

**HEALTH COMMUNICATION AND HEALTH OUTCOMES: ANALYSIS
OF HEPATITIS B AND C PATIENTS IN QUETTA, BALOCHISTAN**



by

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**DEPARTMENT OF SOCIOLOGY
FACULTY OF SOCIAL SCIENCES
INTERNATIONAL ISLAMIC UNIVERSITY ISLAMABAD
2023**



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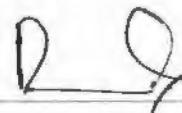
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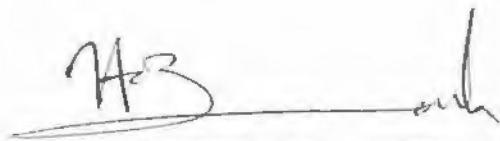
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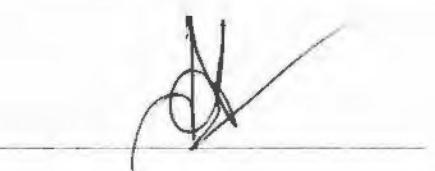
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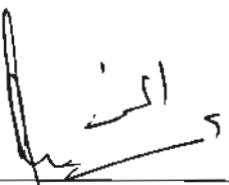
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STATEMENT OF UNDERSTANDING

I, Aminullah Reg. No. 37-FSS/PHDSOC/F16, student of PhD Sociology, Department of Sociology, International Islamic University Islamabad hereby declare that the thesis entitled, "Health Communication and Health Outcomes: Analysis of Hepatitis B and C Patients in Quetta, Balochistan" submitted in partial fulfillment for the requirement of PhD degree is my original work, and has not been submitted for any other degree in national or international institution. Moreover, all the sources that I have indicated are acknowledged by means of complete reference.

Date 20-01-2023

Signature



Aminullah

DEDICATED TO

To all those who are deprived of better healthcare.

List of Abbreviation

BMC	Bolan Medical Complex
CFA	Confirmatory Factor Analysis
CMIHCP	Chief Minister Initiative for Hepatitis Control Program
COPD	Chronic Obstructive Pulmonary Disease
HBM	Health Belief Model
HBM	Health Belief Model
HBsAg	Hepatitis B Surface Antigen
HBV	Hepatitis B Virus
HCV	Hepatitis C Virus
HIV	Human Immunodeficiency Virus
HL	Health Literacy
KP	Khyber Pakhtunkhwa
MQAC	Medical Quality Assurance Commission
NBS	National Bureau of Statistics
PMRC	Pakistan Medical Research Council
SEM	Structural Equation Modeling
SPSS	Statistical Package for Social Sciences
THC	Tailored Health Communication
TRA	Theory of Reasoned Action
WHO	World Health Organization

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ABSTRACT

The present study is an analysis of the underlying factors affecting health communication in hepatitis B and C Patients in Balochistan. The study analyzes health communication at individual, organizational and societal level. Mixed Method Research (MMR) approach is used to study the objectives. For this purpose, data were collected using simple random technique from 399 patients registered in three public sector hospitals of Quetta, the capital city of Balochistan. A well-structured questionnaire was used to collect data from the participants. Quantitative analysis was conducted using Statistical Package for Social Sciences (SPSS). Qualitative data was collected by in-depth interviews from 15 physicians selected through purposive sampling. For Qualitative analysis, thematic analysis technique was employed.

Based on the analysis, it is deduced that better health outcomes are dependent on health communication at individual, organizational and societal levels. The study identified that health literacy, health behavior, media advocacy, cultural competence, disease related stigma, language, health related anxiety, gender, area of residence and health practices are the important factors of health communication. Findings from qualitative analysis were also supporting the quantitative results. The findings of this research suggest that the health communication strategies should be effectively utilized for promoting health communication and propagating preventive health awareness. The study further recommends that the academia should step forward to seek the attention of stakeholders about this particular issue.

The results of the study have potential implications to strengthen the health care system by considering the communicative aspect of public health.

CHAPTER ONE

INTRODUCTION

1.1. Introduction

Communication is the most persuasive activity in social life. It is at work even though when it is pin drop silence. People communicate in every situation even when they don't like to do so. Communication is at work; ranging from virtual to very active state of affairs. Although communication is a taken for granted phenomenon, yet it is deeply dependent on factors like culture, religion, ethnicity and other structural components (See for example; Harner, 2010; Parvanta & Bass, 2018). The National Communication Association (NCA, 2019) defined the concept of communication as "how people use messages to generate meanings within and across various contexts, cultures, channels and media". Although, this definition covers the general aspects of communication, but it is of much importance while dealing public health. Numerous authors have thoroughly shed light on the importance of health communication, its indicators in different social contexts and strategies involved in its enhancement. (See e.g. Harner, 2010; Parvanta, & Bass, 2018; Rimer, & Kreuter, 2006). Comprehending the exclusive needs of patients is necessary for the development of public health communication. People with different ethnic and religious backgrounds perceive health and health care system differently. Communicating health in ordinary and understandable way with these patients/people can make them adherent to the dominant health care system. This audience oriented approach in health can have positive impact on their health outcomes (Parvanta, & Bass, 2018; Slater, 1996)

The present study focuses health communication and health outcomes of hepatitis patients in Balochistan. The available literature about this aspect of public health was limited to communication at individual level, i.e. doctor-patient communication. But this study, primarily explores the health communication at individual, organizational and societal levels. The study analyzes the underlying factors contributing in the health communication of hepatitis patients in a larger context. (See chapter 5 and 6 of the study). The study examines the factors of health communication at three different levels. Language (Chaturvedi, 2008; Ferguson & Candib, 2002), gender (Muinen, 2002; Liuccio, 2015), health Literacy (Nutbeam, 2008; Epstein & Street, 2007), disease related stigma (Rintamaki, Scott, Kosenko, Jensen, 2007), health related anxiety(Koszegi, 2003; Chaturvedi, 2008), cultural competence (Betancourt, Green & Carrillo, 2002), media advocacy (Snyder, 2007; Walsh, Rudd, Moeykens & Moloney, 1993), health behavior (Rimer, & Kreuter, 2006) and health practices (Hughner & Kleine, 2004) were found to be the contributing factors in hindering health communication in the context of Pakistan.

1.2. Background of the Study

Effective communication has a key role in the field of medicine and health care as in all other spheres of human activity. This interpersonal communication can be between doctor and patient, patient and health professional or between general public and health professionals (Freidson 1988). Of these, the most important is the effective communication between doctors and patient that directly affect the diagnosis and treatment processes. Keeping in view the prevalence of chronic diseases, effective communication between doctors and patients is of great importance (Byrne, 1976). Disease, not only creates problems for the patient but it also creates uncertainty for the victim's family. Therefore the role of a doctor extends from not only treating the patient but also adjusting both the patient and the family to the problem which the disease has caused

(Cartwright, 1964). Communicating knowledge and information about the disease, providing support and motivation can play important role while adjusting patients to limited and controlled lifestyle of healthcare system (Davis, 1963). For many scholars effective communication is the only way to control chronic diseases and adjust patients to these diseases (e.g, Kency 1975: Langer, 1975).

Medical Quality Assurance Commission (2016) found that increased patient's satisfaction, practitioner job satisfaction, treatment adherence and better patient's healing, are the outcomes of collaborative and integrated communication between doctors and patients. The commission also reported that the dissatisfaction level of the patients regarding their communication with the practitioners is higher than the dissatisfaction level of the patients with the medical treatment. A myriad of studies have shown that poor communication in health care system has a strong negative impact on the overall health care (Medical Quality Assurance Commission, 2016). The practitioner must properly and extensively communicate the nature, causes, impacts and treatment procedure of the disease with the patients or the family attendants. The practitioner should also communicate the pros and cons of a particular treatment process. The practitioners also need to keep in view the consequences of breaking bad news and they must know the ways to tackle such situations (Ranjan, 2015). In certain cases where the health professionals could not effectively communicate with patients or their attendants, it causes unnecessary pain, poor health outcomes, prolongation of disease and unavoidable deaths. Ineffective communication between the practitioner and the patient-party also incur monetary and temporal loss (Coulter, 2007).

Vermeir (2014) reviewed a sum of sixty nine research articles to find that ineffective Doctor-Patient communication has strong negative impact on; continuity of treatment, patient's

safety, patient's satisfaction and use of valuable resources. In today's world, one of the most prominent causes of disability and deaths is chronic diseases. As a result, the patients everywhere are exposed to threats concerned with these diseases. The patients must be involved in the process of healthcare, which ultimately contribute to decision making at every level in healthcare system. Communication is a decisive factor affecting healthcare along with affecting decision making process. Firstly, communication of patients with doctors and healthcare professionals can influence patients' recovery. Secondly, it helps the patient in regulating emotions. Thirdly, it produces compliance and also ensures satisfaction with the whole healthcare system (kourakos, Fradelos, Papathanasio, Saridi & Kafkia, 2018).

World Health Organization (WHO) report shows that chronic diseases are growing in low and average income countries. Therefore, it needs urgent attention of the professionals and leaders to comprehend the underlying causes of this surge in chronic diseases. The urgency of the situation requires an explicit and clear policy on the part of national and international leaders to eradicate the miseries. As an immediate measure, it is necessary to communicate the most relevant and basic information about the causes of the chronic diseases to both the health care professionals and people at large (WHO, 2005).

The joint commission (2011) showed that health communication, cultural mobility and other necessary social prerequisites for combating chronic disease are not provided in hospitals; therefore, the patients are at risk of deleterious consequences. These social inputs must be injected in the health care systems of hospitals for better and quick treatment of the patients. The joint commission has, for better, highlighted this aspect of health care system to better understand the overall needs of patients, necessary during their treatment. The commission has

strictly focused on effective communication between patients and health care providers, cultural background and family and patient-centered care.

Health communication and health related awareness strategies are underdeveloped even in the first world countries, although these countries are gradually developing a trend of paying more attention to these aspects of health care system. Evidences show that poor health conditions during communicable diseases are the result of ineffective health communication between patients and health care professionals. The field of health communication further needs to be explored and strengthened in order to enhance the proficiency of health care system (Barry, Doyle & Sixsmith, 2014).

Among other measures required for health awareness, self-care is of prime importance. It has been the focus of doctors and health care professionals for quick and effective recovery. Better health outcomes are correlated with self-care. Among other diseases, chronic diseases specifically require self-care for better outcomes and recovery (Ausili, Masotto, Dallora, Salvini & Mauro, 2014). Goals of chronic care are to accelerate functionality, minimize pain emanating from the disease, and prolong health with the help of secondary care. All these goals can be accomplished by establishing effective relationship between patient and doctor. This effective relationship between doctor and individual patient is clearly dependent on their interpersonal communication (Nolte & McKee, 2008). Cardiovascular diseases, diabetes and asthma or chronic obstructive pulmonary disease (COPD) were traditionally considered as chronic diseases. When the duration of diseases and survival rates increased, the scope of chronic diseases widened to encompass many other diseases like different types of cancer, HIV/AIDS, disabilities, mental disorders. All these diseases are linked to lifestyle choices i.e. smoking habits, sexual behavior, exercise, diets and along with genetic predisposition. Patients with

chronic conditions require care from multiple centers i.e. relatives, doctors and health care professionals. Keeping this in view, policy makers are trying to improve life chances through enhancing health care systems (Busse, Blümel, Kreinsen & Zentner, 2010).

As medical evidences show that Hepatitis C is a blood borne disease transmitted either by transfusion, needle stick injury or other cases of exposure to contaminated blood, therefore it is indicative of HIV which is a step advance. All these factors of HCV and HIV resultantly create stigmatization for infected patient which in return negatively affect health care. It also reduces patient's ability to share and continue with effective and timely cure (Zickmund, Ho, Masuda, Ippolito & LaBrecque, 2003).

A considerable number of Hepatitis C Virus infected patients have reported that they face difficulties while consulting physicians, the cause of which might have been the ineffective communication. One prominent reason of poor communication between patient and physician may be the perceived stigmatization of patient by their physician (Zickmund, Hillis, Barnet, Ippolito & LaBrecque, 2004).

Patient-physician communication is effective when there is effective communication promotion partnership. Although some serious steps have been taken for improving the overall health communication but very little attention has been paid to the other aspects of communication which focuses on patient-physician communication partnership. Although it is an exhaustive, time consuming and multifaceted skill, yet it needs to be promoted to establish an effective consultation. Researchers have suggested ways of promoting communication partnership by; training the physicians and the patients, distribution of informative leaflets in

hospitals and clinics and media advocacy of patients' and physicians' communication problems (Cegala, McClure, Marinelli & Post, 2000).

Public health services performance in Pakistan is on a critical verge. There is a marked difference of service provision and utilization in rural and urban areas. Rural areas are clearly at a disadvantaged position in Pakistan. The provision of health services also varies when the provinces or districts are compared, respectively. Provinces of Sindh and Balochistan portray a pathetic image of health services when compared to the provinces of Punjab and Khaiber Pakhtoonkhwa (Afzal & Yusuf, 2013).

1.2.1. Prevalence of Hepatitis B and C in Pakistan

National prevalence survey on hepatitis B and C has been carried out in Pakistan to estimate the overall severity of diseases, the epidemiological aspects and to discover the underlying factors of risk associated. Survey depicts 2.5 % prevalence of hepatitis B surface antigen (HBsAg) and 4.8 percent prevalence of anti-hepatitis C virus (HCV). Both of these diseases contribute to 7.6 percent infection rate in the overall population of the country. There is a strong association of infection rate and multiple risk factors (Qureshi, Bile, Jooma, Alam & Afzidi, 2010). The prevalence of HBsAg and HCV in four provinces of Pakistan was recorded exclusively; Balochistan is ranked first in HBsAg with 4.3 percent prevalence followed by Sindh with 2.5 percent, Punjab with 2.4 percent and KP with 2.3 percent. However, prevalence of HCV was highest in Punjab 6.7% followed by Sindh 5 percent. Prevalence of HCV was less in Balochistan and KP with 1.5 and 1.1 percent, respectively. The overall prevalence of HBsAg and HCV in Pakistan was reported 4.9 percent (Pakistan Medical Research Council, 2008).

1.2.2. Prevalence of Hepatitis B (Surface Anti-gene) According to Gender and Age in Balochistan

The frequency of HBsAg in male was reported 5.2 percent while in the female population it was reported 3.4 percent. The overall prevalence rate in Balochistan was reported 4.3 percent. The most vulnerable age group in Balochistan is 40-49 years. The report showed that 7 percent of people from the study population having ages 40 to 49 years were HBsAg positive, followed by the age group of 30-39 which was reported to be 6.8 percent HBsAg positive. Similarly, 6.6 percent prevalence rate was reported among those people who aged 50 to 59 years. People with ages 60 and above reported 5.2 percent positivity rate, age group 20-29 showed 5.1 percent HBsAg prevalence, 2.8 percent prevalence was reported in age group 5 to 19, and 2.1 percent prevalence was reported in children under five (Pakistan Medical Research Council, 2008).

1.2.3. Prevalence of Hepatitis C Virus According to Gender and Age in Balochistan

Minor difference of HCV prevalence was seen in male and female study populations. Hepatitis C virus was reported in 1.4 percent male population and 1.6 percent of female population in Balochistan. On the other hand the most vulnerable age group in Balochistan (4 percent) suffering from hepatitis C was 60 years and above, followed by 50-59 which reported 3.9 percent of prevalence. Age groups 40-49 and 30-39 showed 2.9 and 2.4 percent prevalence respectively. 1.1 percent, 0.7 percent and 0.3 percent were reported in age groups 20-29, 5-19 and age under-five, respectively (Pakistan Medical Research Council, 2008).

1.3. Statement of the Problem

Health communication has a substantial role in medicine. Communication between physician and patients, between patients and health professionals, between patients and their relatives or among members of society contributes in developing a healthy environment. Along with many other structural constraints, poor health communication contributes to health miseries across Pakistan. Better health environment in a society is a public health issue which is dependent on an effective communication about illnesses at individual, community and societal levels. Patients with chronic diseases face many problems to properly communicate about their diseases at all levels. The issue is the center of attention for diverse array of public health researches around the globe. This issue is undermined in countries like Pakistan where little to none consideration is given to health in general and public health in particular. Only few of the researchers have touched the issue by highlighting the dimension of doctor-patient communication whereas they have ignored the overall health communication; at its different stages and varying levels. This study aims to elaborate the whole situation of health communication and its impacts on patients with chronic diseases like HBV and HCV.

1.4. Study Objectives

- i. To study the prevailing communication gap between patients and their physicians.
- ii. To examine the relationship between health communication and health outcomes in Balochistan.
- iii. To explore the impacts of language, ethnicity, anxiety, health stigma, health literacy health practices and media advocacy on health communication in Balochistan.

iv. To find the impacts of gender, cultural competence and health behavior on health communication.

1.5. Research Hypotheses

- i. There is a relationship between media advocacy, cultural competence and health communication.
- ii. There is association between health related anxieties, diseases related stigma and health communication.
- iii. There is association between health literacy of population and health communication.
- iv. There is relationship between health behavior, gender differentials and health communication.

1.6. Significance of the Study

The present study mainly focuses on the overall situation of public health communication with a claim that along with many other reasons of health disparities in Pakistan, one prominent cause of poor health condition is lack of health communication at individual, organizational and societal levels. The researcher thoroughly traces the undermining factors involved in the process of poor health communication and their relationship to poor health condition among hepatitis infected patients in Balochistan.

During the course of reviewing literature related to the research area, a prominent gap was found in the field of health sociology. A diverse array of literature was found related to one dimension of health communication which thoroughly discussed doctor-patient communication. The literature has left behind a gap that focuses the overall communication at larger part of

society in Pakistan. Addressing this research gap, the said study focuses on the health communication at individual, organizational and societal levels. On individual level, the stigma and anxiety associated with the disease has thoroughly been discussed and explored. At organizational level the variables comprise of health literacy of people about diseases and media advocacy associated with the overall health conditions of people. At societal level the variables include, cultural competence, health behavior and health practices which are considered to be indicators of health conditions in a society. These variables explored in this study, extends the debate of health communication in Pakistani context from mere doctor patient communication to a wider range.

This research study will contribute to health sociology by focusing the social scientific ideas discussed in literature as it has tried to minimize the research gap. Furthermore, this study highlights the problems faced by hepatitis infected patients due to poor health communication in Pakistani society. The findings of the study regarding the shortcomings in the health communication can sensitize society in general and the concerned authorities in particular. Furthermore the said study has included some interdisciplinary questions to produce knowledge about how society shapes people's behavior to perceive health, disease and cure. The findings of the study suggest that certain misconceptions regarding health and illness are shaped by religious and cultural beliefs that in return are shaping people's behavior. The findings show that these misconceptions are detrimental to the overall process of treatment and healing process. The findings of the study will discourage the old conception of health and will bring forth new ideas to the debate such as role of anxiety, religious misconception, cultural competence and health behavior.

CHAPTER TWO

LITERATURE REVIEW

2.1. Empirical Review

The literature review is the part where the researcher assesses to the facts revealed from the relationship of different variable (Ford, & Richardson, 1094). In this section I have explored the study variables through the literature for empirical evidences by different authors. This section sheds light on the variables used throughout the research process. The variables that were found the contributing factors in the Pakistani context include Media Advocacy (Snyder, 2007; Walsh, Rudd, Moeykens & Moloney, 1993), Health Related Anxiety (Koszegi, 2003; Chaturvedi, 2008), Gender (Muinen, 2002; Liuccio, 2015), Health Literacy (Nutbeam, 2008; Epstein & Street, 2007) Language (Chaturvedi, 2008; Ferguson & Candib, 2002), Disease Related Stigma (Rintamaki, Scott, Kosenko & Jensen, 2007), Health Behaviour (Rimer, & Kreuter, 2006), Cultural Competence (Betancourt, Green & Carrillo, 2002) and Health Practices (Hughner & Kleine, 2004).

