



## Original Research

## Exploring adaptability in Hepatitis C patients: insights from the experiences of young adults

Philip Zafar<sup>a</sup>, Amna Bibi<sup>a</sup>, Fatima Afzal<sup>a</sup>, Isma Khan<sup>a</sup>, Adeela Naz<sup>a</sup>, Adnan Azam<sup>b\*</sup>

<sup>a</sup> Shalamar Nursing College Lahore, Pakistan

<sup>b</sup> Gulf College of Nursing Dera Ghazi Khan, Pakistan

### Abstract

Hepatitis C, or HCV, is considered a significant contributor to liver diseases worldwide. It threatens the lives of many. Due to its extensive prevalence, the World Health Organization (WHO) set a target to eliminate it by 2030. HCV is a matter of concern worldwide; however, Pakistan has the highest number of HCV infections, second only to Egypt, resulting in economic, social, and psychological damage.

This research aims to obtain an in-depth understanding of the traumas, i.e., psychological, emotional, physical, and social, faced by the young patients of HCV. Moreover, to determine the behaviors that support successful adaptability in these young patients. The study used a phenomenological research design as a guideline for data collection, including 12 participants until the saturation level was achieved. Individual in-depth interviews were conducted using a purposive sampling technique. The interviews were tape-recorded, transcribed, and analyzed using the thematic analysis approach. The results indicated that younger patients who suffered from HCV experienced various sufferings on a social and psychological level. Some of the most essential coping mechanisms include social and recreational activities as well as spiritually inspiring practices, lifestyle modifications, and vigorous health beliefs. These methods improved adaptability and resilience. The present study supports the quality service delivery to patients diagnosed with hepatitis C. Likewise, religious beliefs bring ease to the path of fighting a chronic illness and help achieve adaptability, thus producing improved health outcomes.

Correspondence:

[adnanazamalirao@gmail.com](mailto:adnanazamalirao@gmail.com)

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**Introduction:** Hepatitis C virus (HCV) may induce acute, sub-acute or chronic hepatitis. The hepatitis C virus is transmitted through blood and blood products, insecure injection practices, unsafe health care behaviors, and sexual practices<sup>1</sup>. Moreover, in the entire world, HCV infection prevalence was 1.0 percent in 2015, while the Eastern Mediterranean Region had the peak prevalence of 2.3 percent, trailed by Europe (1.5 percent). Annual death toll from HCV-related health complications is estimated to be around 700,000<sup>2</sup>. Similarly, a significant fraction of people having HCV infection are not aware of their carrier status. In addition, precise HCV prevalence data are lacking, which is necessary to analyze the scale of the disease in different countries around the globe. This will help in devising interventions for public health. That is why HCV screening is a prerequisite to isolate infected individuals and involve them in disease management<sup>3</sup>.

Liver morbidities and mortalities are a prominent cause of concern in global perspectives in both developed and developing countries. Pakistan is in the grip of a historic HCV epidemic. One in every twenty Pakistanis is already has HCV infection, which is a substantial contributor to the country's liver disease burden. Hepatic patients perceived a need for social and psychological assistance to cope with the disease's consequences<sup>4</sup>.

The percentage prevalence of HCV found in all provinces was 5.46 percent in Punjab, 2.55 percent in Sindh, 6.07 percent in Khyber Pakhtunkhwa, 25.77 percent in Balochistan, and 3.37 percent in the federally administered tribal areas<sup>5</sup>. Furthermore, as per Hepatitis record management system at THQ hospital Dunyapur District Lodhran (Division Multan), it was observed that annually at THQ Dunyapur almost 924 new cases of Hepatitis B and C were registered (from 1<sup>st</sup> June 2018 – 1<sup>st</sup> June 2019) with 1:10 proportion (after ten cases of Hepatitis C (840), one case of Hepatitis B (84) is diagnosed), which is a huge number in a small city of merely 0.5 million populations<sup>6</sup>. Psychological and emotional trauma cannot be separated from the patients who have been diagnosed with Hepatitis C. It is high likely that these patients might develop mental health problems, such as anxiety, depression, insomnia, and other mental health problems.

