THE PATTERNS OF HEALTH SEEKING BEHAVIOR AMONG HEPATITIS C IN KARACHI, PAKISTAN

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Abstract

Background: The study aimed to assess the patterns of health seeking behavior and the level satisfaction with the health care providers among hepatitis C patients in Karachi, Pakistan.

Methodology: A descriptive, cross-sectional study was conducted among 250 hepatitis C patients, who were recruited from the Aga Khan University Hospital and the Civil Hospital Karachi, Pakistan, between March and May 2013.

Results: The patterns of health seeking behavior showed that a majority of the study participants approached a medical doctor (n=359), followed by spiritual healers (n=103), and a few participants approached traditional healers (n=38) and homeopaths (n=11). The pattern of health seeking behavior also revealed that the participants were taking treatment from more than one health care provider at the same time. Participants who visited doctors had effective treatment outcomes and they were satisfied with their doctors. However, those participants who visited homeopaths, traditional healers and spiritual healers had ineffective treatment outcomes and they were not satisfied with these health care providers.

Conclusion: The patterns of health seeking behavior are strongly related to the patients' cultural practices and beliefs, which affect their choice of health care providers. This study has provided a basis for planning interventional studies aimed at improving patients' health seeking behaviors.

Key Words: Health seeking behavior, satisfaction, health care providers, hepatitis C, Pakistan.

Introduction

Globally, the hepatitis C virus (HCV) causes more than 350,000 deaths per year (1). Hepatitis C has become a major health problem in the developing countries (2). In Pakistan, the HCV rate is 4.8% which is the second highest prevalence rate among all developing countries (3). Statistically, 80% patients with hepatitis C develop chronic hepatitis, 25% to 30% develop liver cirrhosis, and 25% end up with hepatocellular carcinoma (4).

Globally, health promotion programs have been based on the notion that providing knowledge about the disease and the choices available for treatment would bring a change in individual behavior, towards more beneficial health seeking behavior. The desired health care seeking behavior is that an individual responds to an illness by seeking, first and foremost, help from a trained allopathic doctor, in a formally recognized health care setting (5). In Pakistan, cultural beliefs and practices often lead to home remedies and consultation with traditional healers, which results in delay in treatment seeking from modern healthcare services (6).

A few studies have been conducted on barriers of health seeking behavior among hepatitis C patients, and most of these studies were conducted in developed countries (7,8,9,10). Recently, one study was conducted on the evaluation of various therapies of hepatitis C in Pakistan (11). However, to researchers knowledge, none of the study has been conducted to explore the patterns the health seeking behavior among hepatitis C patients in Karachi, Pakistan.

The current study was designed to determine the pattern of health seeking behavior among patients with Hepatitis C and to estimate the proportion of Hepatitis C patients who are satisfied with their health care providers.

Methodology

A quantitative descriptive cross-sectional study design was used in the present study. The purposive sampling was done and the sample size consisted of
250 hepatitis C patients. The participants were recruited from the Gastrointestinal clinic of Aga Khan University Hospital (AKUH) and the Hepatitis clinic of the Civil Hospital Karachi, Pakistan. The AKUH and Civil Hospital, Karachi, were selected as the study settings because these are amongst the two largest and most accessed tertiary care hospitals in Karachi in private and public sector, respectively. The rationale for selecting one private and one government hospital as the study setting was to capture patients from diverse socio-economic backgrounds and geographical locations. The Civil Hospital is approached by patients from the entire provinces of Sindh and Baluchistan.

The inclusion criteria of the study included the following: (a) male or female, 18 years of age or above (b) visited Gastrointestinal (GI) / Hepatitis clinic during the data collection period (c) diagnosed with hepatitis C on the basis of antibodies against HCV (anti-HCV) and/or HCV RNA testing, within the last three years (d) absence of co-morbidities. The data was collected between March and May 2013, through a modified questionnaire on ‘Patterns of Health Seeking Behavior among Patients with hepatitis C. The researcher first determined the eligibility of the patients for their inclusion in the study. Eligible patients were given information about the study purpose, risks, benefits, and their rights as participants. Patients who were interested and willing to participate were provided the written consent form. The process of data collection took a maximum of 20-30 minutes.