Media Advocacy

Media advocacy is of much importance in highlighting any issue at community level. Present study focuses on the importance of media advocacy of health care system in the context of Pakistan. It is little different from other health communication strategies because health communication strategies target at health problems and focus prevention at societal levels but media advocacy targets at rising voices against those problems (Dorfman, 2014). This study focuses the importance of media advocacy in changing health behaviour of people toward better

understanding about their health issues and their available treatment resources. The literature highlighted the role of media advocacy as follows.

Media has the potential to shape the behavior of people toward a particular issue of social importance. It is an extensive and most effective channel of infiltrating ideas and knowledge into the minds of public. It can positively revolutionize the field of health communication. The more it focuses on any health problem the more chances of remedy can be ensured. Executing health related campaigns can be effective in altering the dietary behavior of people. By involving community in health communication campaign for a specific period of time can help to effectively achieve health goals. Communication campaign is an organized activity of social marketing which involves a large population. Changing health behavior of people through communication campaign includes use of health services, dietary habits, family planning, dental care, exercise, testing and screening, medication use and substance use prevention. Communication campaign mostly uses presentations, posters, public service messages through media, discussion groups and workplace counseling (Snyder, 2007).

Changing health behavior through media campaign is an effective technique. Proliferation of health messages and depiction of healthy lifestyle in media has effective health outcome. Media campaigns can induce positive, and reduce negative health behaviors in population. These campaigns make the population more health sensitive and they start consulting the doctors as soon as the complications arise; which help in on-time report of the disease (Wakefield, Loken & Hornik, 2010). Throughout its history the United States government has failed to promote the fundamentals of improving the health care system i.e. changing dietary behavior, making people to abstain from excessive drinking and tobacco usage. Molding the behavior of masses through social marketing can effectively make a country able to cope with

the poor health conditions. Social marketing is trying to develop sense making; a tool to divert communication from the process of delivering message to the process of dialogue, where patient are being encouraged to approach healing of frustrating health problems (Walsh, Rudd, Moeykens & Moloney, 1993).

Communication campaign is an effective technique to change the behavior through an organized activity targeted at a specific population for a specific period of time. The target population is usually a large community which is regularly exposed to health related ideas and messages. Health communication campaigns usually target behaviors like poor diet, tobacco usage, physical activity, alcohol consumption, use of toxic agents and microbial agents (Synder, 2007). Other researchers have also found that mass media campaign can effectively change the behavior of a huge population by its direct and indirect pathways of messages (Hornik, Yanovitzky, 2003). The direct effect includes their decision making process at individual level while the indirect pathway includes bringing change in the social environment by incorporating changes in the social norms and values (Fishbein & Azjen, 2010).

2.1.1. Health Related Anxiety

Health anxiety is a condition where someone irrationally starts worrying about his/ her health. The literature highlights the importance of health related anxiety in health communication and health outcomes. Scholars are of the view that health anxiety affects health communication in different ways. Some of the scholars says that health anxiety undermines the decision making process of diseased people. While some of them clarifies that it may cause immune depression in ill person. The present study highlighted its effects on health communication and health outcomes of hepatitis patients in the context of Pakistan.

Patient's response to disease and their timely decision is an important step in the healing process. Different studies have analyzed the costs of getting medical attention and getting better health condition resulting from the response and the decision making. Anxious situation caused by disease may result in patient's lower ability in decision making. Patients often avoid consulting doctors in sever anxious situations. They may not avoid doctors in small and minute health problems (Koszegi, 2003).

Effective dealing with the patients is only possible when the consultant acknowledges his/her limitations and s/he prepares to cope with these limitations. Learning skills and practices can help the consultant to cope with the unpleasant and teasing situations. Depression, anger and anxiety are part of our day to day experiences. Denying and ignoring them may produce denial and delay of the necessary healing procedure. These may produce further anger and violence in patients' behavior. Effective and efficient interaction with them may produce long lasting impression. To talk medicine with patients in an ordinary language is no less than a skill. They don't care what one knows but they better understand how we care of them (Chaturvedi, 2008).

2.1.2. Gender

Gender of the patient is significant at both the diagnostic and treatment phases of the disease even in the modern societies. In traditional and normative societies like Pakistan, it affects health communication and health outcomes. The reviewed literature thoroughly discusses the effects of gender differentials on health in a variety of ways. Some of the scholars highlight the immense feminization of health in western societies, while some also discussed the undermined part of women in health institution. This study focuses on how women health is vulnerable while

communicating with their physicians and other health related individuals in the context of Pakistan.

Apart from other determinants of health communication gender is prominent factor of poor health communication between doctor and patient. This aspect of health care system has been addressed in several studies. With a focused view on the issue, one prominent dimension of health care delivery system must be concern; to know that with the immense feminization of health in western world, consultation of male patients by female doctors will be common in future. This aspect may demand more concentration on why this happens. In this regard health should be concerned as gender neutral. Having more knowledge about gender issues does not necessarily depict that it has been applied in medicine, medical care and health policy (Brink-Muinen, 2002).

Promoting gender sensitivity through health communication requires community based awareness of gender issues. For this purpose woman's concerns of health i.e. how they perceive health, health needs and their problems, must be the focus of the field. Health communication as a field of study may narrow down the miseries of women by focusing upon the issue of how women communicate, deliver and perceive the health messages. Women should be encouraged to take part in public health communication programs so they could easily understand their health and make effective decisions (Liuccio, 2015).

2.1.3. Health Literacy

Literature sheds light on the importance of health literacy and its effects on health outcomes. The present study highlights its importance in a widened way. The study claims about the overall health literacy of people at community level to be necessary for preventing the diseases.

Therefore the study focuses that better health literacy of people is not possible without proper health communication at larger level.

Health literacy is of much importance because its relationship has been proved with health status and better health outcomes both at clinical as well as at the societal level. A sophisticated understanding of health communication and health literacy is required at both interpersonal and organizational levels to enhance better life chances (Nutbeam, 2008). Quality of health care is dependent on clear communication between patient and doctors. When a patient visits the physician and explains the medical history and symptoms to him/her, based on that information the physicians prescribe the treatment and medicines. However, in most of the cases the treatment is less curative because of the poor health literacy of the patient to communicate the complications. In such a way, although, a considerable amount of money is spent while screening and treating the disease; in the health care system, yet little consideration is given to the much important health literacy problem. If these resources are used properly and proportionately, the entire health care system can be revolutionized. If the patient is literate in health related issues, treatment can be carried out in effective and less consuming manner. Thus health literacy is of utmost importance for patient's interest and better health outcomes (Kindig, Panzer & Bohlman, 2004).

Health literacy is the ultimate product of health education. Updating health care system can enhance health education. Treating patients with respect and giving them informed response through effective communication may lead to improved health outcomes (see for example; Arora, 2003; Epstein & Street, 2007). It is described by the diverse literature that altering health behavior is the central concern of health education and health literacy. Positive or informed health behavior is the ultimate purpose of health education so that patients may take timely and

informed decision about their illness (Rimer et al., 2004). In a longitudinal study conducted by Rimals (2000) it was investigated that whether it's individual's self-efficacy that governs his/her perceived risk and translate it for them into health information or they try to use the gained knowledge for healthy behavioral practices. He found that individuals with low level of self-efficacy show low level of desired actions even though having enough knowledge of adopting healthy life style. Maibach, Flora and Nass (1991) revealed that individuals' self-efficacy belief and their effective health campaigns contribute to their health habits of taking foods and doing physical activities.

2.1.4. Language

Language and communication are necessary components for each other. Effective communication requires a clear understanding of the medium of communication. The present study focuses the importance of language in health communication. In cultural societies like Pakistan better health communication between physicians and patients, between patient and treatment is of great importance. The study highlights the importance of language in health communication and its effects on health outcomes.

Language and culture play an important role in the meaning making process. Health communication must keep in consideration this aspect of language that a particular phenomenon can have varied and diverse meanings in different contexts of language and culture. Health communication scholars must take into account the pragmatic aspect of language while searching for better health outcomes (Thompson, Parrott & Nussbaum, 2011). The effectiveness of interaction with patient may be produced if the consultant is able to portray an impressive concern to the patients in conversation. Patient understands in ordinary language which is why

the health care providers should avoid the use of jargons or other technical terms in their conversation with the patients. Patients weight the concern and compassion of health care professionals. This art of care can bring credibility among them and enhance healing. Hurting patient with harsh conversation may further escalate and deteriorate their anxious condition. (Chaturvedi, 2008).

Language, race and ethnicity significantly influence the doctor patient relationship. Patients with high English proficiency catch high sympathetic response, make good interaction, receive enough information and gets encouraged to make better decision making while consulting their physicians. Results further depict that patients with low English proficiency are less likely to choose doctors who are not language concordant. They show more satisfaction with racially concordant physicians (Ferguson & Candib, 2002).

2.1.5. Disease Related Stigma

Disease related stigma is attached with some diseases like AIDS and sexually transmitted diseases (STDs) even in advanced societies. In traditional societies even blood born diseases like hepatitis B and C also attach stigma. People with hepatitis bear a kind of fear while infected with these viruses. These attached stigmas affect their communication and treatment while undermining their health outcomes. The present study sheds light on how disease related stigma affect health communication and health outcomes in hepatitis B and C patients in Balochistan.

Health related stigma refers to a situation in which a group of people is stereotyped or labeled for having a particular disease. Such stigmatization of a group provides an opportunity to other social groups to alienate and distance the target group due to fear of the spread of infection. Stigma mainly results in status loss, guilt and shaming in the people who are stigmatized. Stigma

always pushes the stigmatized in underprivileged and discriminated position which include social and economic losses (Deacon, 2006). To investigate individuals' others aspects in psychological and social context the researcher must go beyond their perspective of health belief model. Weiden (1997) has found that non adherence of patients with their treatment is associated with their perceived stigma. It has also been found that depressed adults with feeling of stigma are more likely to leave their follow ups (Sirey et al., 2001).

HIV infected patients may have very sensitive and stigmatized feelings. They judge themselves by the behavior of others. Identifying or ignoring such type of behaviors might have importance for health care providers. HIV stigma in 50 male respondents in America was examined in health care perspective. Respondents narrated a variety of behaviors shown by health care individuals ranging from uncertain response to a very transparent ignorance (Rintamaki, Scott, Kosenko & Jensen, 2007). The health belief model is based on the principle of preventing diseases on the basis of perceived severity of diseases. It links the actions of individuals with their beliefs about their diseases (Janz & Becker, 1984). Limitation of health belief model is that in what circumstances the action could be taken? It ignores the perceived severity of socio-psychological factors where health related stigma plays its role. For instance patients with mental illness avoid reporting disease will eventually be asked to diminish stigma as a health behavior (See for example; Wahl, 1999 & US Department of Health and Human Services, 1999).

2.1.6. Health Behaviour

Healthy behaviour of people at community level can enhance better health conditions. Prevention of diseases is dependent on effective health communication while targeting the

enhancement of health behaviour of people. Health conscious behaviour is a pre-requisite of healthy life. The present study highlights the prevailing condition of health behaviour and its impacts on health outcomes in the context of Pakistan.

Tailored Health Communication (THC) is the information and behavior change technique targeted at individuals to enhance the health outcomes and interest. The technique of tailored health communication has been studied as a source of changing health behaviors by influencing individuals to adopt health related strategies. These include the intensity of peoples' interests in attending communication, perceiving it relevant and preparing themselves for action. Diverse literature has shown that application of THC in almost all cases have changed health behavior in number of health related habits; i.e. smoking, diet, exercise and screening. It is further made effective if we incorporate multi-messaging pathways instead of relying on one-dimensional pathway (Rimer & Kreuter, 2006). Health campaigns are very effective when specifically designed for bringing in behavior changes rather than just promoting awareness. Health campaigns can be either for promoting awareness, bringing change in behavior or for the execution of both. Often the behavior change campaign involves changing the dietary habits of population i.e. altering their way of cooking foods, food eating schedules, walk and other ways of ensuring healthy lives. The health campaigns must hold in consideration the feasibility of the project and willingness of the population. The campaigns must be designed as easy as possible, so that the population can learn properly by consuming this provided knowledge. (Fisher & Fisher, 1996).

It has been observed that the existing literature is more concerned with the immediate effects of behavior changing campaigns as compared to its long term effects. Therefore, most of health campaigns and their consequent effects are never pursued and recorded; as soon as the

campaigns are closed. Efforts are needed to make the campaigns participatory at community level by focusing the sensitivities of local cultures and beliefs. Such behavioral changing campaigns can have long lasting effects on individuals (See for example; Snyder, 2007 and Shimp, 1997) behavioral changing campaigns must consider its cost effectiveness along with its scope. The literature shows that utilizing media can be much affordable and reachable to the communities (Hornik, 1988).

2.1.7. Cultural Competence

Cultural competence of health care system is of great importance. In advanced societies it has emerged as a separate area of study in the field of health sociology. It sheds light on the adoptability of health care system. In traditional societies proper health care system needs to be adopted and encouraged against folk methods of treatments. The said study sheds light on the present conditions that how people peruse their health and its treatment.

Cultural competence as a field of health care has emerged in parts to analyze the causes that may influence the health status and contribute to health disparities among diverse ethnic and racial minorities. The significant aim of the field is to make health care system effective to diagnose patients' problem along with focusing their diverse cultural and religious sensitivities relating to their health (Betancourt, Green & Carrillo, 2002).

Organizational cultural competence is a step forward way to overcome health disparities among marginalized groups. Recruiting minorities and promoting them to positions of organizational leadership can lead to minimize the hindrances. Systematic cultural competence focuses on the underlying barriers that contribute to undermine marginalized groups preferences and their health related beliefs and behaviors. Clinical cultural competence recommends strong

and effective health care skills to incorporate patients' cultural and religious beliefs and negotiate and interact with them accordingly (Betancourt, Green & Carrillo, 2002).

It has also been observed that patients with ethnic differences are less expressive with their physicians, and the doctors also behave less effectively with them. Cultural difference has always brought barriers in doctor and patient's communication. (Schouten & Meeuwesen, 2006). Cultural-Sensitive health care providers can effectively communicate with patients belonging to different cultures (Brislin, 1993). Literature reveals that cultural sensitivity is of great importance while treating culturally diverse patients (Bronner, 1994; Majumdar, 1995; Moore, 1992). Considering patient's cultures during treatment and recommendation is the prominent focus of cultural sensitivity (Brislin, 1993; Dennis, Giangreco, 1996; Jackson & Haynes, 1992). This may involve comprehending and valuing the norms and beliefs of patients during treatment.

2.1.8. Health Practices

Laymen conceptualize health, illness and treatment differently based on cultural, religious and economic backgrounds. The differences in the conceptualization of health in different communities push the people away from the contemporary scientific ways of medication and hospitalization. Some believe fasting as a remedy from illness; others believe that daily routine determines one's health while others believe that cleanliness and proper life can be the source of healthy life. For some people active spiritual conduct helps in maintaining good health and considers illness as a spiritual or moral fault. All these beliefs and connotation of such beliefs reflect that a great majority of people disassociate themselves with the dominant scientific and objective approach of the day (Hughner & Kleine, 2004).

Lay people do not necessarily conceptualize health on the basis of scientific and objective knowledge. Their conceptualization of health is based on multiple sources of knowledge including; folk wisdom, personnel experiences, spirituality and cultural beliefs. These factor do not only construct an accumulative image about an illness in the mind of people but these factors also play important role in determining the cure for that particular illness (Rogers, 1991)

2.1.9. Conceptual Model 1

The conceptual model 1 consists of seven variables where three variables i.e. health literacy, cultural competence and disease related stigma have been assumed to be independent while two variable i.e. health practices and health behaviour have been assumed to be mediating variable. On the other hand patient related health outcome has been assumed as dependent variable while media advocacy has been assumed as corresponding variable.

The model shows the direct and indirect effect of independent variables on dependent variables. The independent variables i.e. health literacy and disease related stigma are directly affecting patient related health outcomes while health alone affecting health outcomes through the mediation of health practices and health behaviour. Cultural competence indirectly affects health outcomes through the mediation of health practices. The model further shows that media advocacy apart from other variable influence health outcomes.

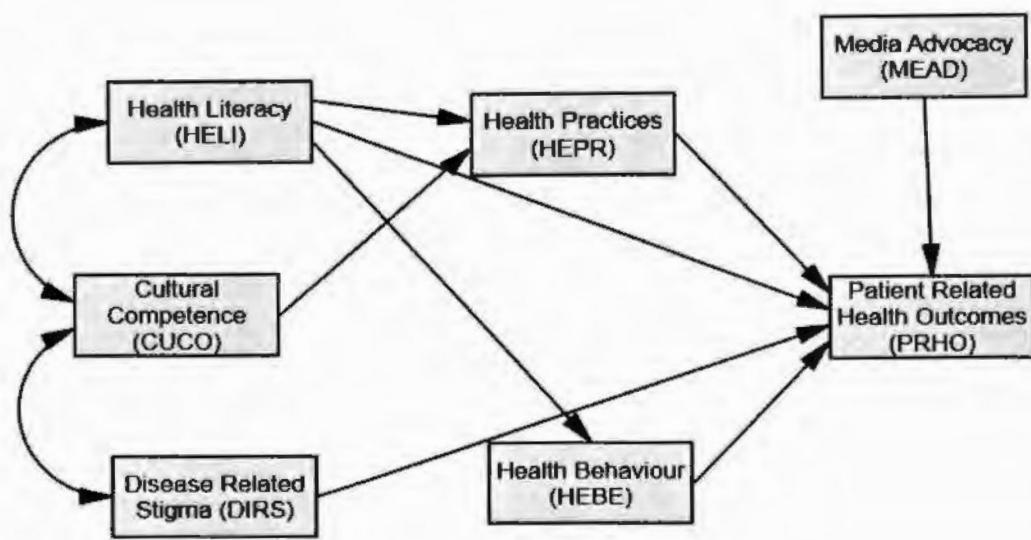


Figure 2.1 Conceptual Framework of Model 1

Based on the above model, the following hypotheses have been developed which have direct effects. The hypotheses having indirect effects have been discussed in next chapter.

Hypothesis 1: There is a direct effect of health literacy and cultural competence of patients on their health practices in Balochistan.

Hypothesis 2: There is direct effect of health literacy and disease related stigma of patients on patient related health outcomes in Balochistan.

Hypothesis 3: There is direct effect of health practices, health behavior and media advocacy of patients on patient related health outcomes in Balochistan.

Hypothesis 4: There is direct effect of health literacy on health behavior and patient related health outcomes in Balochistan.

Hypothesis 5: There is correlation between health literacy and cultural competence among hepatitis patients in Balochistan.

Hypothesis6: There is correlation between cultural competence and diseases related stigma among hepatitis patients in Balochistan.

2.1.10. Conceptual Model 2

The conceptual model 2 consists of seven variables where three variables i.e. health practices, health behaviour and media advocacy have been assumed to be independent while two variable i.e. health literacy and disease related stigma have been assumed to be mediating variable. On the other hand patient related health outcome has been assumed as dependent variable while cultural competence has been assumed as corresponding variable.

The model further shows the direct and indirect effect of independent variables on dependent variables. The independent variables i.e. health practices, health behaviour and media advocacy are directly affecting patient related health outcome while health practices indirectly affecting health outcome through the mediation of health literacy and disease related stigma. Furthermore, health behaviour indirectly affects health outcomes through the mediation of health literacy. The model also shows that media advocacy indirectly affects health outcomes through the mediation of health literacy and disease related stigma. On the other hand, cultural competence affects patient related health outcome as corresponding variable.