*This study aimed to gain in-depth insight into different traumas, i.e. psychological, emotional, physical, and social, faced by diseased persons. Besides, this study also focused on the identification of behaviors that lead to successful adaptability in such patients. The information received from current study are expected to help in policy making to prevent, cure and rehabilitate of the patients, their families and the community at large.*

*Although there is an escalating array of qualitative studies addressing the psychosocial experiences of patients living with Hepatitis C, there remains a paucity of focus on the adaptability and resilience process for young adults in the Pakistani sociocultural and religious setting. While current studies are dominated by those investigating the dimensions of stigma, treatment availability, and overall strategies, this research uniquely investigates adaptability and resilience from a phenomenological perspective, without neglecting the overriding focus on beliefs in health*

*and spirituality and self-actualization strategies in resilience. Given its focus on young patients in active treatment at public sector hospitals in South Punjab, this research provides insights relevant to the specific setting and adds new evidence to existing qualitative research on this topic.*

**Literature Review:** A cross-sectional study among people who inject drugs (PWID) in the United States (US), advocated that HIV diagnoses are decreasing, while HCV is increasing. Care for HIV and HCV relies heavily on specialist infrastructure, which is lacking in rural areas. Multiple barriers make it difficult for rural drug injectors to access these treatments. Similarly, access to syringe service programs, medication-assisted therapy for opioid addiction, and pre-exposure prophylaxis for HIV are all limited in rural areas<sup>7</sup>.

Moreover, the cost of drugs is still the highest in the United States. The latest therapies for hepatitis C virus (HCV) infection are extremely successful but also very expensive. Only 15% of the estimated more than 3 million people with HCV infection in the United States have received treatment five years following the launch of these medications, often due to budgetary restrictions<sup>9</sup>. Approximately one-third of those who test positive for HCV, actually receive treatment and ongoing care. One of the obstacles in accessing care is frequently linked to poverty<sup>8</sup>. Furthermore, a qualitative descriptive study conducted in USA also narrated that people with hepatitis C sometimes face social stigma, humiliation, or despair. They suffer social consequences as a result of false fears - either their own or those of family and colleagues - that they will transfer the virus to others, such as through casual contact<sup>10</sup>.

Regarding African continent, plans to eradicate hepatitis have been developed in several countries. Egypt is one of the most prosperous nations, where many people have already been treated and massive testing systems are identifying the millions of people who are infection carriers. In addition to adults, Egypt also including children in screening programs. In addition, adolescents have a tendency to reinforce the community by promoting awareness and advocating for the rights of provision of health for all. This technique can be a benchmark for other countries since globally nearly 11 million teenagers (below the age of 15) are currently infected with HCV<sup>11</sup>.

Looking into the Asian context, a meta-regression analysis (2019) underlined that HCV prevalence does not seem to be declining gradually in Central Asia as compared to the global trends. The meta-analysis also emphasized that nationally representative population-based studies must be piloted to specifically delimit HCV in these countries and knowledge gaps must be addressed to enhance awareness amongst populations at increased risk of contracting hepatitis C infection<sup>12</sup>.

HCV infection fit to established criteria for disease eradication criteria. Appropriate allocation of resources, commitment and dedication are currently deficient. Tremendous success can be accomplished if the relevant actors, including governments, international organizations, and the commercial sector, and civil society, act collaboratively with preset rigid goals to achieve

eradication from menace of Hepatitis C<sup>13</sup>. Moreover, a recent cross-sectional study in Taiwan reported that low disease awareness is a contributing factor to the high prevalence of hepatitis C infection. A lower education level was associated with a lower rate of disease awareness. The current study aimed to investigate the rates of disease awareness, link-to-care, and treatment uptake of HCV in hyper-endemic areas in southern Taiwan. Lower education levels and normal liver biochemistry were associated with a lower rate of disease awareness. We demonstrated huge gaps in disease awareness, link-to-care, and treatment uptake in the HCV care cascade in an HCV-hyper-endemic area, even in the initial era of direct-acting antiviral agents. Therefore, it is an urgent need to overcome these hurdles to achieve HCV elimination<sup>14</sup>.

Similarly, a study showed that Pakistan has one of the peak HCV infection rates after Egypt in the world<sup>15</sup>. A systematic review also indicated that one in every 20 Pakistanis has already been exposed to HCV. According to careful estimations, the prevalence rate in the general population is 5 percent. A retrospective research investigation on the general population of Punjab province was conducted to find out hepatitis C prevalence. Overall, 66,086 subjects were included in the study. Geographically, the Punjab province showed asymmetrical distribution of Hepatitis C infection, with prevalence rates fluctuating from 5% to 45% in various places, with significantly high prevalence in south Punjab districts<sup>16</sup>.