**Validity and Reliability of the Tool:**

Before the data collection, the validity and reliability of the tool was checked. The study questionnaire was originally in the English language which was then translated into Urdu by an expert in the language. The translated questionnaire was then back translated into English by an expert who had good command over both the languages. No major changes were found in the questionnaire after back translation.

For the content validity of the questionnaire, the content validity index (CVI) of the Urdu translated questionnaire was calculated after taking input from a committee of experts including Gastroenterologists. The procedure for calculating the CVI was followed as illustrated by Polit and Beck (2008). The CVI of the tool was then calculated based on the experts’ rating, which came out to be 0.95 for ‘relevancy’ and 0.9 for ‘linguistic clarity’.

Before the actual data collection process, the translated tool was pilot tested on 13 participants (i.e. 5% of the total sample size of 250). Pilot testing of the instrument was done to ensure its face validity and to identify any issues that the participants might face in the interpretation of the questions.

**Operational Definition of Patterns of Health Seeking Behavior:**

In the present study, pattern of health seeking behavior is defined as patients' contacts with the type of health care provider as their first, second, and third visit. The types of health care providers include: medical doctors (clinic and hospital), homeopaths, traditional healers (Hakim), Spiritual healers (Dum), and nurses/midwives/lady health visitors.

**Ethical Considerations:**

For the present study, ethical approval was taken from the Ethical Review Committee of the authors’ institution. Permission for data collection was sought from head of both the study settings. A written informed consent was obtained from each patient at the beginning of the interview. The principles of autonomy, confidentiality, and anonymity of the participants were followed throughout the study.

**Data Analysis:**

The analysis of the first question included the patterns of health seeking behavior among hepatitis C patients. For this study question, frequencies and percentages were computed for those participants who approached doctors, homeopaths, traditional healers (hakim) and spiritual healers (dum) as their first, second, and third visit option. The second question of the study included the estimated proportion of hepatitis C patients who were satisfied with their health care providers. For the analysis of this study question, percentages and frequencies were calculated for the participants who were satisfied and dissatisfied with their health care providers.

**Results**

**Socio-demographic Characteristics and Background Information of the Participants:**

The participants’ demographic characteristics in Table 1 show that slightly more than half of the participants were males (56.4%) and slightly less than half of the participants were females (43.6%). The participants’ age ranged from 18 to 72 years, with a mean age of 38 years (SD ± 10.8 years). A majority of the study participants (75.2%) were married at that time. With regard to occupation, most of the participants fell in the category of unemployed and others (42.4%), where others include religious teachers and students. Within the educational level of the participants, a majority of the participants had received primary (18.4%) level of education. A majority of the participants (54.4%) had a household income of less than Rs. 10,000. The study participants had representation from all of the 18 towns of Karachi; however, the majority of participants lived in Baldia town (14%), outside Karachi (13%), and in Kemari town (10.8%), as illustrated in figure 1. With regard to ethnicity of the participants, 30% belonged to Khyber Pakhtunkhwa /GilgitBaltistan (KP/GB) and spoke Hindko, Hunzai and Pushto language; 26.4% were Urdu/Gujrati speaking, and 18% spoke Sindhi. The study participants were also asked about health insurance which indicated that a majority of the
participants (95.6%) were not insured. More than half of the participants (60.8%) used no protection for sexual contact whereas 39.2% participants used some kind of protection.

Table 1: Socio-Demographic Characteristics and Background Information of the Study Participants

| Characteristics         | Frequencies (n = 250) | Percentages (%)
|-------------------------|-----------------------|------------------
| Gender                  |                       |                  
| Male                    | 141                   | 56.4             
| Female                  | 109                   | 43.6             
| Age                     |                       |                  
| <20                     | 58                    | 23.2             
| 20-39                   | 71                    | 28.4             
| ≥40                     | 121                   | 48.4             
| Marital status          |                       |                  
| Currently Married       | 188                   | 75.2             
| Currently Unmarried     | 62                    | 24.8             
| Occupation              |                       |                  
| Laborer                 | 90                    | 36.0             
| Service                 | 43                    | 17.2             
| Business                | 11                    | 4.4              
| Others/unemployed       | 106                   | 42.4             
| Literacy rate           |                       |                  
| Educated                | 145                   | 57.2             
| Uneducated              | 107                   | 42.8             
| Education level         |                       |                  
| Primary                 | 46                    | 18.4             
| Middle                  | 17                    | 6.8              
| Matric                  | 44                    | 17.6             
| Intermediate            | 17                    | 6.8              
| Higher/others           | 20                    | 8                
| Ethnicity               |                       |                  
| Sindh                   | 45                    | 18               
| Punjabi/Saraiki         | 44                    | 17.6             
| Baluchi                 | 13                    | 5.2              
| Urdu/Gujarati/Memon/Kachhi | 66               | 26.4             
| KPK/GB                  | 75                    | 30               
| Others                  | 7                     | 2.8              
| Income                  | 156                   | 54.4             