The model further shows the correlation among independent variables. It shows that there is correlation between health practices, health behaviour and media advocacy.

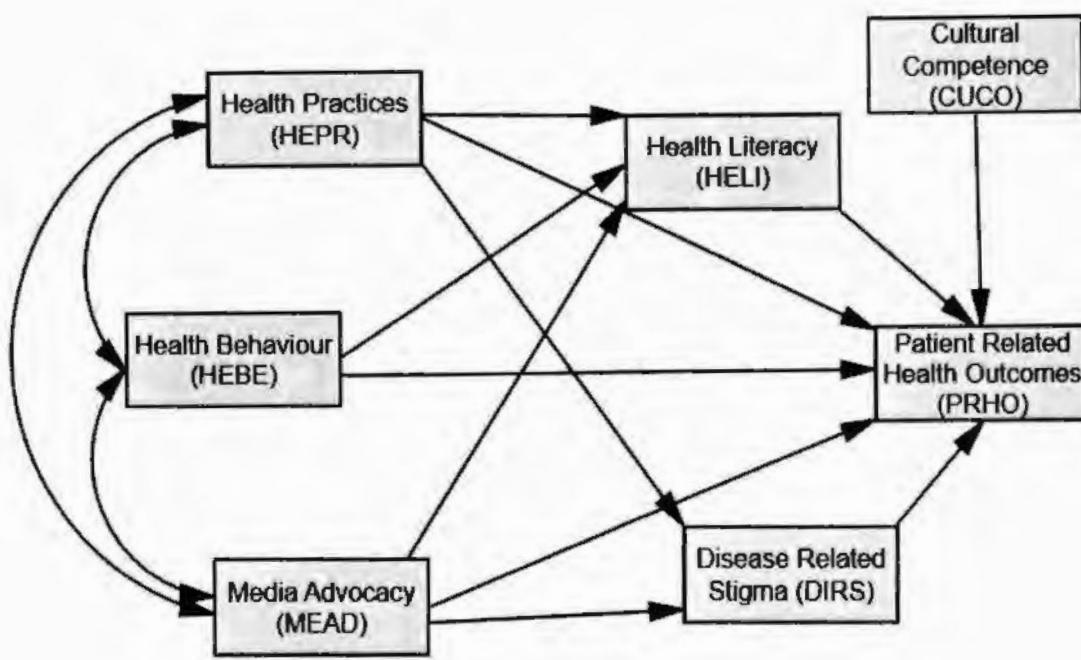


Figure 2.2 Conceptual Framework of Model 2

Based on the above conceptual model, the following hypotheses have been developed which are having direct effects. The hypotheses having indirect effects have been discussed in next chapter.

Hypothesis 1: There is a direct effect of health practices on health literacy, patient health related outcomes and disease related stigma of hepatitis patients in Balochistan.

Hypothesis 2: There is direct effect of health behavior on health literacy and patient related health outcomes of hepatitis patients in Balochistan.

Hypothesis 3: There is direct effect of media advocacy on health literacy, patient related health outcomes and disease related stigma of hepatitis patients in Balochistan.

Hypothesis 4: There is direct effect of health literacy, cultural competence and disease related stigma on patient related health outcomes of hepatitis patients in Balochistan.

Hypothesis5: There is correlation between health practices and media advocacy among hepatitis patients in Balochistan.

Hypothesis6: There is correlation between health practices health behavior among hepatitis patients in Balochistan.

Hypothesis7: There is correlation between health behavior and media advocacy among hepatitis patients in Balochistan.

2.2. Theoretical Review

This section examines the theoretical underpinning of the study. Variety of theoretical approaches supports the present study. Due to multi-dimensional nature the study it needs multiple theoretical approaches to be linked with the arguments. This study examines health communication at individual, organizational and societal levels therefore it is pertinent to employ relevant models of health for each dimension of the study. The theoretical approaches used in the study are health belief model which underpins the health behavior of people and their preventive cure of the diseases. The study also employs communication persuasion model that can elaborate about health literacy of people at societal level and media advocacy which is important for behavioral change. The study further elaborates the arguments of cultural competence by the theory planned behavior where it sheds light on the attitude of people, their subjective norms and perceived behavioral control. The study further strengthens its argument of disease related anxiety while going through transactional model of stress and coping where it elaborates about individual primary and secondary appraisal. The primary appraisal is individual's ability of knowing about the stressor and the secondary appraisal is his/ her ability of coping with the stressor. Furthermore the study analyses the argument of health practices and disease related

stigma through the background of health life style model. Health life style model propose about living condition of people, their collectivities, age, gender and ethnicity and class circumstances. At the last the study also employs the concept of collectivities which argues about the thought process of a society and cultural competence. It elaborates on how culture, religion, workplace environment and politics influence the thought processes of people and how the thought processes affect health. Detail discussions of different theoretical approaches employed in the study have been given bellow.

2.2.1. Health Belief Model

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The Health Belief Model (HBM) was developed in 1974 by Becker, based on the contribution of social psychologists Hoshbaum, Rosenstock and Kegels. The model mainly focuses on the individual behavioral change. According to this model two main factors are involved in influencing health related protective behavior; 1) person's susceptibility to diseases and its subsequent sever consequences, 2) his/ her belief of the benefits of taking recommended actions that must outweigh the necessary barriers or costs of taking actions (Naidoo & Wills, 2000). Tailored health communication (THC) is the information and behavior change technique targeted at individual to focus the health outcomes and interests. The technique of tailored health communication has been studied as a source of changing health behavior by influencing individuals to adopt health related strategies. These include the intensity of peoples' interests in attending communication, perceiving it relevant and preparing themselves for action. A great deal of literature shows that THC in most of the cases have changed health behavior in number of health related habits; i.e. smoking, diet, exercise and screening. Its effectiveness can be further enhanced by incorporating multi-channel communicative/messaging pathways instead of relying on the unidirectional pathway of doctor-patient communication (Rimer & Kreuter, 2006). A

significant deal of studies have explored and narrated that health related stigma, i.e. fear of segregation, label of deviant behavior and loneliness, is a prominent barrier in health communication. Different aspects of stigma are responsible in undermining public health communication. A prominent dark side of health related stigma is the stigma of low literacy of patients while giving health related information to health professionals (Easton, Entwistle & Williams, 2013).

2.2.2. Communication Persuasion Model

Communication persuasion model in strict sense is slightly different from other communication models in field of public health communication. The use of persuasion communication model is dominantly found in the field of advertising health related messages. This model mainly focuses public health communication especially through the use of mass media. This feature of involving mass media makes the model different from other communication models in which only small-scale risk population is treated. The model can be used in variety of ways; which include the evaluation of consumer behavior while responding to a public health message. The communication persuasion model works at two levels; input communication factor and output communication factor. The input communication factors of change contains five stages; source, message, channel, receiver and destination. These input variables, or stages of communication change, allow the practitioner to select, reject or manipulate the message. The output variable are dependent over these input communication variables. Output communication variables are a series of related occurrences that shall take place in a specific order so that a message could have the effect of change. These output communication variables include; tuning in, attending, liking, comprehending, generating, acquiring, agreeing, storing, retrieving, deciding, acting, post acting and covering. A behavior change toward a desire action can be brought when both input and

output communication variables are tuned in the specific order while conducting an effective mass media campaign (Corcoran, 2007). Health behavior in its broader sense refers to manifest actions of organizations, groups and individuals bringing social change which resultantly enhance policy development and encourage policy implementation to improve and ensure quality of life (Parkerson, 1993). Change in social environment ultimately brings change in health behavior with rapid means of communication. Media and other personalized means of communication can produce an environment of education which will finally produce health literacy. Health literacy in return accelerates health communication (Glanz, Rimer & Viswanath, 2008).

2.2.3. Theory of Reasoned Action

Theory of Reasoned Action (TRA) was originally proposed by Ajzen and Fishbein in 1980 which focuses mainly on the performance of a specific behavior. According to this theory the role of a specific behavioral change is determined by an individual's intentions to perform that specific behavior. Intention of performing a specific behavior is the product of two factors; individual's attitude for adopting a specific behavior (positive/negative) and individual's subjective norms toward that specific behavior (overall perception of significant others toward person's specific behavior). According to this theory attitudes are the outcomes or functions of behavioral beliefs and their evaluative outputs whereas subjective norms are the outcomes of an individual's normative belief and inspirations to comply with a specific task (Montano & Kasprzyk 2015). Satisfying physician-patient relationship is mainly dependent over culture and ethnicity. Medical communication is always affected by these factors. Studies reveal that physicians behave less effectively when communicating with ethnically different patients. Patients too are less verbally expressive and assertive with culturally and ethnically different

physicians. Medical communication is adversely affected by five cultural differences. 1) Cultural beliefs about health and illness. 2) Value differences. 3) Cultural understanding of doctor-patient relationship. 4) Perceived ethnic biases. 5) Linguistic and communication barriers (Schouten, Meeuwesen, 2005). A great majority of people are practicing traditional medicine; osteopaths, chiropractors, acupuncture, folk healers and faith healer because of their normative structure and religious beliefs. Their attitudes toward healing practices are predominantly structured by their normative system of culture and religion (Cockerham, 2015).

2.2.4. Transactional model of stress and coping

The factors that cause stress in an individual are called stressors. Stressors disturb the balance between the external and internal environment of the individual. Stressors affect psychological as well as physical well beings for restoring balance (Lazarus, & Cohen, 1977). The transactional model of stress and coping is thus a comprehensive framework of analyzing and evaluating the procedures of coping with stressful situations. These situations are the product of an individual's environmental transactions. This procedure of transactions is dependent on the power of external stressor. Therefore it is firstly facilitated by individual's appraisal of stressor and secondly his/her ability of coping or the social and cultural means at disposal (Antonovsky, & Kats, 1967). Stress is defined as 'the fear or anxiety induced in an individual, produced by mind-body reaction to stimuli'. It normally happens in a situation during which the individual feels some threat and fear. Historically, researches about stress have focused on only two aspects i.e. the environmental or external stimuli and the changes in individuals. For sociologist, the primary focus of attention should be the environmental or external stimuli of stress which are called as stressors (Pearlin, 1989).

2.2.5. Health Life Style Model

For a great period of time the much important variables of life style and health had escaped the eyes of the academicians. It was in the twenty first century that attention to the correlation of the two variables was paid. Health life style theory was proposed by the author (Cockerham, 2005, 2013a, 2013b; Hinote, 2015), which suggested a theoretical model for the behavioral change and focused on the life style of people. The author assumed that it was needed in response to the epidemiological transmission which occurred during the twentieth century. Health life style was linked to the mortalities from both communicable and chronic diseases. The idea carried with the revelation that poor health is the ultimate result of one's life style. Health has not been communicated to the people therefore their life style is not satisfactory.

Life style model propose four categories of organizational or structural variables like; (1) living condition (2) collectivities (3) age, gender and race/ethnicity and (4) class circumstances. These variables determine the socialization of people which resultantly affect their life choices. These organizational factors together establish life chances. The produced chances and choices together interact and eventually ensure the foundation of dispositions of social act. This leads to practices that involve health habits. These practices eventually constitute different patterns of health life style.

The conceptualization of the influence of agency and structure is of great importance for theoretical purpose. When one considers health life style, it produces the thought that whether people make decision regarding their foods, diets, smoking and exercise by themselves or they are influenced by the structure? People may believe that it is purely an individual choice. Because they may be influenced by the idea of free will. If this is the case then why people

demand structural changes involved in their health miseries? The theory believes that life style is also a product of distinct configurations of social hierarchies. Life style is a stimulus of individual's self-identity and position in class hierarchies. Some theoretical hints about life style have existed. One prominent aspect may be the impacts of Thorstein Veblen's (1899-1994) idea of the Theory of the Leisure Class. Which proposed the term "life style" According to the theory life style means the approaches of upper class to the mode of leisure. This became synonymous with the culture of consumerism i.e. the belief that only wealthy class has the means of a 'style'. This was an oversight to confine it to the richest only. As we now know that the underprivileged have also their life style (Giddens, 1991).

Weber also suggested insights to this aspect of life style. He proposed that people from the same class share a common life style distinct from the underprivileged. Member of a class expect other members to adopt the same life style even though the individual has a distinct life style. Kalberg 1994 argued that Weber often supported the agency, but he saw that social actions of people are formed in regularities and repeated behavior. For weber the structure and agency have configurator relationship while making individual behavior. For example, in *The Protestant Ethic and the Spirit of Capitalism* (1958) Weber shed light on the top-down flow influence of structure (religion, economy) on individual behavior (Sibeon, 2004).

Weber also pointed that life is not only style dependent on what people produce, but it is also dependent on what they consume. He noted that production promotes consumption. George Ritzer and William Yagatich (2012) argued that making difference in production and consumption produce false thoughts because all actions indistinctly involve both processes.

Most importantly, Weber's sociological contribution to the concept of life style is the interplay between chances and choice (Cockerham, Rütten, & Abel 1997). He called life chances 'the probability of approaching satisfaction for individuals' needs, desires and interests that are attached in structural conditions. Therefore he noted that life chances are proxies of structure and life choices here propose individual agency. Life style is produced in the nexus of chances and choices.

2.2.6. The Concept of Collectivities

Collectivities "thought communities" are groups of people linked through common relationships, like culture, religion, workplace, politics and kinship. These common factors brought them to common frame of thinking therefore these are called thought communities. Collectivities do not only reveal the individual thoughts but also tell about the thoughts of community as a whole (Zerubavel, 1997). According to Berger and Luckmann (1967) the concept of thought communities is analogous to Mead's idea of 'generalized other' in which both these are the concepts of the perspectives of collectivities. Despite this aspect people may accept or reject the normative codes while taking individual action.

In the support of collectivities Weber also contributed with the notion that social collective entities have distinct concepts in individual minds. He notes that individual thinking admires that something really exists with normative authority. This existence of thinking with normative authority administers their actions. Christakis and Fowler (2007, 2008) linked the idea to their research that the influence of social network has strong relationships with their thinking of action. They found that obese individuals highly preferred obese friends and smokers preferred smokers in their surroundings.

2.2.7. Theoretical Model

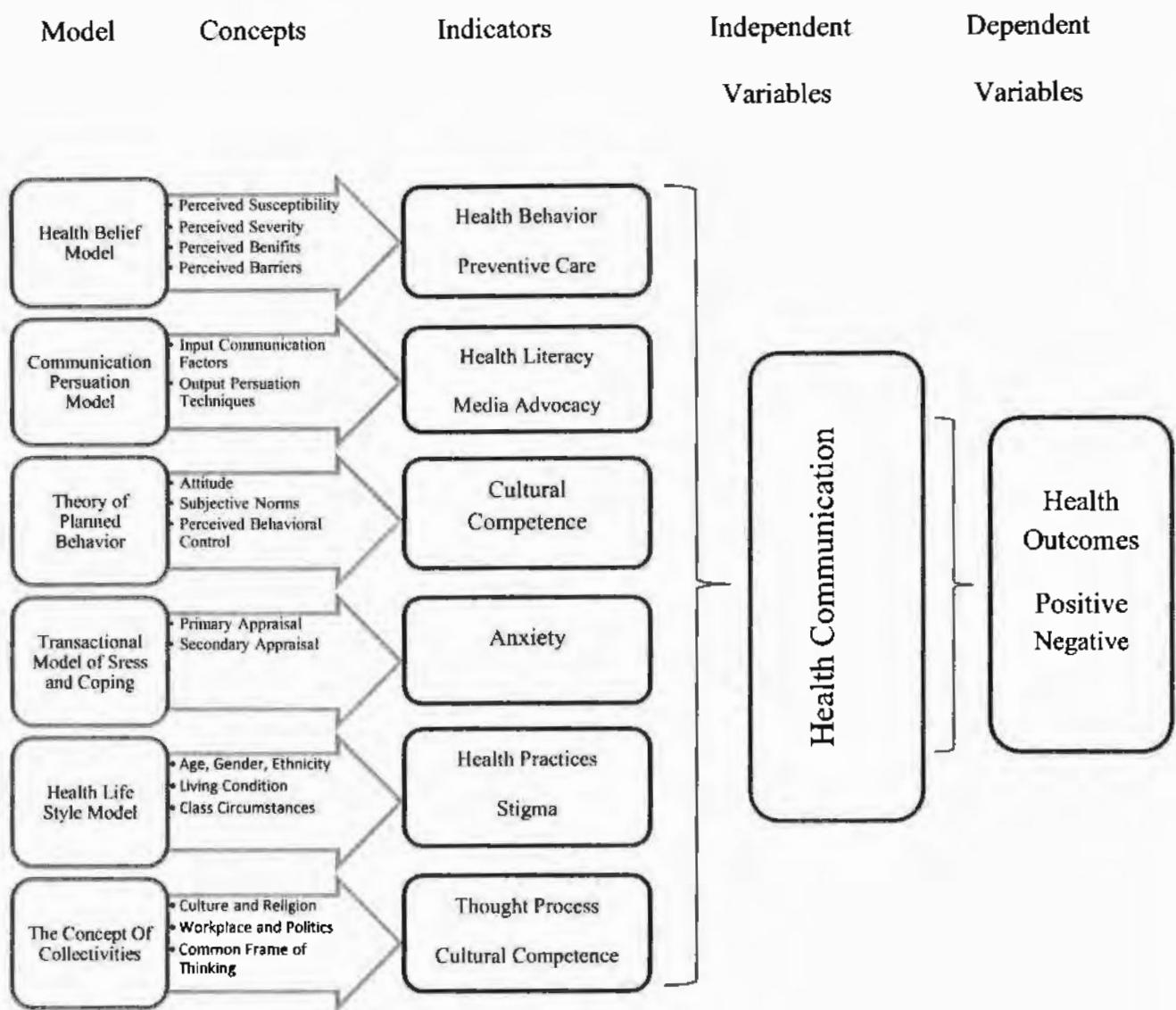


Figure 2.3 Theoretical understanding of the relationship between health communication and Health Outcomes

CHAPTER THREE

METHODOLOGY

2.3. Introduction

Previous chapter thoroughly discussed the empirical and theoretical review of literature. The chapter also shed light on the study variables and their relationship. Furthermore the chapter also discussed about the conceptual framework of the study where study hypothesis have been discussed in detail.

This chapter deals with the research methodology and techniques employed for the present study. Research methodology is the scientific way of solving a research problem. It might be considered as the science of how research is to be done. Research methodology also explains the various steps involved in a research process along with highlighting the logic behind it. It not only emphasizes on the techniques employed in, but also the logic of relevance to that specific study (Kothari, 2004). This section of the present study comprehensively discusses research paradigm, design and strategy, sampling procedure, sample size and research tools for data collection, ethical consideration and the whole work plan on which this study is based.

2.4. Research Paradigm

Research paradigms have been classified in three distinct philosophical categories, by Gephart in 1999, such as positivism, interpretivism and critical post-modernism (Singleton, Straits, Straits, & McAllister, 1988).

Exploring social reality through positivist philosophical paradigm is based on the idea of French Philosopher August Comte. According to Comte human behavior can only be understood and explored through reasons and experiments. Based on this idea Comte took an objectivist notion of knowledge and social reality. According to him reality is an objectively given social phenomenon and could be measured independently of researcher's biases. Based on these ideas, the positivists adopt the pure scientific methods of knowledge production process through quantification and measurement (Henning, Rensburg and Smit, 2004).