A qualitative study, conducted in Faisalabad, also advocated that in addition to medical care, religious and spiritual support, can be a crucial coping mechanism in such a chronic illness. Patients usually comment that their requirements in terms of religion and spirituality are not generally considered acceptable. The patient may also experience social isolation and loneliness in the hospital setting. The infectious nature of the disease is another factor contributing to social isolation among hepatitis C patients<sup>17</sup>.

According to the conceptual framework (figure 1) that was developed from the literature, individuals with chronic illnesses like Hepatitis C have physical, psychological, and social obstacles that are linked to their ability to adapt. According to the theory, if patients encounter fewer physical, psychological, and social obstacles, they will adjust to their illness more rapidly; if they encounter many, the opposite effect would be seen.

The stress and coping theory devised by Lazarus and Folkman in 1984, served as the theoretical framework for this investigation (figure 2). According to the theory, stress is caused by discrepancy between external or internal demands and personal and social resources to deal with them. This theory identified two cognitive assessment processes, which are primary appraisal and secondary appraisal.

Primary Appraisal implicates the examining of whether an event is relevant to a person or not. Events acknowledged as personally relevant are valued as stress stimuli (may possibly cause damage, danger, or challenge). If one recognizes event as stressful, he/she weighs his/her own means to deal with the stress and coping responses become

activated. This starts the course of *secondary appraisal*. The frameworks brought forward in the study have complementary but different roles. The conceptual framework explains the link between challenges on the physical, psychological, and social aspects and the amendment of adaptability in Hepatitis C patients. On the other hand, the stress and coping concept gives the theoretical foundation on which the experiences of the research participants in adapting to the stress are viewed. Both frameworks form the structural and theoretical foundation in the study to present adaptability without duplication.

#### **Transactional Theory of Stress and Coping:**

Coping, according to Lazarus and Folkman cognitive and behavioral efforts to deal with stressful events. This model was selected because it is appropriate with the current study. As we know during the infective and treatment stage of Hepatitis, patients particularly young patients are, physically, psychologically and socially stressed but later on patients analyze the stress and available resources to take measures to cope with this tragic situation.

In current study, diagnosis of Hepatitis C served as an agent of primary appraisal for the participants of the study. Physical challenges, psychological issues, social limitations, career curbs and financial constraints were influencing factors. These factors affect coping. The coping mechanism in this study was considered as secondary appraisal which ultimately resulted in effective or ineffective adaptability.

**Material and methods:** We used qualitative phenomenology in this study. Qualitative phenomenology research seeks to discover people's true experiences and meanings. The phenomenological study approach captured, analyzed, and examined participants' experiences and adaptive behaviors from their perspective. This method is an effective qualitative way to characterize one's reality about events and experiences<sup>18</sup>. The individuals who directly experienced the phenomenon serve as the main data source in all qualitative phenomenology investigations<sup>19</sup>.

In order to make the qualitative study rigorous and trustworthy, a variety of techniques were used. Inclusion of quotations to capture the reality of the participants, a technique of long engagement, has helped to increase the credibility of the study. Dependability of the research has been ensured by conducting each interview using a similar pattern of the semi-structured interviewing technique. The confirmability of the research has been ensured by adopting a transparent coding technique. The transferability of research has also been ensured by describing the research context in a thorough manner.

The target population for the current research consisted of patients who had been diagnosed with Hepatitis C at least 3 months prior to the study and were currently receiving treatment for an active Hepatitis C infection. The present study was conducted at the three administrative divisions of South Punjab i.e., Nishtar Hospital Multan, Bahawal Victoria Hospital Bahawalpur and District Headquarter Hospital (DHQ) Dera Ghazi Khan. There is no definitive guideline for determining the sample size in a

phenomenological investigation. However, it has been suggested that a range of 5-25 individuals can effectively handle the issue<sup>20</sup>. Saturation is a crucial criterion for determining an appropriate sample size in qualitative research. It represents a point at which gathering additional data will no longer yield any new and meaningful information for the study<sup>21</sup>. The initial expectation was to include a minimum of 15 people in the study. However, the data reached a point of saturation with 10 individuals, meaning that no additional information was being gathered.