Patterns of Health Seeking Behavior among hepatitis C patients:

As shown in Table 2, four types of health care providers were found to be commonly approached by the study participants for the treatment of hepatitis C: doctors, homeopaths, traditional healers (hakims), and spiritual healers (dum). In all three visits, the majority of the participants had approached doctors (n = 359), followed by spiritual healers (n = 103), and a few participants had approached traditional healers (n = 38) and homeopaths (n = 11). In the present study, the pattern of health seeking behavior also revealed that the participants were taking treatment from more than one health care provider at the same time.

Table 2: Patterns of Health Seeking Behavior among Hepatitis C Patients

<table>
<thead>
<tr>
<th>Medical Doctor (n=359)</th>
<th>Homeopath (n=38)</th>
<th>Traditional healer (n=103)</th>
<th>Spiritual healer (n=38)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>179 (61.6%)</td>
<td>6 (2.4%)</td>
<td>16 (5.8%)</td>
</tr>
<tr>
<td>Second</td>
<td>129 (51.6%)</td>
<td>5 (2%)</td>
<td>16 (6.4%)</td>
</tr>
<tr>
<td>Third</td>
<td>51 (20.4%)</td>
<td>0 (0%)</td>
<td>5 (2%)</td>
</tr>
</tbody>
</table>

Patients' Satisfaction with their Health Care Providers:

The study findings also revealed the outcomes of the treatment and patients' satisfaction with their health care provider, as illustrated in Table 3. The total number of participants (n) for each treatment outcome and satisfaction with health care provider was different because, at the time of interview, some of the participants came for treatment for the first time; therefore, a few participants responded only on satisfaction; however, a few participants were unable to respond to both: the treatment outcome and satisfaction.

A very interesting finding of the present study was that, in both the visits, participants who visited doctors had effective treatment outcomes and they were
Table 3: Outcome of the Treatment and Patients’ Satisfaction with Primary Health Care Provider

<table>
<thead>
<tr>
<th>FIRST VISIT</th>
<th>Medical Doctor</th>
<th>Homeopath</th>
<th>Traditional healer</th>
<th>Spiritual healer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total n</td>
<td>Effective Satisfied n (%)</td>
<td>Not effective Dissatisfied n (%)</td>
<td>Total n</td>
</tr>
<tr>
<td>Treatment Outcome</td>
<td>164</td>
<td>100 (61)</td>
<td>64 (39)</td>
<td>6</td>
</tr>
<tr>
<td>Patients’ Satisfaction</td>
<td>180</td>
<td>126 (70)</td>
<td>54 (30)</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND VISIT</th>
<th>Medical Doctor</th>
<th>Homeopath</th>
<th>Traditional healer</th>
<th>Spiritual healer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total n</td>
<td>Effective Satisfied n (%)</td>
<td>Not effective Dissatisfied n (%)</td>
<td>Total n</td>
</tr>
<tr>
<td>Treatment Outcome</td>
<td>143</td>
<td>85 (59)</td>
<td>58 (41)</td>
<td>5</td>
</tr>
<tr>
<td>Patients’ Satisfaction</td>
<td>157</td>
<td>109 (69)</td>
<td>48 (31)</td>
<td>5</td>
</tr>
</tbody>
</table>

satisfied with their doctors. However, those participants who visited homeopaths, traditional healers, and spiritual healers had ineffective treatment outcomes and they were not satisfied with these health care providers.