This study is based on both positivism and interpretivism research paradigms so that an objective knowledge of health communication could be obtained. This study focuses on the overall health communication situation in Balochistan and its impacts on hepatitis B and C infected patients. Health professionals, patients, their attendants and the whole health care system need to be well communicative regarding public health issues. This study is limited to the health communication which is considered to be an effective way of promoting better health conditions. Both positivist and interpretivism research approaches appear to be best suited to explore the health communication situation in the province of Balochistan.

2.5. Research Design

The Research Design is a conceptual structure around which a research study is thoroughly conducted. It is an organized plan for the whole research activity which comprises data collection along with its measurement and analysis (Kothari, 2004). In the present study the researcher selects the descriptive as well as exploratory research design which focuses on the situation of health communication of hepatitis B and C patients in Balochistan. The selected research design ensures the due impartiality of researcher and reduces biasness. In studying the

overall health communication conditions in the province the selected design helped to neutralize the inherent biases of researcher and available conditions. For conducting an objective research, the researcher must ensure his/her neutrality of opinion (See e.g. Scott, Mannion, Davies, & Marshall, 2003; Gurman, Rubin, & Roess, 2012).

2.6. Study Population

The patients of hepatitis B and C in district Quetta (the capital city of the Balochistan Province in Pakistan), constituted the population of the present study. The reason behind the selection of district Quetta among other districts of the province is its cosmopolitan nature where Pushtoon, Baloch, Barahvi, Hazara and other minority communities are living. These are different ethnic groups speaking different languages such as Pashto, Balochi, Barahvi, Hazargi and Urdu. According to Pakistan Bureau of Statistic (2017) the total population in the three Tehsils of district Quetta is 2275699. The Chief Minister Hepatitis Control Program, initiated in November 2017 is engaged in eradicating hepatitis from the province. The Chief Minister Initiative for Hepatitis Control (CMIHC) program is still engaged in treating 23154 patients in its four hepatitis control centers in the district. Patient's registration details in the centers enabled the researcher to collect data from all the patients with their different socio-economic and ethnic background.

2.7. Sample Size

Specifying a true representative sample size is an important and basic step in a research process. An accurate and true representative sample size can minimize the inherent biases in research. In this study sample size has been calculated through Taro Yamani formula. When the sample frame is available and the total population is known, the quantitative researcher then usually use

this formula for calculating the accurate and true representative sample size. The researcher in this study received lists of registered patients for vaccination and medication with their complete bio data, in the four centers of hepatitis control, situated in district Quetta.

2.8. Calculation of Sample Size

Formula

$$n = \frac{N}{1+Ne^2}$$

where;

n = required sample size

N = Target Population

e = Margin of error = 4%

Total sample size was calculated as 449 where margin of error is 5% at confidence interval 95%.

2.9. Sampling design

In this study the researcher selected the study sample by simple random technique to approach the respondents (i.e. Hepatitis B and C virus infected patients) in district Quetta. Reason behind selecting this sampling technique is to easily approach the respondents with equal opportunity of being selected from the sample frame. According to CMIHC program coordinator, the patients visit the hepatitis control centers twice in a week on Monday and Thursday. Their visit to the centers enabled the researcher to collect data. In such random visits of different patients to the centers demanded simple random technique to be employed.

2.10. Tools for Data collection

In this phase the data was collected by using pre-coded self-administrated questionnaire. The questionnaire was designed in English, while those “unfamiliar with English” respondents were questioned in their native languages through employing key informants team constituted of both males and females. For qualitative data collection in-depth interview schedule was employed. The respondents for qualitative data collection were 15 physicians who treat hepatitis patients in both public sector hospitals as well as private clinics.

2.11. Variables of the Study

This study includes background variables, independent variables and dependent variables. Background variables of this study comprise age, language, gender, marital status, ethnicity, education, family structure and area of residence. Independent variables are categorized at three levels i.e. individual level, organizational level and societal level. Variables at individual level include anxiety and stigma of patients associated with their disease. At organizational level the variables comprise of health literacy of people about diseases and media advocacy associated with the overall health conditions of people. At societal level the variables include, cultural competence, Health behavior and health practices which are considered to be indicators of health conditions in a society. Dependent variable in this study is health outcomes of hepatitis B and C patients in Quetta, Balochistan.

2.12. Data Analysis

As the study is both descriptive and exploratory in nature therefore the researcher analyzed the data by employing statistical package for social sciences (SPSS) for quantitative analysis and thematic analysis for qualitative analysis.

2.12.1. Quantitative Data Analysis

Quantitative data analysis was done by employing statistical package for social sciences (SPSS) for data entry, univariate analysis and bivariate analysis. Confirmatory factor analysis (CFA) statistical test was employed to confirm the factors used throughout the study. Amos software structural equation modeling (SEM) was employed to explore the direct and indirect relationship between dependent and independent variables.

2.12.2. Qualitative Data Analysis

Qualitative data analysis was done through thematic analysis technique. Though it was a long and continuous process from data collection to data analysis, but the researcher went through the process by interviewing the respondents (15 physicians) at their clinics at both public and private hospitals by employing purposive sampling technique. The rationale behind using purposive sample technique was to easily approach those physicians who were treating hepatitis patients in either way. After data collection a thorough listening procedure was done repeatedly. The interviews were transcribed into texts, as they were recorded. Different common concepts were coded to extract themes. After transcription, themes were explored in the data. After repeated reading of different themes some were re-merged because of some common features of the

responses. After that, some themes were selected in which the factors of health communication were explored.

2.12.3. Thematic Analysis

Thematic analysis is an approach which is specified to identify, analyze and report different patterns (themes) within data. It mainly organizes and describes data in comprehensive details. Along this it also interprets various aspects of the research study. Due to this aspect it is considered a rich and useful technique when a researcher intends to explore new areas in an academic discipline. For this study the researcher considered it as a relevant approached to be incorporated.

The qualitative data analysis part of this study is more inductive and critical approach based as in reflective thematic analysis multiple approaches can be used in one study. By using the thematic analysis which is based on a six phase process for analysis, the current qualitative data has gone through all phases of familiarization with the data, coding, generating initial themes, reviving themes, defining and naming themes, and writing up the analysis.

2.13. Interviews with the Respondents

The researcher employed in-depth interview technique to collect primary data from the respondents. The respondents (15 physicians) were approached in their offices/clinics. Before visiting them they were asked for the appointments. All respondent were asked about their willingness toward mentioning their name in the analysis or not. The researcher interviewed the respondents up to the saturation point where responses got a point of similar responses. The researcher tried to approach physicians in first few hours of the day so that they could participate

with adequate time and focus. But in some cases the physicians sat evening time for the interviews.

2.13.1. Independent variables:

Interdependent variables have been categorized at three levels i.e. individual level, organizational level and societal level. Variables at individual level include anxiety and stigma of patients associated with their disease. At organizational level the variables comprise health literacy of people about diseases and media advocacy associated with the overall health conditions of people. At societal level the variables include, cultural competence, Health behavior and health practices which are considered to be indicators of health conditions in a society. Dependent variable in this study is health outcomes of hepatitis B and C patients in Quetta, Balochistan.

Media Advocacy: Media advocacy is a prominent factor of health communication. Every health care system firstly needs peoples' compliance over the procedure adopted for health outcomes. Altering behavior through social marketing may efficiently manage with the overall poor health conditions in a country. Social marketing is trying to develop sense making; a tool to deter communication from the process of distributing message to the process of dialogue, where patients are being encouraged to approach healing of frustrating health problems (Walsh, Rudd, Moeykens, Moloney, 1993).

Health Related Anxiety: Anxious condition caused by disease may disturb the decision making capability of patients and their way of communication with others. Chaturvedi, (2008) argued that depression, anger and anxiety are part of our normal and every day experiences. Denying and ignoring these factors may produce denial of treatment and deferral of the necessary healing procedure. These may produce further annoyance and violence in patient's behavior. Real and

efficient interaction and showing sympathy with them may produce long lasting imprints. To talk treatment with patients in an ordinary language is a skill of efficient professional. The patients don't care what the physicians know but they better appreciate how we care of them.

Gender: Gender of the patient also matters while taking part in health communication. Liuccio, (2015) has found that encouraging gender sympathy through health communication necessitates community based consciousness of gender issues. For these purpose women's worries of health .i.e. how they observe health, health needs and their problems must be the focus of the field of health communication. Health communication as an academic field may abolish the miseries of women by concentrating upon the questions of how women communicate, deliver and identify the health message. Women should be exhilarated to take part in public health communication program so that they could easily comprehend about their health and make good decisions.

Health Literacy: health literacy for both the ill and healthy person is an important factor of health communication. It has been recommended by the diverse literature that changing health behavior is the essential concern of health education or health literacy. Positive or conversant health behavior is the decisive purpose of health education for patient that can lead to the timely and cognizant decision about their illness (Rimer, et.al, 2004). In a longitudinal study conducted by Rimals, (2000) established that whether it's individual's self-efficacy that directs their seeming risk into translating it for their health information or they try to use the extended knowledge into healthy behavior practices. He found out that individual with lower level of self-efficacy show low level of desired actions even though having enough knowledge of adopting healthy life style.

Language: language is of great importance in health communication. Language, race and ethnicity obviously influence the doctor patient relationship. Ferguson and Candib (2002) asserted that patients with low English proficiency catch less compassionate response, make disturb interaction, receive inadequate information and discouraged to make better decision making while consulting with their physicians. Results further depict that patients with low English proficiency are less likely to choose doctors who are not language concordant. They exhibited more satisfaction with ethnically concordant physicians.

Disease Related Stigma: For a number of scholars, stigma plays important role in health communication. Health related stigma refers to a condition where a specific group of individuals is negatively blamed for having a certain type of sickness which offers a chance for a person to distance them and their in-group with the fear of acquiring infection. This is a key factor due to which stigma is formed. Stigmatization mainly ends with status loss, blaming as well as shaming of the people who are stigmatized. Stigma always pushes the stigmatized in an unfortunate and differentiated position which includes social and economic loss (Deacon, 2006).

Health Behavior: Health behavior of the people have robust association with their health outcomes. The people with health conscious behavior are more likely to follow effective strategies of health care system. A number of health communication techniques have focused the behavioral change strategies targeted at individual to focus the health outcomes. The technique of tailored health communication has been studied as a source of altering health behavior by prompting individuals to adopt health related strategies. These comprise the intensity of peoples' interests in attending communication, identifying it relevant and preparing themselves for action. Numerous scholars have shown that tailored health communication in many cases has altered

health behavior in number of health related habits; i.e. smoking, diet, exercise and screening (Rimer and Kreuter, 2006).

Cultural competence: For many experts of public health, cultural competence of people with health care system is of great importance. Cultural competence as an area of health care has arisen in parts to examine the grounds that may affect the health and contribute to health disparities among diverse ethnic and racial minorities. The primary purpose of the field is to make health care system more operational to diagnose patients' problem with focusing their varied cultural and religious understandings relating to their health (Betancourt, Green, Carrillo, 2002). It has also been perceived that patients with cultural differences are less expressive with their doctors, and the doctors also perform less effectively with them. Cultural difference among them has constantly caused barriers among doctor and patient's communication. (Schouten, Meeuwesen, 2006). Culturally sensitive health care providers can efficiently communicate with patients belonging from different cultures (Brislin, 1993).

Health Practices: Varying approaches of people using different health practices may also affect proper health communication. Lay people do not make their health understanding according to science and proven in practice dimension. For them manifold sources of health knowledge are contributing to build images of health and illness. Folk wisdom, personal experiences and spiritual and cultural beliefs play an significant role while deciding health and illness and also their ways of eliminating the illnesses (Rogers, 1991)

Response Rate: The total number of the registered hepatitis patients in the three hospitals was 23154. Hence the researcher would randomly approach the patients who would come to these centers on the stipulated days of the week. The overall response rate throughout the data

collection was moderate. Meanwhile total of 570 patients were approached and only 399 were willing to fill the questionnaire. Focusing on gender differentials, 220 female respondents were asked to fill the questionnaire where only 114 female patients were convinced to take part in filling the questionnaire. On the other hand, the response rate of male patients was comparatively good than that of females. A sum of 350 male patients was asked to take part in the survey in which 285 of them responded. This also signifies the religious and cultural sensitivities of the region towards women's participation in public sphere.

For qualitative data analysis physician were interviewed. A sum of 27 doctors was requested for interviewed, whereas only 15 respondents gave their consent for interview.

2.13.2. Dependent variable

Dependent variable for the said study is health outcomes of hepatitis patients in Balochistan. The results derived from the analysis revealed that health outcomes of hepatitis patient are dependent on proper health communication. The study further analyzed the underlying factors of health communication in the context of Pakistan

2.14. Limitations of the Study

The study is limited to focus only the patients infected with hepatitis B and C virus. Moreover the researcher attempted to explore the health communication condition through only those patients who were registered for vaccination and proper treatment in CMIHCP in district Quetta. The study universe is limited to three public sector hospitals in Balochistan.

2.15. Ethical Consideration

As it is the moral responsibility of researcher to ensure the compliance of respondents throughout the research process. District Quetta is a cosmopolitan city where different ethnic groups are living. The researcher ensured the patient's confidentiality along with their cultural values. It was made sure by the researcher that the identities of the patients who were more conscious about their health privacy were not disclosed at any level. Certain female patients as per the cultural values were reticent and reluctant towards male surveyors, so female surveyors were deployed for this purpose. None of the boundaries of religious and cultural norms were transgressed during the process of data collection. Their confidence was built by supporting their informed consent throughout research process. Moreover each physician was asked to either use his/her name in the results or not. In the analysis section, the names of physicians are mentioned on their approval.

2.16. Field Experience

The researcher's experience is of great importance to be shared with audience. In the present study I had a broad and sociable experience while collecting data for both quantitative as well as qualitative analysis. First of all when I got permission letter from my supervisor to go into the field for data collection, I went to Balochistan Medical Complex (BMC) where I met the Registrar of the institute to approach the list of registered patient. I introduced myself, showed him the letter and requested him for a visit to the data office. He for whatever unknown reasons rebuked my request by saying that he was not bound to entertain my request. I then got into arguments with him that any public office holder was bound by the law to provide the information to any citizen of the country under the constitution "right to information act" a

government document. Disturbed by my argument he called his peon and censured him for allowing me into his office. In short, I was disappointed at that moment seeing the reluctant and unsupportive behavior of the administrative staff of health institution. I then met the provincial coordinator of the Chief Minister Initiative for Hepatitis Control program and let him know about what happened before. He was a helpful and supportive. He cooperated well and made sure that I get the desired data.

After getting the data of registered patients I then constituted a team of surveyors accompanied by me throughout the data collection process. There were number of problems that we had to deal in the face of data collection as the surveyors were all students aged 22 to 26 years. The patients and their attendants showed noncompliance toward them due to a trust deficit. Many patients after conviction told that they had never had the experience of narrating about their diseases to a stranger. Once my team of male members approached a patient whose attendant was a female, the patient was about 50 to 55 years old. Her attendant was educated and was very hesitant. When the surveyors started questioning the patient, the attendant went to ask nursing staff to stop the questioning. When I asked the attendant for cooperation she replied that we do not want to share our worries with everyone.

After collecting the data from patients I then opted to collect data from doctors and physicians. It is very difficult to approach respondents for a lengthy interview, because they usually don't have enough time in their busy schedule. To overcome this issue I utilized my social contacts for getting time from the physicians. I visited Deputy Secretary Health whose nephew is my friend and colleague. The Secretary called six gastroenterologist of the city to cooperate with me. I then visit the physicians' offices in government hospital. After approaching them, majority of them appreciated me when they went through the study. Some of them further

helped me while referring me to the next known physicians. Some of the physicians also refused me when they were asked for the interview. I had scholarly experience while interviewing the doctors of the office of Director General Quetta. All of them appreciated my efforts because my study was very close to their mandate. Some of them even requested me to share the results after conducting the study.

2.17. Test of Reliability

Table 2.17.1 *Test of Reliability*

S.N.	Variable Name	Code	Item No.	Cronbach. Alpha Value
1	Health Related Anxiety	HERA	10	.769
2	Disease Related Stigma	DIRS	15	.817
3	Health Literacy	HELI	12	.849
4	Cultural Competence	CUCO	10	.851
5	Health Behavior	HEBE	16	.888
6	Media Advocacy	MEAD	10	.704
7	Health Practices	HEPR	9	.937
8	Patient Related Health Outcomes	PRHO	12	.870
Overall			94	.844

Table 3.15.1 shows the reliability test which reveal that all the variables are significantly confirmed with the alpha value of above .700. Therefore the entire variables have been pursued for further analysis.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATIONS

3.1. Introduction

Chapter three thoroughly discussed the literature relevant to the study. Both empirical and theoretical literatures were included in detail. The literature also shed light on the variables of the study. Test of reliability was included to confirm them for further analysis. This chapter deals with the data analysis and interpretation. It has been divided in different sections, including univariate, bivariate and multivariate analysis. Univariate analysis includes frequency distribution along with percentages and is presented in the form of tables. Bivariate analysis includes reliability test, normality test, t- test, and chi-square and tau-b statistical tests. Multivariate analysis consisted of Structural Equation Modeling (SEM) to measure the direct and indirect effects of the model.

3.2. Descriptive Statistics

This section analyzes the data derived from hepatitis patients in Balochistan. The descriptive statistics presents the simplest picture of the data in the shape of percentages and frequency distribution.

3.3. Socio-demographic information

This section provides the socio-demographic information of the hepatitis patients. The socio-demographic information include; gender, age, education, marital status, family type and residential area of the patients in Balochistan.

Table 3.3.1 *Patients' Responses Towards Their Socio-demographic Characteristic*

Category	F	%	Category	f	%
Gender				Marital Status	
Male	285	71.4	Single	175	43.9
Female	114	28.6	Married	224	56.1
Total	399	100.0	Total	399	100.0
Age				Education of respondent	
20-30	164	41.1	Primary	228	57.1
31-40	97	24.3	Middle	19	4.8
41-50	94	23.6	Matric	75	18.8
51-60	40	10.0	Higher Secondary	77	19.3
Total	399	100.0	Total	399	100.0
Area of residence				Family Type	
Urban	191	47.9	Nuclear	146	36.6
Rural	208	52.1	Joint	239	59.9
Total	399	100.0	Extending	14	3.5
			Total	399	100.0

Table 4.3.1 shows that 71.4 percent patients are male while 28.6 percent are female. Moreover, 43.9 percent patients are unmarried while 56.1 percent of them are married. The ages

of 41.1 percent of patients are between 20-30 years while ages of 24.3 are between 31-40 years. Whereas the ages of 23.6 patients are in between 41-50 years. While the ages of 10 percent of patients are in between 51-60 years. Meanwhile, the ages of only 1 percent are above 60 years. Furthermore, the table depicts that the education of majority of patients 57.2 percent is primary. Whereas 4.8 of patients are having middle level education. 18.8 percent of the patients have passed their matriculation. 19.3 percent patients have got higher education.

The table also reveals that the area of residence of 47.9 percent of patients is urban, while 52.1 percent of the patients are living in rural areas. Along this the table presents that 36.6 percent of the patients are living in nuclear families and 59.9 percent of the patients have joint family system. Table depicts that only 3.5 percent of the patients are living in extended type families.

Table 3.3.2 Patients' Responses Towards their primary health information

S.N.	Question	Yes		No	
		f(%)	f(%)	f(%)	f(%)
2.1	Had you ever heard of hepatitis before your infection?	257(64.4)		142(35.6)	
2.2	Have you ever heard that hepatitis is a fatal disease?	263(65.9)		136(34.1)	
2.3	Did you know that hepatitis is a curable disease?		209(52.4)		190(47.6)
2.4	Do you have another member of your family infected with hepatitis?	241(60.4)		158(39.6)	
2.5	Have you ever been hospitalized for hepatitis?		239(49.9)		160(40.1)
2.6	Are you satisfied with the treatment of hepatitis provided to you?		14(3.5)		385(96.5)
2.7	Where did you come to know about chief minister Hepatitis control program?		Family f(%)	Friends f(%)	Doctor f(%)
			32(8.5)	6(1.5)	361(90.5)

Table 4.3.2 reveals that majority of the patients, 64.4 percent, responded in affirmation to the question that "Had you ever heard of hepatitis before your infection?" While 35.65 percent of the patients answered in negative to the same question.