In order to prevent the loss of any crucial or noteworthy information, two individuals were subjected to additional interviews. The respondents were selected using a non-probability purposive selection technique. The sample selection criteria for this study involve young adult patients, both male and female, with ages ranging from 17 to 30 years. This age categorization criterion was established by Jagtap and Kokare in 2016. We enrolled patients who were receiving treatment following a confirmed diagnosis of Hepatitis C using PCR. These patients had been diagnosed at least 03 months prior to the interview and did not have any reported psychiatric disorders. We deliberately eliminated patients with any comorbidities other than Hepatitis C.

Thematic analysis was done through a systematic and continuous process. To start with, the interview transcriptions involved multiple readings until familiarity with the data was accomplished. Manual open coding was involved in the process of identifying and assigning meanings to pieces of text deemed significant. The similar pieces of text were further combined to emerge with sub-themes that shared meaning and patterns within them. In the end, verification of sub-themes led to the development of overarching themes related to the everyday experiences of the respondents. Constant comparison analysis was involved to build consistencies across the transcriptions, and the coding was confirmed and verified numerous times to build rigor on the analysis process.

Formal approvals from the relevant hospitals were acquired following approval by the institutional Review Board (IRB) of the University of Health Sciences (UHS) Lahore. Patients undergoing treatment of Hepatitis C after PCR confirmed diagnosis were approached from Hepatitis Clinics of designated hospitals.

**Results:** The results of this study are presented in a direct correlation with the identified research aims. In establishing research aims, each aim is thoroughly addressed. The first research aim, which seeks an examination of psychological, emotional, physical, and social trauma encountered by young people with Hepatitis C, is identified by a theme called "Health Belief and Support System." The second research aim, which examines strategies that promote effective adaptability, is addressed by another theme called "Strategies for Resilience and Adaptability" that emphasizes strategies employed by research participants. Thus, these themes link research aims with the results.

The demographic showed that individuals in the study who were afflicted with Hepatitis C and were currently

undergoing treatment for the disease. The mean age was 27 years, with a range of 18 to 29 years. The majority of the participants, approximately 67%, were married. 50% of the participants had completed their education up to the graduation level, whereas 25% (3 out of 12) of the participants had no formal education. All the patients were enrolled as candidates for Hepatitis C and were receiving oral antiviral medication from the government facilities in their various districts. After doing an analysis of the qualitative data that was gathered, it was found that the experiences of young patients who were infected with HCV originated within the following themes.

1) Health Belief and Support System

2) Strategies for resilience and adaptability

Subthemes are subordinate categories that fall within a broader theme. When multiple subthemes with comparable characteristics are grouped together, they form a complex and extensive theme that illustrates the hierarchical structure of the data<sup>22</sup>. The subthemes encompassing the ideas, thoughts, and perceptions of the participants are categorized within the overarching themes.

**Theme 1: Health Belief and Support System:** Another major theme emerged was health belief and support system. In Islam, health is described as a treasured divine blessing with both a bodily and a spiritual dimension, with the latter being much more significant. While Social support is recognized as construct that has long been proposed to have direct and shielding impacts on patients' well-being and emotional adjustment to adverse events.

**Disease as divine test:** Participants exclaimed that they had accepted their ailment because they trusted in God's will and believed that the challenges in human life are pre-planned by God and He has the sole authority over the matters of health and illness. Study participants strongly advocated the role of belief system in health and illness. They stated as:

*"Disease may attack at any time in one's life, Holy God challenges his beloved ones with pain and sufferings, God has written the life span and we have to spend it, either it is in suffering or otherwise" (ID 1).*

*"Disease is given by ALLAH and Only ALLAH will take it away, whatever the situation is, no one other (than ALLAH) has solution of it" (ID 3).*

**Social support:** The role of healthcare professionals' counselling, familial and friends' support appeared crucial and advantageous in inducing receptive behaviors in patients with Hepatitis C. Compliance with the treatment was hasten due to social support as advocated by different participants. Familial supportive role also arose central in coping with initial apprehensions associated with diagnosis of a disease as verbalized by the respondents.

