission, symptoms and aetiology, that might be the cause of higher prevalence of disease in the public [11]. In a study it was found that even educated patients have poor knowledge of disease regarding its complications and transmission, which was also indicated in our study [12]. Internationally many KAP studies indicated same alike results particularly poor knowledge about HBV [13]. In a study carried out in Egypt between barbers and customers, overall knowledge about transmission of disease was found good which is contrary to the findings of our study [14].

A little difference was found in the findings of out study as compared to various studies carried out in Pakistan about attitude towards hepatitis, as it was observed positive in our study. Health Belief Model emphasizes an important characteristic of the patient care which presents that patient's beliefs and attitude regarding their disease reveal their conduct and response about that specific medical condition [15].

We found poor practice response of patients towards their disease in our study. These findings of our study are inline with other studies of KAP carried out globally and in Pakistan in general population and particular patients which also showed poor practice response of patients regarding their disease [16,17].

Educational levels of the patients have particularly huge influence on knowledge of patients. Except on attitude of patients, age was a non-significant factor. Patient characteristics do influence the knowledge, attitude and practice response of the patients. Linear positive correlation between knowledge, attitude and practice disclosed that these variables directly affect each other [18]. Selected patients of our study were having poor educational level with poor socio-economic status and because of this our study may not be presented for the entire population of Pakistan.

Even with the limitations, our analysis described that poor knowledge of hepatitis in patients was the key reason of poor practices and negative attitude. Health and governments authorities have to emphasis on improving the general knowledge of the people about such chronic diseases and medical facilities should be made easier for approach of general public.

CONCLUSION:

In our study we concluded that the major reason behind poor practice and negative attitude of hepatitis B & C patients was the deficiency of necessary knowledge about the hepatitis. Conversely, linear positive correlation between knowledge, attitude and practice disclosed that these variables directly affect each other and better knowledge can produce improved attitude regarding the disease and in due course healthier practices for prevention and treatment.

REFERENCES:

1. Baldo V, Baldovin T, Trivello R, Floreani A. Epidemiology of HCV infection. Curr Pharm Des. 2008; 14:1646-54.
2. Karim F, Foster G, Akbar SF, Rahman S. Prevalence and risk factors of asymptomatic hepatitis C virus infection in Bangladesh. J Clin Exp Hepatol. 2011; 1:13-6.
3. Qureshi H, Bile K, Jooma R, Alam S, Afridi H. Prevalence of hepatitis B and C viral infections in Pakistan: findings of a national survey appealing for effective prevention and control measures. East Mediterr Health J. 2010; 16: S15-23.
4. Farhat M, Yasmeen A, Ahmad A. An overview of hepatitis B and C in Pakistan. Int J Microbiol Allied Sci. 2014; 1:98-102.
5. Al Haq N, Hassali MA, Shafie AA, Saleem F, Farooqui M, Haseeb A, et al. A cross-sectional assessment of knowledge, attitude and practice

among Hepatitis-B patients in Quetta, Pakistan. BMC Public Health. 2013; 13:448.
6. Al Haq N, Hassali MA, Shafie AA, Saleem F, Farooqui M, Aljadhey H. A cross sectional assessment of knowledge, attitude and practice towards Hepatitis B among healthy population of Quetta, Pakistan. BMC Public Health. 2012; 12:692.
7. Mohamed R, Ng CJ, Tong WT, Abidin SZ, Wong LP, Low WY. Knowledge, attitudes and practices among people with chronic hepatitis B attending a hepatology clinic in Malaysia: a cross sectional study. BMC Public Health. 2012; 12:601.
8. Saraswat V, Norris S, Knegt Rd, Sanchez Avila J, Sonderup M, Zuckerman E, et al. Historical epidemiology of hepatitis C virus (HCV) in select countries-volume 2. J Viral Hepat. 2017; 24:8-24.
9. Razavi DH. Global prevalence and genotype distribution of hepatitis C virus infection in 2015: a modelling study. Lancet Gastroenterol Hepatol. 2017; 2:161-76.
10. Jokhio A, Bhatti T, Memon M. Knowledge, attitudes and practices of barbers about hepatitis B and C transmission in Hyderabad, Pakistan. East Mediterr Health J. 2010; 16:1079-84.
11. Haider G, Haider A. Awareness of women regarding hepatitis B. J Ayub Med Coll Abbottabad. 2008; 20:141-4.
12. Talpur AA, Memon N, Solangi R, Ghumro A. Knowledge and attitude of patients towards hepatitis B and C. Pak J surg. 2007; 23:162-5.
13. van der Veen YJ, Voeten HA, de Zwart O, Richardus JH. Awareness, knowledge and self-reported test rates regarding Hepatitis B in Turkish-Dutch: a survey. BMC Public Health. 2010; 10:512.
14. Shalaby S, Kabbash I, El Saleet G, Mansour N, Omar A, El Nawawy A. Hepatitis B and C viral infection: prevalence, knowledge, attitude and practice among barbers and clients in Gharbia governorate, Egypt. East Mediterr Health J. 2010; 16:10-7.
15. Saleem F, Hassali M, Shafie AA, Awad A, Bashir S. Association between knowledge and drug adherence in patients with hypertension in Quetta, Pakistan. Trop J Pharmaceutical Res. 2011; 10:125-132.
16. Ali K, Seyyed Wahid T, Siamak K, Shahram A, Hossein Faghihi KA, Mehrdad M, et al. Knowledge, attitudes and practice of Iranian medical specialists regarding hepatitis B and C. Hepat Mon. 2010; 10:176-82.
17. Razi A, ur Rehman R, Naz S, Ghafoor F, Khan M. Knowledge attitude and practices of university students regarding hepatitis B and C. J Agr Biol Sci. 2010;5(4):38-43.
18. Khan N, Ahmed SM, Khalid MM, Siddiqui SH, Merchant AA. Effect of gender and age on the knowledge, attitude and practice regarding hepatitis B and C and vaccination status of hepatitis B among medical students of Karachi. J Pak Med Assoc. 2010; 60:450-5.