Furthermore, majority of the patients, 65.9 percent, responded to the question that "Have you ever heard that hepatitis is a fatal disease?" positively. While less than half of the patients, 34.1 percent, answered that they have never heard that hepatitis is fatal disease.

Above than half of the patients, 52.4 percent said that they knew that hepatitis is a curable disease. While slightly less than half of the patients 47.6 percent responded that they did not

know that hepatitis is a curable disease. Table also depicts that majority of the patients, 60 percent, had another member of their family infected with hepatitis. Whereas 40.1 percent of the patients had no hepatitis infected person in their family.

The table further shows that 49.9 percent of the patients responded that they have been hospitalized for hepatitis. While an adequate number of the patients, 40.1 percent said that they have never been hospitalized for hepatitis. Moreover, majority of the patients, 96.5 percent said that they were not satisfied with the treatment of hepatitis provided to them while a small number of the patients 3.5 percent said that they were satisfied with the treatment of hepatitis provided to them. The table further portrays that majority of the patients, 90.5 percent said that they were informed by the about Chief Minister Hepatitis Control Program. While only 8.5 percent of them were informed by their family member and 1.5 percent of the patients said that they were informed by about Chief Minister Hepatitis Control Program.

3.4. Anxiety as Individual/Psychological Factor

This section analyzes the factors of health communication contributing at individual level. At its strict sense the variables that affect health communication of individual with their physician, family members and other health care professionals. In this section of the research data collected about the individual psychological factors which play role in health communication, is discussed. The study includes anxiety as a communication barrier at individual level.

Table 3.4.1 *Patients' Response toward Health Related Anxiety*

S.N.	Statement	NAL	R	S	O
		f(%)	f(%)	f(%)	f(%)
4.1	Any reference to hepatitis bring strong feelings in me	160 (40.1)	43 (10.8)	115 (28.8)	81 (20.3)
4.2	Even though it is a good idea I found that getting a hepatitis test scared me	109 (27.3)	72 (18.0)	106 (26.6)	112 (28.1)
4.3	Whenever I hear about friends or public figure with hepatitis I get more anxious about my condition of hepatitis	179 (44.9)	55 (13.8)	123 (30.8)	42 (10.5)
4.4	I feel kind of numb when I thought about Hepatitis	49 (12.3)	36 (9.0)	261 (65.4)	53 (13.3)
4.5	I think of hepatitis even though I do not mean to	38 (9.5)	69 (14.8)	245 (61.4)	57 (14.3)
4.6	I had a lot of feeling about hepatitis , but I do not want to deal with them	54 (13.5)	41 (10.3)	253 (63.4)	51 (12.8)
4.7	I had more trouble falling asleep, because I could not get thoughts of hepatitis out of me	123 (30.8)	144 (36.1)	113 (28.3)	19 (4.8)
4.8	I am afraid that the result of my hepatitis test would show that my disease is getting worse	27 (6.8)	27 (6.8)	257 (64.4)	88 (22.1)
4.9	Just hearing the word hepatitis scares me	12 (3.0)	33 (8.3)	218 (54.6)	136 (34.1)
4.10	I have been so anxious about my hepatitis test that I have thought about delaying it	23 (5.8)	60 (15.0)	132 (33.1)	184 (46.1)

Statement 4.1 presents the responses of patients toward health related anxiety. Primary analysis reveals that 20.3 percent of the patients are filled with strong feelings when any reference to hepatitis is made. 28.8 percent of the patient responded that they sometimes feel strong when hepatitis is mentioned. 10.8 percent of the patients are rarely offended by statement “Any reference to hepatitis brings strong feeling in me”. However, 40 percent of the patients are unmoved by the reference of hepatitis to them. It has been concluded that 54.7 percent of the patients are affirmative to the statement “Any reference to hepatitis brings strong feeling in me”.

Statement 4.2 records the responses of patients toward health related anxiety of getting tested. Primary evidences revealed that 28.1 percent of the patients are often in agreement and 26.6 percent of the patients are sometimes in agreement with the statement “Even though it is a good idea; however I found that getting a hepatitis test scares me”. On the Contrary, 18 percent of the patients rarely agree with the said statement while 27.3 percent of the patients not at all agree with the statement. It has been deduced that 54.7 percent of the patients are scared by the idea of getting tested.

Statement 4.3 reveals the responses of patients toward health related anxiety of getting into worsened position by hearing about hepatitis. Primary analysis presents that 10.5 percent of the patients often show their agreement and 30.8 percent of the patient sometimes shows their agreement with the statement “whenever I hear about friends or public figure with hepatitis I get more anxious about my condition of hepatitis”. On the other hand, 13.8 percent of the patients rarely agree with the statement while 44.9 percent of the patients not at all agree with the said statement. It is thus concluded that 41.4 percent of the patients are in the favor of the statement “whenever I hear about friends or public figure with hepatitis I gets more anxious about my condition of hepatitis”.

Statement 4.4 further presents the responses of patients toward health related anxiety. Primary analysis reveals that 13.3 percent of the patients often show their agreement and 65.4 percent of the patients show their sometimes agreement to the statement “I feel kind of numb when I think about Hepatitis”. Similarly, only 9 percent of the patients rarely show their agreement while 12.3 percent of the patients not at all show their agreement with the given statement. It can be concluded that 78.7 percent of the patients agree that they feel numb when they hear about hepatitis.

Statement 4.5 presents the responses of patients toward their health related anxiety of unnecessarily thinking about the disease. Primary data reveals that 14.3 percent of the patients show ‘often’ agreement and 61.4 percent of the patients ‘sometimes’ agree with the statement “I think of hepatitis even though I do not mean to”. On the other side, 14.8 percent of the patients ‘rarely’ agree with the statement while 9.5 percent of the patients ‘not at all’ agree with the said statement. It has been concluded that 75.7 percent of the patients are in favor of the statement “I think of hepatitis even though I do not mean to”.

Statement 4.6 represents the responses of patients toward health related anxiety of avoiding the thought of the diseases. Primary analysis reveals that 12.8 percent of the patients ‘often’ agree and 63.4 percent of the patients ‘sometimes’ agree with the statement “I had a lot of feelings about hepatitis, but I did not want to deal with them”. However, 10.3 percent of the patients ‘rarely’ agree while 13.5 percent of the patients ‘not at all’ agree with the said statement. It has been concluded that 76.2 percent of the patients are in the favor of the argument “I had a lot of feelings about hepatitis, but I did not want to deal with them”.

Statement 4.7 presents the responses of patients toward health related anxiety of insomnia. Primary exploration reveals that 4.8 percent of the patients 'often' agree and 28.3 percent of the patient 'sometimes' agree with the statement "I had more trouble in falling asleep, because I could not get rid of the thoughts of hepatitis out of me". On contrary to that, 36.1 percent of the patients 'rarely' agree while 30.8 percent of the patients 'not at all' agree with the said statement. It has been summed up that 33.1 percent of the patients are in the favor of the statement "I had more trouble in falling asleep, because I could not get thoughts of hepatitis out of me".

Statement 4.8 further presents the reactions of patients toward health related anxiety of getting tested. Primary analysis reveals that 22.1 percent of the patients 'often' agree and 64.4 percent of the patients 'sometimes' agree with the statement "I am afraid that the results of my hepatitis test would show that my disease is getting worse". On the contrary, 6.8 percent of the patients 'rarely' agree while 6.8 percent of the patients 'not at all' agree with the said statement. It has been concluded that majority, 86.5 percent of the patients are in the favor of the proposition "I am afraid that the results of my hepatitis test would show that my disease is getting worse".

Statement 4.9 mirrors the responses of patients toward health related anxiety of the fear of the disease. Primary analysis presents that 34.1 percent of the patients 'often' agree and 54.6 percent of the patient 'sometime' agree with the statement "just hearing the word hepatitis scares me". Contrary to that, 8.3 percent of the patients 'rarely' agree and only 3 percent of the patients 'not at all' agree with the mentioned statement". It has been concluded that a sufficient majority 88.7 percent of the patients are in the favor of the statement "just hearing the word hepatitis scares me".

Statement 4.10 portrays the responses of patients toward their perceived health related anxiety of getting tested. Primary analysis show that 46.1 percent of the patients 'often' agree and 33.1 percent of the patients are 'sometimes' in agreement with the statement "I have been so anxious about my hepatitis test that I have thought about delaying it". On the contrary side, 15 percent of the patients 'rarely' agree and only 5.8 percent of the patients 'not at all' agree with the said proposition. So, majority of the study population is anxious about getting tested.

3.5. Disease Related Stigma as Individual/Psychological Factor

Table 3.5.1 *Patients' Response toward Disease Related Stigma*

Strongly Disagree= SD, Disagree=D, Agree=A, Strongly Agree=SA

S.N.	Statement	SD	D	A	SA
		f(%)	f(%)	f(%)	f(%)
5.1.	I feel ashamed of hearing about my hepatitis	88 (22.1)	100 (25.1)	163 (40.9)	48 (12.0)
5.2.	People avoid close contact with hepatitis infected patients	47 (11.8)	57 (14.3)	240 (60.2)	55 (13.8)
5.3	I am discriminated due to hepatitis at work	43 (10.8)	76 (19.0)	208 (52.1)	72 (18.0)
5.4	I am not desirable spouse	1 (.3)	20 (5.0)	223 (55.9)	155 (38.8)
5.5	I feel that I am placing others at risk due to HB or C	28 (7.0)	148 (37.1)	192 (48.1)	31 (7.8)
5.6	People avoid getting gifts from HB or C patients	124 (31.1)	188 (47.1)	76 (19.0)	11 (2.8)
5.7	People do not let their children playing with hepatitis patient's children	84 (21.1)	109 (27.3)	128 (32.1)	78 (19.5)
5.8	People avoid taking meal with hepatitis patients	35 (8.8)	50 (12.5)	218 (54.6)	96 (24.1)
5.9	People avoid hand shake with hepatitis patients	79 (19.8)	160 (40.1)	139 (34.8)	21 (5.3)
5.10	People avoid continuing friendship with HB and C patients	104 (26.1)	153 (38.3)	91 (22.8)	51 (12.8)
5.11	Doctors and health professionals treat hepatitis patients differently	124 (31.1)	183 (45.9)	75 (18.8)	17 (4.3)
5.12	Hepatitis patients get little care from doctors and nurses	119 (29.8)	135 (33.8)	108 (27.1)	37 (9.3)
5.13	Doctors and nurses are reluctant with hepatitis patients	39 (9.8)	66 (16.5)	225 (56.4)	69 (17.3)
5.14	Doctors and nurses keep distance from patients diagnosed with HB and C virus	22 (5.5)	39 (9.8)	254 (63.7)	84 (21.1)
5.15	HB or C patient hardly get admission in wards	137 (34.3)	185 (46.4)	47 (11.8)	30 (7.5)

Statement 5.1 presents the responses of patients toward disease related stigma of feeling ashamed. The data reveals that 12 percent of patients are strongly agreed and 40.9 percent of patients are agreeing with the statement “I feel ashamed of hearing about my hepatitis”. On contrary, 25.1 percent of the patients disagree and 22.1 percent of the patients strongly disagree with the stated proposition. It has been concluded that 52.9 percent of the patients are in agreement to the statement “I feel ashamed of hearing about my hepatitis”.

Statement 5.2 presents the responses of patients toward disease related stigma of social alienation. The analysis reveals that 13.8 percent of patients strongly agree and 60.2 percent of patients agree with the proposition “people avoid close contact with hepatitis infected patients”. On the other side, 14.3 percent of the patients disagree and 11.8 percent of the patients strongly disagree with the said statement. It has been concluded that 74 percent of the study population perceive that people avoid them because of the disease.

Statement 5.3 presents the responses of patients toward disease related stigma of facing discriminatory behavior. The analysis reveals that 18 percent of patients strongly agree and 52.1 percent of patients agree with the given statement “I am discriminated due to hepatitis at work”. Contrary to that, 19 percent of the patients disagree and 10.8 percent of the patients strongly disagree with the above statement. It has been concluded that 70.1 percent of the study population face social discrimination due to their being infected.

Table 5.4 presents the responses of patients toward disease related stigma of family alienation. The analysis results in that 38.8 percent of patients strongly agree and 55.9 percent of patients are agree with the proposition “I am not a desirable spouse”. Contrary to that, 5 percent of the patients disagree and only 0.3 percent of the patients strongly disagree with the above

proposed statement. It has been concluded that a majority of the 94.7 percent of the study population feel alienated in family structure.

Statement 5.5 presents the responses of patients toward disease related stigma of spreading the disease. The analysis reveals that 7.8 percent of patients strongly agree and 48.1 percent of patients agree with the statement “I feel that I am placing others at risk due to HB or C”. On the other hand, 37.1 percent of the patients disagree and only 7 percent of the patients strongly disagree with the said statement. It has been concluded that 55.9 percent of the patients are in the fear that they are playing agent’s role in spreading the disease.

Statement 5.6 depicts the responses of patients toward disease related stigma of social alienation. The analysis presents that 2.8 percent of patients strongly agree and 19 percent of patients agree with the proposed statement “People avoid getting gifts from HB or C patients”. On the contrary, 47 percent of the patients disagree and 31.1 percent of the patients strongly disagree with the said statement. It has been concluded that less than quarter 21.8 percent of the patients are in the favor of the statement “People avoid getting gifts from HB or C patients”.

Statement 5.7 reveals the responses of patients toward disease related stigma of risking the future of their children. The analysis presents that 19.5 percent of patients strongly agree and 32.1 percent of patients agree with the proposed statement “People do not let their children playing with hepatitis patient’s children”. On the other side, 27.3 percent of the patients disagree and 21.1 percent of the patients strongly disagree with the mentioned statement. It has been proven that 41.6 percent of the patients believe in the statement that “People do not let their children playing with hepatitis patient’s children”.

Statement 5.8 presents the responses of patients toward disease related stigma of social alienation. The analysis reveals that 24.1 percent of patients strongly agree and 54.6 percent of patients agree with the given statement “people avoid taking meal with hepatitis patients”. Contrary to that, 12.5 percent of the patients disagree and 8.8 percent of the patients strongly disagree with this statement. It has been concluded that 78.7 percent of the patients feel that they are social alienated because of the diseases.

Statement 5.9 depicts the responses of patients toward disease related stigma of social alienation. The analysis reveals that 5.3 percent of patients strongly agree and 34.8 percent of patients agree with the given statement “people avoid handshakes with hepatitis patients”. However, 40.1 percent of the patients disagree and 19.8 percent of the patients strongly disagree with the statement “people avoid hand shake with hepatitis patients”. It has been verified that 40.1 percent of the patients are in the favor of the statement “people avoid handshakes with hepatitis patients”.

Statement 5.10 presents the responses of patients toward disease related stigma of friends’ alienation. The analysis shows that 12.8 percent of patients strongly agree and 22.8 percent of patients agree with the statement “people avoid continuing friendship with hepatitis B and C patients”. Contrary to it, 38.3 percent of the patients disagree and 26.1 percent of the patients strongly disagree with the statement mentioned above. It has been concluded that 35.6 percent of the patients among the study population feel that their friends have alienated them due to their disease.

Statement 5.11 further presents the responses of patients toward disease related stigma differential treatment. The analysis reveals that 4.3 percent of patients strongly agree and 18.8

percent of patients agree with the statement “doctors and health professionals treat hepatitis patients differently”. However, 45.9 percent of the patients disagree and 31.1 percent of the patients strongly disagree with the said statement. It has been assumed that 23.1 percent of the patients feel that they are treated differently at hospitals.

Statement 5.12 presents the responses of patients toward disease related stigma of differential care. The analysis discovers that 9.3 percent of patients strongly agree and 27.1 percent of patients agree with the statement “hepatitis patients get little care from doctors and nurses”. Contrary to it, 33.8 percent of the patients disagree and 29.8 percent of the patients strongly disagree with the stated proposition. It has been concluded that 36.4 percent of the patients are in the fear that they are differently cared.

Statement 5.13 further presents the responses of patients toward disease related stigma of differential treatment. The investigation reveals that 17.3 percent of patients strongly agree and 56.4 percent of patients agree with the given statement “doctors and nurses are reluctant with hepatitis patients”. Contrary to it, 16.5 percent of the patients disagree and 9.8 percent of the patients strongly disagree with the statement. It has been concluded that 73.7 percent of the patients affirm the statement “Doctors and nurses are reluctant with hepatitis patients”.

Statement 5.14 further presents the responses of patients toward disease related stigma of alienation at hospitals. The analysis exposed that 21.1 percent of patients strongly agree and 63.7 percent of patients agree with the given statement “doctors and nurses keep distance from patients diagnosed with hepatitis B and C virus”. Contrary to it 9.8 percent of the patients disagree and only 5.5 percent of the patients strongly disagree with the statement. It has been concluded that 84.8 percent of the patients perceive social alienation at hospitals.

Statement 5.15 presents the responses of patients toward disease related stigma of differential treatment at hospitals. The data reveals that 7.5 percent of patients strongly agree and 11.8 percent of patients agree with the given statement “hepatitis B or C patient hardly get admission in wards”. Contrary to it, 46.4 percent of the patients disagree and 34.3 percent of the patients strongly disagree with the statement. It is thus concluded that only 19.3 percent of the patients believe that the hospitals are differentially treating them.

3.6. Health Literacy as Organizational Factors

The factors affecting health communication and health outcomes of hepatitis patients at organizational level have been analyzed in this section. The variable used in this section affects communication at a larger level where individual rely on the available structure of health care system.

Table 3.6.1 Patients' Response towards Health Literacy

Very Difficult= VD, Fairly Difficult=FD, Fairly Easy=FE, Very Easy=VE

S.N.	Statement	VD	FD	FE	VE
		f(%)	f(%)	f(%)	f(%)
6.1	I find information on treatment of illness that concerns me	296 (74.2)	94 (23.6)	9 (2.3)	0 (0.0)
6.2	I understand what the doctor said to me	30 (7.5)	36 (9.0)	227 (56.9)	106 (26.6)
6.3	I understand my doctor instructions on how to take medicine	44 (11.0)	20 (5.0)	248 (62.2)	87 (21.8)
6.4	I judge when I need to get second opinion from another doctor	168 (42.1)	152 (38.1)	59 (14.8)	20 (5.0)
6.5	I use information that doctors give me to make decisions about my illness	169 (42.4)	80 (20.1)	112 (28.1)	38 (9.5)
6.6	I follow instructions from my doctors or pharmacists	34 (8.5)	3 (.8)	285 (71.4)	77 (19.3)
6.7	I find information on how to manage mental health problems	269 (67.4)	122 (30.6)	6 (1.5)	5 (.5)
6.8	I understand why I need health screening	212 (53.1)	100 (25.1)	74 (18.5)	13 (3.3)
6.9	I find out about activities that are good for my mental well being	239 (59.9)	127 (31.8)	27 (6.8)	6 (1.8)
6.10	I understand advice from family members	10 (2.5)	2 (.5)	109 (27.3)	278 (69.7)
6.11	I understand information in the media on how to get healthier	301 (75.4)	69 (17.3)	25 (6.3)	4 (1.0)
6.12	I judge when every behavior is related to my health	270 (67.7)	74 (18.5)	52 (13.0)	3 (.8)

Statement 6.1 presents the responses of patients toward health literacy. The data revealed that 0 percent of patients are very easy and 2.3 percent of patients are fairly easy with the given statement “I find information on treatments of illness that concerns me”. Contrary to it, 23.6 percent of the patients are fairly difficult and 74.2 percent of the patients are very difficult with the said statement. It has been concluded that only 2.3 percent of the patients approve the statement and a large portion of the study population is unable to comprehend the treatment information.