*"I consulted to a physician, he reassured that it is not a big issue but its treatment is mandatory. I was a little bit irritated initially, after all I had good friends too who counselled me that it is not an issue, and there is medicine and treatment available" (ID 1, ID 6, ID10).*

*"Initially I was very worried then my father counselled me that you will be alright, take proper medicine and treatment. Then doctor guided me about the treatment plan. In fact my family took more care of me when I told them" (ID 7 and ID 8).*

**Theme 2: Strategies for resilience and adaptability:**

Another major theme derived from the data is "Strategies for resilience and adaptability". Stressors in human life grossly impact the normal human functioning and it's natural to dilute the stress by various means. Some participants of the current study also narrated about the use of numerous strategies to deal with the stressors and to adapt effectively with the situation. Four sub-themes were extracted from this theme that are being debated below.

**Recreational activities:** Use of leisure activities was specified by many participants to cope up with stress related to ailment. The participants mentioned about different sort of mind diversion activities which they used during the course of the disease to lessen the mental load. They verbalized as:

*"I used to study some books or I spend most of my time on social media, watching TV and nothing else. I used them to relieve my tension whenever I felt this disease problematic" (ID 3, ID 4).*

*"I used to watch TV with family so that I may not feel psychological burden" (ID 5).*

*"For mind diversion, I used to read books, novel, do exercise and morning walk" (ID 7).*

**Religious practices for solace:** The participants' reliance on faith was a significant coping technique, and they had more prayer sessions than normal. They felt a stronger connection to God. Moreover they discussed the significance of spiritual beliefs and faith in their recovery and living with their sickness. As they claimed that they felt more relaxed after praying.

*"I used to offer prayers, recite Sura-e-Rahman, Sura-e-Fatiha, when I face some worry or feel disappointed I used to remember ALLAH" (ID 2, ID 3).*

*"I did not use to offer prayers regularly in the beginning and recitation of Holy Quran and other religious activities. so, I was a bit more religious after diagnosis and I felt that due to this my worries faded away and all the things came in routine" (ID 3, ID5).*

*"Offering prayer gives you solace" (ID 7.ID 8, ID 11)*

**Lifestyle modifications:** Participants of the study expressed beneficial effects of life style modifications. They were of the view that diet and activity based interventions should be adopted for better coping with this situation and for healthier outcomes, besides laying stress on strict compliance to treatment regimen. They have responded as:

*"I have observed that if you will improve your diet and will take your medicine on time, by God's will, you would be fine" (ID 1, ID 5).*

*"Improve your diet, do some exercise, it will reduce your tensions. The better your food, the more your nutritional requirements will be met and you will not have to face much difficulties" (ID 4).*

**Self-motivation as effective tool for recovery:**

Motivation is the energetic force behind action or behavior. Whatever the cause, staying motivated in the long run requires a high level of personal aspiration. Participants were of the view that worries deeply dampen the healing process. Five participants highlighted the need of self-

motivation for add on health impact. They described it as a key to success in treatment results and stated as:

*"I would say that do not be tense, if you take tension, then problem will not be solved. The more tense you will be, our body's energy will not be utilized, means it will be reduced. Tension makes you half dead" (ID 2).*

*"I would like to suggest that one should not be worried, all praise to the God this disease is treatable. You can be fine and take proper treatment" (ID 6, ID 7, ID 8, ID 10).*

Table 1 indicates the themes and subthemese and determinants.

**Discussion:**

The present study findings revealed that health believes has a positive influence on adaptability of patients with Hepatitis C. By directly connecting the experience of young patients with strategies of adaptability, the study not only complements existing qualitative studies that focus primarily on the burden of illness but also contextualizes the study of patient resilience strategies within culture. The role of spirituality and religion is very important to fight chronic illness and living with its complications as it is believed that disease is test by Allah and He will heal. These findings were supported to the other study<sup>23</sup>. One more study conducted in Jordan support the finding of current study and revealed the importance of health belief system significantly impacts the health seeking behaviors. In order to interact with and overcome some of the social factors that could affect how family members choose to treat sickness, health care workers may benefit from having a thorough understanding of the health belief model utilized by families<sup>24</sup>. Likewise findings explored that role of social support system was amenable in developing positive attitude towards disease. Counselling and support of family, healthcare professional and social circle was pivotal in handling and managing disease. These findings are coherent with the study conducted<sup>25</sup>.