Discussion

Similar to the findings of the other studies conducted in Pakistan on HCV patients (12,13,14), there were more males as compared to females in the current study. This may be due to the fact that probably men are more prone to this disease, or the women suffering from an illness seek health care less frequently as compared to men in Pakistan. Moreover, women need to seek permission from the head or men in the family to visit health care services (6). Hence, this prevents women from accessing appropriate treatment from health care professionals.

One of the striking findings of the current study is that most of the study participants were unemployed and among the participants who were employed, most of them were laborers. Moreover, half of the study participants were earning only less than 10000 rupees per month. In Pakistan, cost has been a major barrier for seeking care from modern health care provider (15). Similar to the findings of other studies (16,17), the cost of diagnostic procedures and treatment of HCV seemed to be enormous for the participants of the current study. Also, considering the earning capacity of an average person in Pakistan and the lack of a health insurance mechanism, it would be challenging for them to manage the financial burden of the disease. In the present study, 95% of the study participants had no health insurance. McGowan and Fried (10) asserted that lack of health insurance is a major barrier for the treatment of hepatitis C.

In the current study, most of the study participants were only educated till the primary level. This is not an unusual finding from Pakistan, where the
literacy rate is 58% (18). Education is an important aspect of health seeking behavior. Mushtaq et al (19) found that people with better education were more likely to use the private hospitals and clinics. Interestingly, our study findings showed that a majority of the study participants were those who were diagnosed as having HCV since the last 4-6 months, followed by those participants who had been diagnosed > 12 months ago. This shows delay in seeking medical treatment from doctors which might be due to participants' beliefs on traditional healers for the treatment of HCV. Once people got dissatisfied with traditional healers and their condition became worse then they approached doctors. Literature supports that cultural practices and beliefs for the cure of the disease are prevalent among people, regardless of their age, socio-economic status, and level of education (6).

In the present study, the patterns of health seeking behavior showed that most of the study participants approached medical doctors; however, a significant number of patients went to spiritual healers on their first and second visit. Surprisingly, more than half of the participants who went to spiritual healers on their first visit had an ineffective treatment outcome and dissatisfaction with them; however, still participants went to spiritual healers on their second visit, which also resulted in ineffective treatment outcomes and dissatisfaction. This shows that participants had strong cultural and religious beliefs related to spiritual healers, which delayed them from approaching doctors and getting appropriate medical treatment.

Besides spiritual healers, participants also visited homeopaths and traditional healers on their first and second visit; they also had ineffective treatment outcomes and dissatisfaction with them. This finding coincides with the findings of a recent study conducted in Pakistan (11), which found that a majority of the HCV patients were not cured by homeopaths and herbal treatment. This pattern of health seeking behavior shows that once patients get dissatisfied with non-medical approaches, then they contact medical professionals, which results in developing complications and delayed treatment seeking from medical doctors. The use of alternate approaches corresponds with previous studies conducted on HCV patients in Canada (20), USA (21, 22), Pakistan (11, 13, 23), and Egypt (24). However, literature also reveals that none of the alternate treatment has proven to be effective for treating hepatitis C (25, 26). This is patients' strong beliefs and perceived benefits on alternate treatment for hepatitis C (24, 27).

In contrast to homeopaths, traditional healers, and spiritual healers, our study showed that a majority of the participants who visited doctors on their first or second visit had effective treatment outcomes and they were satisfied with it. This finding is consistent with other studies conducted in Pakistan (11, 13), which found that a majority of the participants were in favor of allopathic doctors and they had better treatment outcomes. However, in the present study, a few participants also had ineffective treatment outcomes and dissatisfaction with doctors. This might be because of factors such as delayed care seeking from doctors, communication gap between patients and doctors, non-response to the medical treatment, and non-compliance with the medical treatment due to its side effects and high cost.

**Recommendations**

Based on the study findings, it is recommended that once patients get diagnosed as HCV positive, at that time the health care professionals should provide counseling to the patients and their families regarding choice of health care providers for the treatment of HCV. Moreover, health care professionals need to seek information from the patients about the use of non-medical approaches for the treatment of HCV and also to educate patients and their families about the treatment approach they have chosen. In research, a qualitative study is recommended for an in-depth understanding of the present phenomenon.

**References**

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