Statement 6.2 presents the responses of patients toward health literacy. The data depicts that 26.6 percent of patients are very easy and 56.9 percent of patients are fairly easy with the given statement “I understand what the doctor said to me”. Opposite to that, 9.0 percent of the patients are fairly difficult and 7.5 percent of the patients are very difficult with the statement stated above. It has been concluded that 83.5 percent of the patients are able to understand what the doctors say to them.

Statement 6.3 presents the responses of patients toward health literacy related to the instructions of taking medicines. The data shows that 21.8 percent of patients are very easy and 62.2 percent of patients are fairly easy with the given statement “I understand my doctor instructions on how to take medicine”. On the other hand, 5.0 percent of the patients are fairly difficult and 11.0 percent of the patients are very difficult with the statement proposed above. It has been concluded that majority, 84.0 percent of the patients feel easy in understanding the instructions given by the doctors.

Statement 6.4 presents the reactions of patients toward health literacy related to taking decisions. The data reveals that 5.0 percent of patients are very easy and 14.8 percent of patients

are fairly easy with the given statement “I judge when I need to get second opinion from another doctor”. Contrary to it, 38.1 percent of the patients are fairly difficult and 42.1 percent of the patients are very difficult with the proposition made above. It has been thus inferred that only 19.8 percent of the patients are able to take decisions while switching the doctors.

Statement 6.5 shows the responses of patients toward health literacy related to comprehending the information about the disease. The data exposes that 9.5 percent of patients are very easy and 28.1 percent of patients are fairly easy with the given statement “I use information that doctors give me to make decision about my illness”. Contrary to it, 20.1 percent of the patients are fairly difficult and 42.4 percent of the patients are very difficult with the said statement. It has been concluded that 37.6 percent of the patients are literate enough to consume the information related to the disease.

Statement 6.6 presents the responses of patients toward health literacy related to taking instructions. The data reveals that 19.3 percent of patients are very easy and 71.4 percent of patients are fairly easy with the given statement “I follow instructions from my doctors or pharmacists”. Contrary to it, only 0.8 percent of the patients are fairly difficult and 8.5 percent of the patients are very difficult with the statement. It has been concluded that a majority, 90.7 percent of the patients approve the above stated proposition.

Statement 6.7 shows the replies of patients toward health literacy statements related to mental health. The data expresses that 0.5 percent of patients are very easy and 1.5 percent of patients are fairly easy with the given statement “I find information on how to manage mental health problems”. Contrary to it, 30.6 percent of the patients are fairly difficult and 67.4 percent

of the patients are very difficult with this statement. Thus it can be stated that only 2.0 percent of the patients are able to work on their mental health.

Statement 6.8 further presents the answers of patients toward health literacy related to the importance of getting tested. The data discovers that only 3.3 percent of patients are very easy and 18.5 percent of patients are fairly easy with the given statement “I understand why I need health screening”. Contrary to it, 25.1 percent of the patients are fairly difficult and 53.1 percent of the patients are very difficult with this. It can be expressed that only 21.8 percent of the patients approve that they can understand the importance of being tested.

Statement 6.9 presents the responses of patients toward health literacy related to co-curricular activities necessary for good mental health. The data highlights that only 1.8 percent of patients are very easy and 6.8 percent of patients are fairly easy with the given statement “I find out about activities that are good for my mental wellbeing”. Contrary to this, 31.8 percent of the patients are fairly difficult and 59.9 percent of the patients are very difficult with the said statement. It has been concluded that only 2.3 percent of the patients approve the execution of extra activities for good mental health which is necessary for defeating the chronic disease of hepatitis.

Statement 6.10 depicts the responses of patients toward health literacy to feedback from the family members. The data reveals that 69.7 percent of patients are very easy and 27.3 percent of patients are fairly easy with the given statement “I understand advice from family members”. In contrast to it, only 0.5 percent of the patients are fairly difficult and 2.5 percent of the patients are very difficult with the said statement. It has been thus concluded that a great majority of 97 percent of the patients comprehend the interfamily communication well.

Statement 6.11 presents the responses of patients toward health literacy related to media advocacy of health. The data interestingly points out that 1.0 percent of patients are very easy and 6.3 percent of patients are fairly easy with the given statement “I understand information in the media on how to get healthier”. Contrastively, 17.3 percent of the patients are fairly difficult and 75.4 percent of the patients are very difficult with the said. It is thus concluded that only 7.3 percent of the patients understand the contents of media advocacy for living a healthier life and recovering from disease.

Statement 6.12 depicts the answers of patients toward health literacy. The results reveal that only 0.8 percent of patients are very easy and 13.0 percent of patients are fairly easy with the given statement “I judge when every behavior is related to my health”. In contrast to this, 18.5 percent of the patients are fairly difficult and 67.7 percent of the patients are very difficult with the said statement. It is found that only 13.8 percent of the patients are in the favor of the statement “I judge when every behavior is related to my health”.

3.7. Media Advocacy as Organizational factor

Table 3.7.1 Patients' Responses Towards Media Advocacy

Strongly Disagree= SD, Disagree=D, Agree=A, Strongly Agree=SA

S.N.	Statement	SD	D	A	SA
		f(%)	f(%)	f(%)	f(%)
7.1	I am generally attentive to health information on T.V, radio or other means	272 (68.2)	57 (14.3)	22 (5.5)	48 (12.0)
7.2	I often find enough health information on media	305 (76.4)	94 (23.6)	00 (0.00)	00 (0.00)
7.3	Media is actively involved in health campaign	335 (84.0)	62 (15.5)	2 (.5)	00 (0.00)
7.4	Media information about health is easily understandable	366 (91.7)	24 (6.0)	9 (2.3)	00 (0.00)
7.5	I often prefer health information on social media	226 (56.6)	53 (13.3)	86 (21.6)	34 (8.5)
7.6	Social media information about hepatitis made me conscious about my disease	241 (60.4)	72 (18.0)	77 (19.3)	9 (2.3)
7.7	Both electronic and print media help in health awareness	344 (86.2)	54 (13.5)	1 (.3)	00 (0.00)
7.8	I came to know about hepatitis control program through electronic media	334 (83.7)	65 (16.3)	00 (0.00)	00 (0.00)
7.9	I often find public health messages in mainstream media	348 (87.2)	50 (12.5)	1 (.3)	00 (0.00)
7.10	Public health messages in media are often in local languages	347 (87.0)	50 (12.5)	1 (.3)	1 (.3)

Statement 7.1 depicts the responses of patients toward media advocacy related to the availability of health contents on media sources. The results reveal that 12.0 percent of patients strongly agree and 5.5 percent of patients agree with the given statement "I am generally attentive to health information on T.V, radio or other means". Contrary to it, 14.3 percent of the patients disagree and 68.2 percent of the patients strongly disagree with the said statement. It has been concluded that 17.5 percent of the patients take advantage of the media advocacy of health.

Statement 7.2 presents the responses of patients toward media advocacy of health. The data reveals that 0.0 percent of patients strongly agree and 0.0 percent agrees with the given statement "I often found enough health information from media". Contrarily to it, 23.6 percent of the patients disagree and 76.4 percent of the patients strongly disagree with the said statement. It has been concluded that none of the patients among the study population believe that media helps in health advocacy.

Statement 7.3 depicts the responses of patients toward media advocacy. The results show that 0.0 percent of patients strongly agree and only 0.5 percent of patients agreed with the given statement "media is actively involved in health campaign". Contrary to it, 15.5 percent of the patients disagree and 84.0 percent of the patients strongly disagree with the said statement. It has been concluded that only 0.5 percent of the patients believe that media is playing its role in promoting health literacy.

Statement 7.4 shows the answers of patients toward media advocacy related to comprehending the media messages concerning health. The analysis reveals that 0.0 percent of patients strongly agree and only 2.3 percent of patients agree with the given statement "media information about health is easily understandable". Contrary to it, 6.0 percent of the patients

disagree and 91.7 percent of the patients strongly disagree with the said statement. The results of this question are in configuration with last two questions. It has been concluded that only 2.3 percent of the patients believe that media messages relating to health are understandable.

Statement 7.5 depicts the responses of patients toward media advocacy relating to health information on social media. The results reveal that 8.5 percent of patients strongly agree and 21.6 percent of patients agree with the statement “I often prefer health information on social media”. Contrary to it, 13.3 percent of the patients disagree and 56.6 percent of the patients strongly disagree with the said statement. It has been concluded that 30.1 percent of the patients believe that health related contents on social media are helpful.

Statement 7.6 reveals the reactions of patients toward media advocacy related to the role of social media. The results depict that only 2.3 percent of patients strongly agree and 19.3 percent of patients agree with the given statement “social media information about hepatitis made me conscious about my disease”. Contrastively, 18.0 percent of the patients disagree and 60.4 percent of the patients strongly disagree with the said statement. It has been concluded that only 21.6 percent of the patients believe that social media is helping them in their fight against the chronic disease.

Statement 6.7 depicts the responses of patients toward media advocacy related to the role of print and electronic media in propagating health awareness. The results reveal that 0.0 percent of patients strongly agree and only 0.3 percent of patients agree with the statement “both electronic and print media help out in health awareness”. Contrary to it, 13.5 percent of the patients disagree and 86.2 percent of the patients strongly disagree with the said statement. It has

been concluded that only 0.3 percent of the patients believe that electronic and print media is playing a role in propagating health related awareness.

Statement 7.8 portrays the responses of patients toward media advocacy relating to treating facilities. The results show that 0.0 percent of patients strongly agree and 0.0 percent agrees with the given statement “I came to know about hepatitis control program through electronic media”. In contrast to this, 16.3 percent of the patients disagree and 83.7 percent of the patients strongly disagree with the said statement. It has been concluded that none of the participants is satisfied with the role media in guiding the patients to access a convenient health care facilities.

Statement 7.9 depicts the responses of patients toward media advocacy of health related to the role of mainstream media. The analysis reveals that 0.0 percent of patients strongly agree and only 0.3 percent of patients agree with the given statement “I often fined public health messages through mainstream media”. On the contrary, 12.5 percent of the patients disagree and 87.2 percent of the patients strongly disagree with the said statement. It has been concluded that only 0.3 percent of the patients are satisfied with the role of media in propagating health messages.

Statement 7.10 shows the responses of patients toward media advocacy of health relating to the language used in public awareness messages. The analysis depicts that only 0.3 percent of patients strongly agree and 0.3 percent of patients agree with the given statement “public health messages in media are often in local languages”. Contrary to it, 12.5 percent of the patients disagree and 87.0 percent of the patients strongly disagree with the said statement. It has been

concluded that only 0.6 percent of the patients agree that the public health messages in the media are of any convenience.

3.8. Cultural Competence as Societal Factors

This section analyzed the factors contributing in health communication at societal level. The variable used in this section shed light on the overall health situation and its causes. These factors are contributing in health communication and health outcomes beyond the individual capacity.

Table 3.8.1 Patients' Responses Towards Cultural Competence

Strongly Disagree= SD, Disagree=D, Agree=A, Strongly Agree=SA

S.N.	Statement	SD	D	A	SA
		f(%)	f(%)	f(%)	f(%)
8.1	Patient reject treatment due to folk taboo	59 (14.8)	103 (25.8)	125 (31.3)	112 (28.1)
8.2	Patient mind homophobic	43 (10.8)	103 (25.8)	191 (47.9)	62 (15.5)
8.3	Patient believe that folk treatment is better than medical treatment	35 (8.8)	110 (27.6)	153 (38.3)	101 (25.3)
8.4	Misunderstanding between doctor and patient is due to language barrier	11 (2.8)	36 (9.0)	219 (54.9)	133 (33.3)
8.5	Conflict in treatment is due to differences of beliefs	18 (4.5)	37 (9.3)	204 (51.1)	140 (35.1)
8.6	Building nurse patient relationship can reduce medical inisunderstanding	27 (6.8)	46 (11.5)	162 (40.6)	164 (41.1)
8.7	Focusing cultural differences in medical care can reduce health miseries	69 (17.3)	36 (9.0)	215 (53.9)	79 (19.8)
8.8	Stress, caused by unfamiliar environment can enhance health miseries	156 (39.1)	154 (38.6)	50 (12.5)	39 (9.8)
8.9	Noticing patient's religious rituals or living habits can enhance patient's adherence to medical treatment	49 (12.3)	54 (13.5)	194 (48.6)	102 (25.6)
8.10	Patients prefer doctors and nurses of their culture and religion	33 (8.3)	59 (14.8)	158 (39.6)	149 (37.3)

Statement 8.1 presents the responses of patients toward cultural competence relating to folk taboos. The analysis reveals that 28.1 percent of patients strongly agree and 31.3 percent of patients agree with the given statement “patient reject treatment due to folk taboo”. Contrary to it, 25.8 percent of the patients disagree and 14.8 percent of the patients strongly disagree with the said statement. It has been concluded that 59.4 percent of the patients believe that folk taboos are hindering the treatment process.

Statement 8.2 depicts the responses of patients toward cultural competence. The data reveals that 15.5 percent of patients strongly agree and 47.9 percent of patients agree with the given statement “patients mind homophobic”. Opposite to it 25.8 percent of the patients are disagree and 10.8 percent of the patients are strongly disagree with the statement “patients mind homophobic”. It has been analyzed that 63.4 percent of the patients are in the favor of the statement “patients mind homophobic”.

Statement 8.3 presents the replies of patients toward cultural competence relating to the comparison of folk treatment and medical treatment. The analysis reveals that 25.3 percent of patients strongly agree and 38.3 percent of patients agree with the given statement “patients believe that folk treatment is better than medical treatment”. Contrary to it, 27.6 percent of the patients disagree and 8.8 percent of the patients strongly disagree with the said statement. It has been concluded that 59.4 percent of the patients believe that folk treatment is better than medical treatment.

Statement 8.4 depicts the responses of patients toward cultural competence relating to language barrier. The data reveals that 33.3 percent of patients strongly agree and 54.9 percent of patients agree with the given statement “misunderstanding between doctor and patient is due to

language barrier". Contrary to it, 9.0 percent of the patients disagree and only 2.8 percent of the patients strongly disagree with the said statement. It has been concluded that 59.4 percent of the patients believe that their miscommunication with the doctor is caused by the language barrier.

Statement 8.5 presents the answers of patients toward cultural competence relating to differential belief system. The inquiry reveals that 35.1 percent of patients strongly agree and 51.1 percent of patients agree with the given statement "Conflict in treatment is due to differences of beliefs". In contrast to this, only 9.3 percent of the patients disagree and 4.5 percent of the patients strongly disagree with the said statement. It has been concluded that 59.4 percent of the patients believe that difference in the belief system causes a difference in the treatment methods.

Statement 8.6 depicts the responses of patients toward cultural competence relating to patient nurse relationship. The analysis reveals that 41.1 percent of patients strongly agree and 40.6 percent of patients agree with the given statement "building nurse patient relationship can reduce medical misunderstanding". Contrary to it, 11.5 percent of the patients disagree and only 6.8 percent of the patients strongly disagree with the said statement. It has been concluded that 81.7 percent of the patients are in the support of building strong patient and nurse relationship to enhance healing.

Statement 8.7 presents the reactions of patients toward cultural competence. The investigations reveals that 19.8 percent of patients are strongly agreed and 53.9 percent of patients agreed with the given statement "focusing cultural differences in medical care can reduce health miseries". Different to it 9.0 percent of the patients disagreed and 17.3 percent of the patients are strongly disagreed with the statement "focusing cultural differences in medical

care can reduce health miseries". It has been resulted that a big majority of 73.7 percent of the patients are in the favor of the statement "focusing cultural differences in medical care can reduce health miseries".

Statement 8.8 depicts the responses of patients toward cultural competence relating to stress caused by the unfamiliar environment in hospitals. The analysis reveals that 9.8 percent of patients strongly agree and 12.5 percent of patients agree with the given statement "stress, caused by unfamiliar environment can enhance health miseries". Contrary to it, 38.6 percent of the patients disagree and 39.1 percent of the patients strongly disagree with the said proposition. It has been concluded that only 22.3 percent of the patients are in agreement with the statement.

Statement 8.9 presents the responses of patients toward cultural competence relating to religious beliefs. The examination reveals that 25.6 percent of patients strongly agree and 48.6 percent of patients agree with the given statement "noticing patient's religious rituals or living habits can enhance patient's adherence to medical treatment". Contrary to it, 13.5 percent of the patients disagree and 12.3 percent of the patients strongly disagree with the said statement. It has been concluded that 74.2 percent of the patients are in the support of the statement "noticing patient's religious beliefs or living habits can enhance patient's adherence to medical treatment".

Statement 8.10 depicts the responses of patients toward cultural competence relating to cultural and religious proximity of patient and doctor. The analysis exposes that 37.3 percent of patients strongly agree and 39.6 percent of patients agree with the given statement "Patients prefer doctors and nurses of their culture and religion". In contrast to it, 14.8 percent of the patients disagree and 8.3 percent of the patients strongly disagree with the said statement. It has

been concluded that 76.9 percent of the patients prefer the doctors with whom they have cultural or religious proximity.

3.9. Health Behavior as Societal Factor

Table 3.9.1 Patients' Responses Towards Health Behaviour

Strongly Disagree=SD, Disagree=D, Agree=A, Strongly Agree=SA

S.N.	Statement	SD	D	A	SA
		f(%)	f(%)	f(%)	f(%)
9.1	I have at least 3 meals a day	118 (29.6)	99 (24.8)	160 (40.1)	22 (5.5)
9.2	I have breakfast early in the morning	85 (21.3)	92 (23.1)	195 (48.9)	27 (6.8)
9.3	I have vegetable at least once in a week	54 (13.5)	93 (23.3)	221 (55.4)	31 (7.8)
9.4	I have reduced the amount of salt in meal	13 (3.3)	28 (7.0)	282 (70.7)	76 (19.0)
9.5	I have limited consumption of sugar	89 (22.3)	170 (42.6)	117 (29.3)	23 (5.8)
9.6	I try to avoid snacking between meals	154 (38.6)	186 (46.6)	54 (13.5)	5 (1.3)
9.7	I try to exercise or physical activity at least 30 minutes a day	186 (46.6)	178 (44.6)	30 (7.5)	5 (1.3)
9.8	I do strength building exercise	212 (53.1)	123 (30.8)	59 (14.8)	5 (1.3)
9.9	I increase physical activity or exercise every day	225 (56.4)	150 (37.6)	23 (5.8)	1 (.3)
9.10	I limit the time spent in watching television	244 (61.2)	123 (30.8)	28 (7.0)	4 (1.0)
9.11	I get enough sleep every day	18 (4.5)	97 (24.3)	204 (51.1)	80 (20.1)
9.12	I go to bed at regular hours	18 (4.5)	86 (21.6)	187 (46.9)	108 (27.1)
9.13	I brush teeth at regular basis	172 (43.1)	53 (13.3)	60 (15.0)	114 (28.6)
9.14	I have regular health checkup schedule	228 (57.1)	141 (35.3)	28 (7.0)	2 (.5)
9.15	I prefer vaccination for every viral disease	172 (43.1)	40 (10.0)	98 (24.6)	89 (22.3)
9.16	I avoid people who are using drugs in any form	58 (14.5)	21 (5.3)	95 (23.8)	225 (56.4)

Statement 9.1 presents the responses of patients toward health behavior relating to diet. The analysis reveals that only 5.5 percent of patients strongly agree and 40.1 percent of patients agree with the given statement “I have at least 3 meals a day”. Contrary to it, 24.8 percent of the patients disagree and 29.6 percent of the patients strongly disagree with the said statement. It has been found that 45.6 percent of the patients take three times regular meals.