Findings of the study concluded that the quality of a patient's interpersonal relations is critical to effective therapy and recovery. A patient's family can show their support for their loved one's rehabilitation by providing tangible assistance, such as driving them to a doctor's appointment or caring for their children while they seek professional help. Relevant findings were established by study conducted in Saudi Arabia<sup>26</sup>. Moreover, a relevant study conducted in China also yielded the same findings. It is discussed that health belief system is very much crucial to cope with Hepatitis C disease, whereas improved social support are associated with lower psychological discomfort and better health outcomes in patients<sup>27</sup>.

Present study findings indicated that use of leisure activities is vital to cope with stress associated to their illness. The participants discussed several types of mind diversion activities like novel reading, internet surfing, use of social media etc. in spare time, which they utilized to lower the mental load over the course of the sickness. Similar finding were reported<sup>28</sup>.

Since ages, spirituality and religion have been seen as fundamental health determinants. A study conducted in Canada discovered that religion can help to explain some individual and group behaviors as well as the underlying

disparities regarding health and illness<sup>29</sup>. These findings are pertinent to current study. Another study also exclaimed the parallel findings by stating the positive role of spiritual beliefs and faith in their recovery and dealing with their illness. The similar findings were compiled<sup>30</sup>. Additionally, the current study reported that lifestyle amendments impact in terms of beneficial health outcomes. Findings of the study highlighted that nutrition and activity-based therapies should be implemented to enhance coping, in addition to emphasizing strict adherence to treatment regimens. Similar findings were reported<sup>31</sup>. One more relevant study also pointed out the same finding and emphasized that, it is important to incorporate teachings regarding self-management activities, including lifestyle modifications, while devising treatment plans for such patients<sup>32</sup>. The present study also revealed that self-motivation is a key factor in healing and recovery from disease. It was also highlighted that apprehensions regarding disease dampen the healing process. These findings are consistent with the study led<sup>33</sup>. The current study results depict the positive role of self-motivation in successfully passing through the terrain of hardships related to Hepatitis C. Moreover, self-motivation has a pivotal role in combating effectively with Hepatitis C. These findings are consistent with the study conducted<sup>34</sup>. Even though religious coping emerged as the strongest adaptive strategy, the findings also underscore the role of other psychosocial and behavioral factors in enhancing adaptability among young adults with Hepatitis C. Social support from family members, friends, and medical professionals served as an enabling factor that promoted the attitudes toward treatment adherence and emotional adjustment. Lifestyle adjustments, leisure activities, and self-motivation served as an instrumental coping strategy to manage strain and psychological well-being. These non-religious coping strategies suggest a multi-dimensional character of adaptability and underscore the need for holistic psychosocial interventions along with spiritual support.

**Limitations of the study:** There are some limitations in this study, and it is important to acknowledge them. The sample size of this research may not be large enough to ensure the transferability of this research findings to a large extent. Since this research is specific to the subject matter, it may not be easy to apply its findings to other subjects or populations to a certain extent. The fact is that this research is specifically carried out among patients in public health facilities in South Punjab, and the findings may not be applicable to patients in other regions/countries to a certain extent.

**Conclusion:** The study concluded in a way that patients had a wide spectrum of physical, psychological, and emotional distress throughout this phase of sickness. i.e., Stress, anxiety, sadness, etc. The patients additionally discussed in detail the importance of a belief system, daily exercise, adequate food, social and emotional support from friends & family, and proper advice and counselling from healthcare experts play a key role in voyaging across the path of the diagnosis and treatment. The consequences of poor mental health become worse by delayed diagnosis carried on by insufficient testing resources, a shortage of

medications in public hospitals, and inadequate healthcare facilities. These problems could be prevented with appropriate resource allocation. The adaptability of Hepatitis C patients is severely impacted by these gaps. In the meantime, the importance of psychological well-being is greatly overlooked in addition to medical care, despite the fact that it is crucial for enhancing the general quality of life of Hepatitis C patients. In context of nursing practice, strategies should be devised for implementation of holistic care approach in actual clinical settings in governmental hospitals, which is currently lacking. Separate counselling facilities should be available to induce mental health adaptability among patients suffering from Hepatitis C. Administrative flaws in managing resources should be addressed with keen interest by authorities for the provision of continuous quality care.

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#### Conflict of Interest

The authors declare that they have no conflict of interest.