Statement 9.2 depicts the responses of patients toward health behavior relating to diet. The data reveals that only 6.8 percent of patients strongly agree and 48.9 percent of patients agree with the given statement “I have breakfast early in the morning”. Contrary to it, 23.1 percent of the patients disagree and 21.3 percent of the patients strongly disagree with the said statement. It has been concluded that 55.7 percent of the patients take regular breakfasts.

Statement 9.3 shows the reactions of patients toward health behavior relating to diet. The results portray that only 7.8 percent of patients strongly agree and 55.4 percent of patients agree with the given statement “I have vegetable at least once in a week”. Contrary to it, 23.3 percent of the patients disagree and 13.5 percent of the patients strongly disagree with the said statement. It has been concluded that 63.2 percent of the patients are in the favor of the statement “I have vegetable at least once a week”.

Statement 9.4 presents the responses of patients toward health behavior relating to the intake of salts in meals. The analysis reveals that 19.0 percent of patients strongly agree and 70.7 percent of patients agree with the given statement “I have reduced the amount of salt in meal”. Contrary to it, 7.0 percent of the patients disagree and 3.3 percent of the patients strongly disagree with the statement. It has been concluded that 89.7 percent of the patients avoid salt intake in meals.

Statement 9.5 shows the responses of patients toward health behavior relating to intake of sugar in diet. The data reveals that only 5.8 percent of patients strongly agree and 29.3 percent of patients agree with the given statement “I have limited consumption of sugar”. In contrast to it, 42.6 percent of the patients disagree and 22.3 percent of the patients strongly disagree with the said statement. It has been concluded that 35.1 percent of the patients are sensitive to the intake of sugar in diet.

Statement 9.6 presents the responses of patients toward health behavior relating to taking snacks in between the meals. The analysis reveals that only 1.3 percent of patients strongly agree and 13.5 percent of patients agree with the given statement “I try to avoid snacking between meals”. Contrary to it, 46.6 percent of the patients disagree and 38.6 percent of the patients strongly disagree with the proposed statement. It has been deduced that only 14.8 percent of the patients taking snacks in between the meals.

Statement 9.7 shows the responses of patients toward health behavior relating to exercise. The results reveal that only 1.3 percent of patients strongly agree and 7.5 percent of patients agree with the given statement “I try to exercise or physical activity at least 30 minutes a day”. Contrary to it, 44.6 percent of the patients disagree and 46.6 percent of the patients strongly disagree with the said statement. It has been concluded that only 8.8 percent of the patients are in the support of the statement “I try to exercise or physical activity at least 30 minutes a day”.

Statement 9.8 presents the responses of patients toward health behavior. The analysis reveals that only 1.3 percent of patients strongly agree and 14.8 percent of patients agree with the given statement “I do strength building exercise”. Contrary to it, 30.8 percent of the patients

disagree and 53.1 percent of the patients strongly disagree with the said statement. It has been deduced that only 16.1 percent of the patients do regular exercise to strengthen the body.

Statement 9.9 shows the answers of patients toward health behavior relating to exercise. The results depict that only 0.3 percent of patients strongly agree and 5.8 percent of patients agree with the given statement “I increase physical activity or exercise every day”. Contrary to it, 37.6 percent of the patients disagree and 56.4 percent of the patients strongly disagree with the proposed statement. It has been concluded that only 6.1 percent of the patients are in the support of the statement “I increase physical activity or exercise every day”.

Statement 9.10 presents the responses of patients toward health behavior relating to time the patients spent in front of the TV. The analysis reveals that only 1.0 percent of patients strongly agree and 7.0 percent of patients agreed with the given statement “I limit the time spent in watching television”. On the other hand, 30.8 percent of the patients disagree and 61.2 percent of the patients strongly disagree with the said statement. It has been concluded that only 8.0 percent of the patients are in the favor of the statement “I limit the time spent in watching television”.

Statement 9.11 shows the responses of patients toward health behavior relating to sleep. The results reveal that 20.1 percent of patients strongly agree and 51.1 percent of patients agree with the given statement “I get enough sleep every day”. Contrary to it, 24.3 percent of the patients disagree and only 4.5 percent of the patients strongly disagree with the proposed statement. It has been deduced that 71.2 percent of the patients get proper sleep.

Statement 9.12 presents the responses of patients toward health behavior relating to sleep timetable. The analysis depicts that only 27.1 percent of patients strongly agree and 46.9 percent

of patients agree with the given statement “I go to bed at regular hours”. In contrast to it, 21.6 percent of the patients disagree and 4.5 percent of the patients strongly disagree with the said statement. It has been concluded that 74.0 percent of the patients keep a care of their sleep routine.

Statement 9.13 presents the responses of patients toward health behavior relating to cleanliness. The analysis reveals that 28.6 percent of the patients strongly agree and 15.0 percent of patients agree with the given statement “I brush teeth on regular basis”. Contrary to it, 13.3 percent of the patients disagree and 43.1 percent of the patients strongly disagree with the said statement. It has been concluded that 43.6 percent of the patients are in the favor of the argument “I brush teeth on regular basis”.

Statement 9.14 shows the replies of patients toward health behavior relating to health checkup intervals. The data depicts that only 0.5 percent of patients strongly agree and 7.0 percent of patients agree with the given statement “I have regular health checkup schedule”. Contrary to it, 35.3 percent of the patients disagree and 57.1 percent of the patients strongly disagree with the statement. It has been concluded that only 7.5 percent of the patients are in the support of the statement “I have regular health checkup schedule”.

Statement 9.15 presents the responses of patients toward health behavior relating to vaccination. The analysis reveals that 22.3 percent of patients strongly agree and 24.6 percent of patients agree with the given statement “I prefer vaccination for every viral disease”. Contrary to it, 10.0 percent of the patients disagree and 43.1 percent of the patients strongly disagree with the statement. It has been conclude that 46.9 percent of the patients are in the approval of the statement “I prefer vaccination for every viral disease”.

Statement 9.16 depicts the responses of patients toward health behavior. The results reveal that 56.4 percent of patients strongly agree and 23.8 percent of patients agree with the given statement “I avoid people who are using drugs in any form”. Contrary to it, 5.3 percent of the patients disagree and 14.5 percent of the patients strongly disagree with the said statement. It has been concluded that 80.2 percent of the patients are in the favor of the statement “I avoid people who are using drugs in any form”

3.10. Health Practices as Societal Factor

Table 3.10.1 *Patients' Responses Towards Health Practices*

Strongly Disagree=SD, Disagree=D, Agree=A, Strongly Agree=SA

S.N.	Statement	SD	D	A	SA
		f (%)	f (%)	f (%)	f (%)
10.1	I believe that herbal medicine can cure chronic diseases	85 (21.3)	44 (11.0)	135 (33.8)	135 (33.8)
10.2	I believe that cultural medicine can cure hepatitis	105 (26.3)	42 (10.5)	118 (29.6)	134 (33.6)
10.3	I believe that consultation with religious healer can cure diseases	80 (20.1)	61 (15.3)	125 (31.3)	133 (33.3)
10.4	I trust that cold constructed food can cure liver diseases	8 (2.0)	10 (2.5)	207 (51.9)	174 (43.6)
10.5	I trust that organic food can cure liver diseases	14 (3.5)	17 (4.3)	184 (46.1)	184 (46.1)
10.6	I trust that bitter foods can detoxify liver diseases	11 (2.8)	32 (8.0)	202 (50.6)	154 (38.6)
10.7	I trust on faith healers in health remedy	48 (12.0)	131 (32.8)	77 (19.3)	143 (35.8)
10.8	I believe that spiritual meditation can cure chronic diseases	96 (24.1)	95 (23.8)	77 (19.3)	131 (32.8)
10.9	I believe that repentance on bad deeds can reduce health problems	132 (33.1)	119 (29.8)	48 (12.0)	100 (25.1)

Statement 10.1 presents the responses of patients toward health practices relating to herbal treatment. The analysis reveals that 33.8 percent of patients strongly agree and 33.8 percent of patients agree with the given statement “I believe that herbal medicine can cure chronic diseases”. Contrary to it, 11.0 percent of the patients disagree and 21.3 percent of the patients strongly disagree with the said statement. It has been concluded that 66.6 percent of the patients believe that using herbal medicines can treat the disease.

Statement 10.2 depicts the responses of patients toward health practices relating to cultural medicines. The results reveal that 33.6 percent of patients strongly agree and 29.6 percent of patients agree with the given statement “I believe that cultural medicine can cure hepatitis”. Contrary to it, 10.5 percent of the patients disagree and 26.3 percent of the patients strongly disagree with the statement. It has been concluded that 63.2 percent of the patients are in the support of the statement “I believe that cultural medicine can cure hepatitis”.

Statement 10.3 presents the answers of patients toward health practices relating to religious healing. The analysis depicts that 33.3 percent of patients strongly agree and 31.3 percent of patients agree with the given statement “I believe that consultation with religious healer can cure diseases”. Contrary to it, 15.3 percent of the patients disagree and 20.1 percent of the patients strongly disagree with the said statement. It has been concluded that 64.4 percent of the patients are in the approval of the statement “I believe that consultation with religious healer can cure diseases”.

Statement 10.4 presents the responses of patients toward health practices relating to cold constructed food. The analysis reveals that 43.6 percent of patients strongly agree and 51.9 percent of patients agree with the given statement “I trust that cold constructed food can cure

liver diseases”. Contrary to it, 2.5 percent of the patients disagree and 2.0 percent of the patients strongly disagree with the statement “I trust that cold constructed food can cure liver diseases”. It has been concluded that a 95.5 percent of the patients are in the favor of the statement “I trust that cold constructed food can cure liver diseases”.

Statement 10.5 shows the answers of patients toward health practices relating to the use of organic foods as source of health. The data reveals that 46.1 percent of patients strongly agree and 46.1 percent of patients agree with the given statement “I trust that organic food can cure liver diseases”. Contrary to it, 4.3 percent of the patients disagree and 3.5 percent of the patients strongly disagree with the said statement. It has been concluded that 92.2 percent of the patients are in the support of the statement “I trust that organic food can cure liver diseases”.

Statement 10.6 presents the responses of patients toward health practices relating to food. The analysis reveals that 38.6 percent of patients strongly agree and 50.6 percent of patients agree with the given statement “I trust that bitter foods can detoxify liver diseases”. Contrary to it, 8.0 percent of the patients disagree and 2.8 percent of the patients strongly disagree with the said statement. It has been concluded that 89.2 percent of the patients are in the favor of the statement “I trust that bitter foods can detoxify liver diseases”.

Statement 10.7 presents the replies of patients toward health practices relating to faith healing. The results reveal that 35.8 percent of patients strongly agree and 19.3 percent of patients agree with the given statement “I trust on faith healers in health remedy”. Contrary to it, 32.8 percent of the patients disagree and 12.0 percent of the patients strongly disagree with the said statement. It has been concluded that 55.1 percent of the patients are in the support of the statement “I trust on faith healers in health remedy”.

Statement 10.8 presents the responses of patients toward health practices relating to spiritual medication. The analysis depicts that 32.8 percent of patients strongly agree and 19.3 percent of patients agree with the given statement “I believe that spiritual meditation can cure chronic diseases”. Contrary to it, 23.8 percent of the patients disagree and 24.1 percent of the patients strongly disagree with the said statement. It has been concluded that 52.1 percent of the patients are in the favor of the statement “I believe that spiritual meditation can cure chronic diseases”.

Statement 10.9 shows the responses of patients toward health practices relating to the belief that disease is product of bad deeds. The data reveals that 25.1 percent of patients strongly agree and 12.0 percent of patients agree with the given statement “I believe that repentance on bad deeds can reduce health problems”. Contrary to it, 29.8 percent of the patients disagree and 33.1 percent of the patients strongly disagree with the said statement. It has been concluded that only 37.1 percent of the patients are in the favor of the statement “I believe that repentance on bad deeds can reduce health problems”.

3.11. Patient Reported Health Outcomes

Table 3.11.1 *Patients' Responses Towards their health Reported Outcomes*

Strongly Disagree= SD, Disagree=D, Agree=A, Strongly Agree=SA

S.N	Statement	SD	D	A	SA
		f(%)	f(%)	f(%)	f(%)
11.1	I am able to work properly	71 (17.8)	163 (40.9)	121 (30.3)	44 (11.0)
11.2	I am able to climb stairs without any trouble	70 (17.5)	162 (40.6)	124 (31.1)	43 (10.8)
11.3	I do not have sleep disturbance	72 (18.0)	86 (21.6)	144 (36.1)	97 (24.3)
11.4	I do not have feeling of worthlessness	53 (13.3)	131 (32.8)	170 (42.6)	45 (11.3)
11.5	I do not have trouble to participate in social activities	51 (12.8)	168 (42.1)	137 (34.3)	43 (10.8)
11.6	I properly perform my social responsibilities	55 (13.8)	168 (42.1)	140 (35.1)	36 (9.0)
11.7	I properly participate in discretionary activities	91 (22.8)	270 (67.7)	28 (7.0)	10 (2.5)
11.8	I am satisfied with my social activities	66 (16.5)	153 (38.3)	163 (40.9)	17 (4.3)
11.9	I have no body ache or limitations due to body ache	96 (24.1)	258 (64.7)	35 (8.8)	10 (2.5)
11.10	I evaluate personal health as excellent	100 (25.1)	248 (62.2)	50 (12.5)	1 (.3)
11.11	I feel peaceful, happy and calm all the time	77 (19.3)	173 (43.4)	143 (35.8)	6 (1.5)
11.12	I feel energetic all the time	170 (42.6)	217 (54.4)	11 (2.8)	1 (.3)

Statement 11.1 presents the responses of patients toward patients' health reported outcomes. The analysis reveals that 11.0 percent of patients strongly agree and 30.3 percent of patients agree with the given statement "I am able to work properly". Contrary to it, 40.9 percent of the patients disagree and 17.8 percent of the patients strongly disagree with the said statement. It has been concluded that 41.3 percent of the patients are in the favor of the statement "I am able to work properly".

Statement 11.2 shows the responses of patients toward patients' health reported outcomes. The data depicts that 10.8 percent of patients strongly agree and 31.1 percent of patients agree with the given statement "I am able to climb stairs without any trouble". Contrary to it, 40.6 percent of the patients disagree and 17.5 percent of the patients strongly disagree with the statement. It has been concluded that 41.9 percent of the patients are in the support of the statement "I am able to climb stairs without any trouble".

Statement 11.3 presents the responses of patients toward patients' health reported outcomes. The analysis reveals that 24.3 percent of patients strongly agree and 36.1 percent of patients agree with the given statement "I do not have sleep disturbance". Contrary to it, 21.6 percent of the patients disagree and 18.0 percent of the patients strongly disagree with the said statement. It has been concluded that 60.4 percent of the patients are in the favor of the statement "I do not have sleep disturbance".

Statement 11.4 presents the replies of patients toward patients' health reported outcomes. The results reveal that 11.3 percent of patients strongly agree and 42.6 percent of patients agree with the given statement "I do not have feeling of worthlessness". Contrary to it, 32.8 percent of the patients disagree and 13.3 percent of the patients strongly disagree with the said statement. It

has been argued that 53.9 percent of the patients are in the support of the statement “I do not have feeling of worthlessness”.

Statement 11.5 presents the responses of patients toward patients’ health reported outcomes. The analysis reveals that 10.8 percent of patients strongly agree and 34.3 percent of patients agree with the given statement “I do not have trouble to participate in social activities”. Contrary to it, 42.1 percent of the patients disagree and 12.8 percent of the patients strongly disagree with the said statement. It has been concluded that 45.1 percent of the patients are in the favor of the statement “I do not have trouble to participate in social activities”.

Statement 11.6 shows the replies of patients toward patients’ health reported outcomes. The analysis depicts that 9.0 percent of patients strongly agree and 35.1 percent of patients agree with the given statement “I properly perform my social responsibilities”. Contrary to it, 42.1 percent of the patients disagree and 13.8 percent of the patients strongly disagree with the said statement. It has been concluded that 44.1 percent of the patients approve the statement “I properly perform my social responsibilities”.

Statement 11.7 presents the answers of patients toward patients’ health reported outcomes. The analysis depicts that 2.5 percent of patients strongly agree and 7.0 percent of patients agree with the statement “I properly participate in discretionary activities”. Contrary to it, 67.7 percent of the patients disagree and 22.8 percent of the patients strongly disagree with the said statement. It has been argued that only 9.5 percent of the patients are in the favor of the statement “I properly participate in discretionary activities”.

Statement 11.8 presents the responses of patients toward patients’ health reported outcomes. The data reveals that only 4.3 percent of patients strongly agree and 40.9 percent of

patients agree with the given statement “I am satisfied with my social activities”. Contrary to it, 38.3 percent of the patients disagree and 16.5 percent of the patients strongly disagree with the said proposition. It has been deduced, that 44.3 percent of the patients are in the support of the statement “I am satisfied with my social activities”.

Statement 11.9 presents the responses of patients toward patients’ health reported outcomes. The analysis reveals that only 2.5 percent of patients strongly agree and 8.8 percent of patients agree with the given statement “I have no body ache or limitations due to body ache”. Contrary to it, 64.7 percent of the patients disagree and 24.1 percent of the patients strongly disagree with the said statement. It has been concluded that only 11.3 percent of the patients are in the favor of the statement “I have no body ache or limitations due to body ache”.

Statement 11.10 shows the responses of patients toward patients’ health reported outcomes. The analysis shows that only 0.3 percent of patients strongly agree and 12.5 percent of patients agree with the given statement “I evaluate personal health as excellent”. Contrary to it, 62.2 percent of the patients disagree and 25.1 percent of the patients strongly disagree with the said statement. It has been concluded that only 12.8 percent of the patients are in the support of the statement “I evaluate personal health as excellent”.

Statement 11.11 depicts the responses of patients toward patients’ health reported outcomes. The analysis reveals that only 1.5 percent of patients strongly agree and 35.8 percent of the patients agree with the given statement “I feel peaceful, happy and calm all the time”. Contrasting to it, 43.4 percent of the patients disagree and 19.3 percent of the patients strongly disagree with the stated statement “I feel peaceful, happy and calm all the time”. It has been

concluded that 37.3 percent of the patients are in the favor of the statement “I feel peaceful, happy and calm all the time”.

Statement 11.12 presents the responses of patients toward patients’ health reported outcomes. The results depict that only 0.3 percent of patients strongly agree and 2.8 percent of patients agree with the given statement “I feel energetic all the time”. Contrary to it, 54.4 percent of the patients disagree and 42.6 percent of the patients strongly disagree with the said statement. It has been concluded that only 3.2 percent of the patients are in affirmation with the statement “I feel energetic all the time”.