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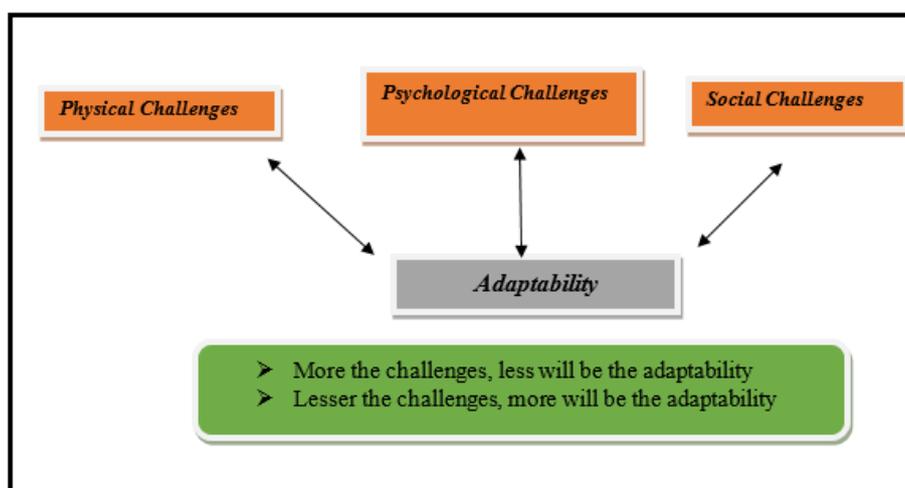


Fig 1. Conceptual framework

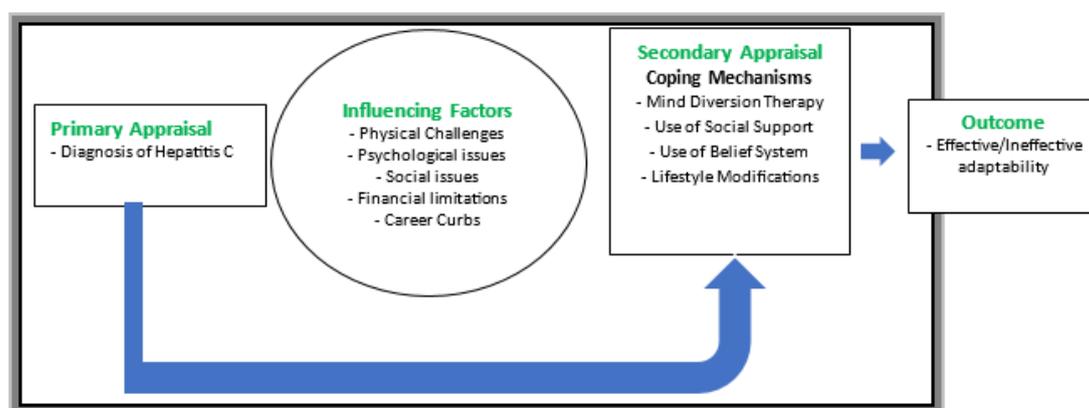


Fig 2. Stress and Coping Theory

**Table 1.** Themes and Sub-themes

Theme	Sub-themes	Determinants
Health Belief and Support System	<i>Disease as divine test</i>	<ul style="list-style-type: none"> <li>➤ Illness – a test from God</li> <li>➤ Belief in pre written fate</li> <li>➤ God as giver and taker of disease</li> </ul>
	<i>Social support</i>	<ul style="list-style-type: none"> <li>➤ Parents’ and Friends’ support</li> <li>➤ Healthcare professionals’ counselling</li> </ul>
	<i>Recreational activities</i>	<ul style="list-style-type: none"> <li>➤ Watching television</li> <li>➤ Mind diversion activities</li> <li>➤ Internet surfing, use of social media, book reading</li> </ul>
Strategies for resilience and adaptability	<i>Religious practices for solace</i>	<ul style="list-style-type: none"> <li>➤ Offering prayers regularly</li> <li>➤ Role of belief system</li> <li>➤ Recitation</li> </ul>
	<i>Lifestyle modifications</i>	<ul style="list-style-type: none"> <li>➤ Dietary modifications</li> <li>➤ Regular exercise</li> <li>➤ Hygienic practices</li> </ul>
	<i>Self-motivation as effective tool for recovery</i>	<ul style="list-style-type: none"> <li>➤ Developing positive attitude</li> <li>➤ Self-motivation</li> <li>➤ Strict compliance to treatment regimen</li> </ul>