3.12. Overall Descriptive Statistics and Variable Codes

Table 3.12.1 *Overall Descriptive Statistics and codes of the variables (n=399)*

Variables		Range	Min.	Max	Mean	Std. Dev.	Var.
Health Related Anxiety	HERA	26	13	39	26.75	5.293	28.015
Disease Related Stigma	DIRS	35	21	56	37.58	6.769	45.823
Health Literacy	HELI	23	15	38	25.15	5.562	30.937
Cultural Competence	CUCO	24	16	40	28.35	5.874	34.500
Health Behavior	HEBE	31	21	52	35.58	8.416	70.822
Media Advocacy	MEAD	12	10	22	13.15	3.271	10.699
Health Practices	HEPR	27	9	36	25.94	7.436	55.288
Patient Related Health Outcomes	PRHO	32	13	45	26.51	6.103	37.246

Table 4.12 indicates the descriptive statistics of variables. Data reflects that the range value of health related anxiety of patients is 26, minimum value is 13, maximum value is 39, mean value is 26.75, while standard deviation and variance are calculated as 5.293 and 28.015 respectively. The data further shows that the range value of disease related stigma of patients is 35, minimum value is 21, maximum value is 56, mean value is 37.58, standard deviation value is 6.769 and variance is calculated as 45.823. The data also reflects that the range value of health literacy of

patients is calculated as 23, minimum value is calculated as 15, maximum value is calculated as 38, mean value is calculated as 25.15, standard deviation value is calculated as 5.562 and variance is calculated as 30.937. Data further reveals that the range value of cultural competence of patients is 24, minimum value is 21, maximum value is 56, mean value is 28.35, standard deviation and variance values are calculated as 5.874 and 34.500 respectively.

The data also reveals that the range value of health behaviour of patients is calculated as 31, minimum value is calculated as 21, maximum value is calculated as 52, mean value is calculated as 35.58, standard deviation value is calculated as 8.416 and variance value is calculated as 70.822. The data also depicts that the range value of media advocacy of patients is 12, minimum value is 10, maximum value is 22, mean value is calculated as 13.15, standard deviation and variance values are calculated as 3.271 and 10.699 respectively. The data further shows that the range value of health practices of patients is 27, minimum value is 9, maximum value is 36, mean value is 26.94, standard deviation value is 7.436 and variance is calculated as 55.288. Along with these facts, the data also reveals that the range value of patient related health outcomes is calculated as 32, minimum value is calculated as 13, maximum value is calculated as 45, mean value is calculated as 26.51, standard deviation value is calculated as 6.103 and variance is calculated as 37.246.

3.13. Primary Data: Inferential Statistics

This section analyses and presents the results derived from primary data on health communication and health outcomes of hepatitis patients in Balochistan. It is further divided in normality test, scale testing, bivariate relationship of variable and Structural Equation Modelling.

3.13.1. Scale Testing

This section presents the results explored from the data and confirms the items of variables by employing Confirmatory Factor Analysis. The items were confirmed through probability value, model estimates. The analysis confirmed that either the items were significant or not to be pursued for further analysis.

Confirmatory Factor Analysis: Items of the variables were confirmed through confirmatory analysis. It is the essential step of analysis to test and refine the factors employed throughout the study. The model estimates of the analysis of hepatitis patients consisted on eight items, including health related anxiety, disease related stigma, health literacy, cultural competence, health behaviour, media advocacy, cultural competence and patient reported health outcomes.

Table 3.13.1 *Model Estimates of CFA Analysis of Patients Health Related Anxiety*

S.N.	Statement	Parameter Estimates	Standard Errors	T Statistics	Probability Value
16	Any reference to hepatitis brings strong feelings in me	0.509	0.063	8.140	0.000
17	Even though it's a good idea, yet getting a hepatitis test scares me	0.549	0.060	9.074	0.000
18	Whenever I hear about friends or public figure with hepatitis I get more anxious about my condition of hepatitis	0.628	0.054	11.540	0.000
19	I feel kind of numb when I think about Hepatitis	0.566	0.040	14.335	0.000
20	I think about hepatitis even though I do not mean to	0.540	0.039	14.016	0.000
21	I had a lot of feeling about hepatitis , but I do not want to deal with them	0.640	0.039	16.208	0.000
22	I had more trouble falling asleep, because I could not escape the thoughts of hepatitis	0.346	0.047	7.404	0.000
23	I am afraid that the results of my hepatitis test would show that my disease is getting worse	0.349	0.039	8.978	0.000
24	Just hearing the word hepatitis scares me	0.197	0.038	5.116	0.000
25	I am so anxious about my hepatitis test that I have thought of delaying it	0.232	0.049	4.768	0.000

Table 4.13.1 reveals the confirmatory factor analysis of health related anxiety. It is stated that item number 21 has been highly contributing and item number 24 is less contributing toward health related anxiety.

Table 3.13.2 *Model Estimates of CFA Analysis of Patients' Disease Related Stigma*

S.N.	Statement	Parameter Estimates	Standard Errors	T Statistics	Probability Value
26	I feel ashamed of hearing about my hepatitis	0.384	0.050	7.692	0.000
27	People avoid close contact with hepatitis infected patients	0.264	0.044	6.022	0.000
28	I am discriminated against hepatitis at work	0.363	0.045	8.120	0.000
29	I am not desirable spouse	0.391	0.027	14.207	0.000
30	I feel that I am placing others at risk due to HB or C	0.127	0.040	3.216	0.001
31	People avoid getting gifts from HB or C patients	0.370	0.040	9.336	0.000
32	People do not let their children play with hepatitis patient's children	0.573	0.051	11.225	0.000
33	People avoid taking meals with hepatitis patients	0.490	0.041	11.820	0.000
34	People avoid hand shake with hepatitis patients	0.518	0.040	12.891	0.000
35	People avoid continuing friendship with HB and C patients	0.740	0.044	16.719	0.000
36	Doctors and health professionals treat hepatitis patients differently	0.449	0.041	11.066	0.000
37	Hepatitis patients get little care from doctors and nurses	0.617	0.046	13.461	0.000
38	Doctors and nurses are reluctant in dealing hepatitis patients	0.200	0.044	4.492	0.000
39	Doctors and nurses keep distance with patients diagnosed with HB and C virus	0.266	0.038	7.001	0.000
40	HB or C patient hardly get admission in wards	0.302	0.046	6.639	0.000

Table 4.13.2 depicts the confirmatory factor analysis of disease related stigma. It has been confirmed that item number 35 is highly contributing toward disease related stigma while item number 30 is less contributing toward disease related stigma.

Table 3.13.3 Model Estimates of CFA Analysis of Patients' Health Literacy

S.N.	Statement	Parameter Estimates	Standard Errors	T Statistics	Probability Value
41	I find information on treatments of illness that concerns me	0.159	0.026	6.217	0.000
42	I understand what the doctor say to me	0.532	0.038	14.098	0.000
43	I understand my doctor instructions about taking medicines	0.589	0.038	15.351	0.000
44	I judge when I need to get second opinion from another doctor	0.655	0.038	17.223	0.000
45	I use information that doctors give to me to make decision about my illness	0.884	0.044	20.271	0.000
46	I follow instructions from my doctors or pharmacists	0.378	0.036	10.441	0.000
47	I find information on how to manage mental health problems	0.310	0.026	12.021	0.000
48	I understand why I need health screening	0.646	0.039	16.466	0.000
49	I find out about activities that are good for my mental well being	0.421	0.033	12.865	0.000
50	I understand advice from family members	0.134	0.033	4.103	0.000
51	I understand information in the media on how to get healthier	0.138	0.033	4.137	0.000
52	I judge when every behavior is related to my health	0.311	0.038	8.277	0.000

Table 4.13.3 analyzes the confirmatory factor analysis of health literacy. The data confirmed that item number 45 is highly contributing toward health literacy while item number 50 is less contributing to health literacy of people.

Table 3.13.4 *Model Estimates of CFA Analysis of Patients' Cultural Competence*

S.N.	Statement	Parameter Estimates	Standard Errors	T Statistics	Probability Value
53	Patients reject treatment due to folk taboos	0.828	0.044	18.646	0.000
54	Patients mind homophobic	0.575	0.040	14.359	0.000
55	Patient believe that folk treatment is better than medical treatment	0.440	0.046	9.636	0.000
56	Misunderstanding between doctor and patient is due to language barrier	0.449	0.033	13.481	0.000
57	Conflict in treatment is due to differences of beliefs	0.643	0.033	19.584	0.000
58	Building nurse patient relationship can reduce medical misunderstanding	0.612	0.040	15.201	0.000
59	Focusing cultural differences in medical care can reduce health miseries	0.489	0.047	10.312	0.000
60	Stress, caused by unfamiliar environment can enhance health iniseries	0.288	0.049	5.858	0.000
61	Noticing patient's religious rituals or living habits can enhance patient's adherence to medical treatment	0.459	0.046	9.941	0.000
62	Patients prefer doctors and nurses of their culture and religion	0.591	0.043	13.639	0.000

Table 4.13.4 reveals the confirmatory factor analysis of cultural competence. Data shows that item number 53 is highly contributing toward cultural competence of people with health care system, and item number 60 is less contributing toward cultural competence.

Table 3.13.5 *Model Estimates of CFA Analysis of Patients' Health Behavior*

S.N.	Statement	Parameter Estimates	Standard Errors	T Statistics	Probability Value
63	I have at least 3 meals a day	0.775	0.039	19.962	0.000
64	I have breakfast early in the morning	0.674	0.039	17.239	0.000
65	I have vegetable at least once in a week	0.617	0.036	17.276	0.000
66	I have reduced the consumption of salt in meal	0.275	0.031	8.977	0.000
67	I have limited the consumption of sugar	0.457	0.040	11.328	0.000
68	I try to avoid snacking between meals	0.510	0.032	15.845	0.000
69	I try to exercise or do physical activity at least 30 minutes a day	0.485	0.030	16.155	0.000
70	I do strength building exercise	0.518	0.035	14.676	0.000
71	I increase physical activity or exercise every day	0.384	0.029	13.398	0.000
72	I limit the time spent in watching television	0.278	0.033	8.352	0.000
73	I get enough sleep every day	0.079	0.040	1.966	0.049
74	I go to bed at regular hours	-0.066	0.042	-1.559	0.119
75	I brush teeth at regular basis	1.023	0.054	18.844	0.000
76	I have regular health checkup schedule	0.404	0.030	13.426	0.000
77	I prefer vaccination for every viral disease	0.975	0.052	18.729	0.000
78	I avoid people who are using drugs in any form	0.600	0.051	11.780	0.000

Table 4.13.5 shows the confirmatory factor analysis of health behavior. The data confirmed that item number 75 is highly contributing toward health behavior of people, while item number 78 is less contributing. The data also confirmed that item number 74 is not contributing toward health behavior of people.

Table 3.13.6 Model Estimates of CFA Analysis of Media Advocacy

S.N.	Statement	Parameter Estimates	Standard Errors	T Statistics	Probability Value
79	I am generally attentive to health information on T.V, radio or other means	0.638	0.048	13.304	0.000
80	I often find enough health information on media	-0.001	0.022	-0.040	0.968
81	Media is actively involved in health campaign	0.043	0.020	2.157	0.031
82	Media information about health is easily understandable	0.075	0.019	3.926	0.000
83	I often prefer health information on social media	0.983	0.042	23.197	0.000
84	Social media information about hepatitis made me conscious about my disease	0.811	0.035	22.952	0.000
85	Both electronic and print media help in promoting health awareness	-0.026	0.018	-1.416	0.157
86	I came to know about hepatitis control program through electronic media	-0.009	0.019	-0.466	0.641
87	I often find public health messages on mainstream media	0.017	0.019	0.885	0.376
88	Public health messages in media are often in local languages	0.017	0.019	0.891	0.373

Table 4.13.6 depicts the confirmatory factor analysis of media advocacy. The data reveals that item number 83 is highly contributing to media advocacy, and item number 81 is less contributing toward media advocacy. Data also confirm that item numbers; 80, 85, 86, 87 and 88, are not contributing toward media advocacy.

Table 3.13.7 *Model Estimates of CFA Analysis of Patients' Health Practices*

S.N.	Statement	Parameter Estimates	Standard Errors	T Statistics	Probability Value
89	I believe that herbal medicine can cure chronic diseases	1.064	0.042	25.313	0.000
90	I believe that cultural medicine can cure hepatitis	1.160	0.043	26.843	0.000
91	I believe that consultation with religious healer can cure diseases	1.037	0.042	24.546	0.000
92	I trust that cold constructed food can cure liver diseases	0.337	0.030	11.286	0.000
93	I trust that organic food can cure liver diseases	0.405	0.034	12.032	0.000
94	I trust that bitter foods can detoxify liver diseases	0.416	0.033	12.552	0.000
95	I trust on faith healers, remedying health	0.833	0.045	18.679	0.000
96	I believe that spiritual meditation can cure chronic diseases	0.989	0.048	20.771	0.000
97	I believe that repentance on bad deeds can reduce health problems	0.854	0.051	16.843	0.000

Table 4.13.7 depicts the confirmatory factor analysis of health practices. The data shows that item number 90 is highly contributing toward media advocacy, and item number 92 is less contributing toward health practices.

Table 3.13.8 *Model Estimates of CFA Analysis of Patients' Reported health Outcomes*

S.N.	Statement	Parameter Estimates	Standard Errors	T Statistics	Probability Value
98	I am able to work properly	0.835	0.034	24.237	0.000
99	I am able to climb stairs without any trouble	0.842	0.034	24.811	0.000
100	I do not have sleep disturbance	0.552	0.049	11.213	0.000
101	I do not have feeling of worthlessness	0.552	0.039	14.019	0.000
102	I do not have trouble to participate in social activities	0.412	0.041	10.076	0.000
103	I properly perform my social responsibilities	0.359	0.041	8.799	0.000
104	I properly participate in discretionary activities	0.293	0.030	9.711	0.000
105	I am satisfied with my social activities	0.510	0.037	13.984	0.000
106	I have no body ache or limitations due to body ache	0.311	0.031	9.956	0.000
107	I evaluate personal health as excellent	0.259	0.030	8.656	0.000
108	I feel peaceful, happy and calm all the time	0.399	0.036	11.057	0.000
109	I feel energetic all the time	0.031	0.029	1.090	0.276

Table 4.13.8 reveals the confirmatory factor analysis of patient related health outcomes. The data confirms that item number 99 is highly contributing toward patient related health outcomes. While item number 107 is less contributing toward patient related health outcomes. Data also shows that item number 109 is not contributing toward patient related health outcomes.

3.14. Test of Normality

Table 4.14 points out the normality statistical test. The value of Kolmogorov-Smirnov and Shapiro-Wilk confirmed that the data has not been normally distributed. Therefore further analysis has been completed on the basis of non-parametric statistical tests.

Table 3.14.1 *Tests of Normality*

Variables	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
Health Related Anxiety	.107	399	.000	.979	399	.000
Disease Related Stigma	.115	399	.000	.978	399	.000
Health Literacy	.119	399	.000	.967	399	.000
Cultural Competence	.064	399	.000	.975	399	.000
Health Behaviour	.146	399	.000	.940	399	.000
Media Advocacy	.200	399	.000	.861	399	.000
Health Practices	.142	399	.000	.926	399	.000
Patient Related Health Outcomes	.114	399	.000	.976	399	.000

a. Lilliefors Significance Correction

3.15. Bivariate Analysis

This section dealt with bivariate analysis of variable where more than one variable had effects on each other. The section included Kendalls' tau_b Statistical Test. Chi-square statistical test and independent sample T test.

Table 3.15.1 *Kendalls' tau_b Statistical Test*

Var.	HERA	DIRS	HELI	CUCO	HEBE	MEAD	HEPR	PRHO
HERA	1.000	.491**	-.165**	.232**	-.026	-.078*	.152**	-.032
DIRS		1.000	-.003	.225**	.033	.011	.020	.148**
HELI			1.000	-.236**	.581**	.578**	-.630**	.462**
CUCO				1.000	-.128**	-.370**	.283**	-.130**
HEBE					1.000	.515**	-.538**	.517**
MEAD						1.000	-.531**	.344**
HEPR							1.000	-.488**
PRHO								1.000

Kendalls' tau_b Statistical Test: Table 4.15.1 shows the correlation among variables used in this study. The Kendalls' tau b statistical test reveals that there is moderate correlation between health related anxiety and disease related stigma among the patients of the study population. The

test further reveals that there is weak correlation between health related anxiety among patients and health literacy of people. The Kendalls' tau b statistical test also reveals that there is weak correlation between health related anxiety among patients and cultural competence of people with health care system. The test also expresses that there is weak correlation between health related anxiety among patients and health behaviour of people. The Kendalls' tau b statistical test further reveals that there is weak correlation between health related anxiety among patients and media advocacy. The test further reflects that there is also a weak correlation between health related anxiety among patients and health practices. The Kendalls' tau b statistical test finally reveals that there is weak correlation between health related anxiety among patients and patient related health outcomes. The Kendalls' tau b statistical test further reveals that there is weak correlation between disease related stigma among patients with health literacy, cultural competence, health behaviour, media advocacy, health practices and patient related health outcomes.

The data further reveal that there is weak correlation between health literacy and cultural competence along with moderate correlation with health behaviour, media advocacy, health practices and patient related health outcomes. The data also depicts that there is weak correlation between cultural competence and health behaviour, health practices and patient related health outcomes along with moderate correlation with media advocacy. The test further confirmed that there is a moderate correlation of health behaviour with media advocacy, health practices and patient related health outcomes. Data also confirmed that there is a moderate correlation of media advocacy with health practices and patient related health outcomes. The test further says that there is also a moderate correlation between health practices and patient related health outcomes.

Table 3.15.2 *Chi-square statistical test (Dependent Variable=Patient Health Related Outcomes)*

S.N.	Variable Name	Value	df	Asymp. Sig. (2-sided)
15.1	Health Related Anxiety	1628.650	598	.000
15.2	Disease Related Stigma	1949.087	702	.000
15.3	Health Literacy	1700.107	572	.000
15.4	Cultural Competence	1824.766	624	.000
15.5	Health Behavior	2191.360	780	.000
15.6	Media Advocacy	1130.417	312	.000
15.7	Health Practices	1786.089	650	.000

Chi-square statistical test: Table 4.15.1 explains the chi-square statistical test which reveals that there is an association between health related anxiety and patient health related outcomes. The hypothesis has been confirmed with the value of 1628.650, df 598 and p-value .000. The chi-square statistical test also reveals that there is association between disease related stigma and patient health related outcomes. The hypothesis has been confirmed with the value of 1949.087, df 702 and p-value .000. The test further reveals that there is association between health literacy and patient health related outcomes. The hypothesis has been confirmed with the value of 1700, df 572 and p-value .000. The chi-square statistical test also shows that there is association between cultural competence and patient health related outcomes. The hypothesis has been

confirmed with the value of 1824.766, df 624 and p-value .000. The test further confirmed that there is association between health behavior and patient health related outcomes. The hypothesis has been confirmed with the value of 2191.360, df 780 and p-value .000. The chi-square statistical test also reveals that there is association between media advocacy and patient health related outcomes. The hypothesis has been confirmed with the value of 1130.417, df 312 and p-value .000. The test further depicts that there is association between health practices and patient health related outcomes. The hypothesis has been confirmed with the value of 1786.089, df 650 and p-value .000.

Table 3.15.3 *Independent Sample T Test in Terms of Residential Background differentials (Reference = Urban)*

		Levene's Test for Equality of Variances						t-test for Equality of Means					
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	Lower	Upper		
Health Related Anxiety	Equal variances assumed	67.702	.00	2.186	397	.029	1.154	.528	.116	2.192			
		0											
Disease Related	Equal variances not assumed	40.495	.00	2.235	332.06	.026	1.154	.516	.138	2.170			
	Equal variances assumed	0		2.140	397	.033	1.445	.675	.118	2.773			
Stigma	Equal variances not assumed	5.941	.01	2.183	345.78	.030	1.445	.662	.143	2.748			
	Equal variances assumed	5		18.776	397	.000	11.539	.61456	10.33097	12.74736			
Health Behaviour	Equal variances not assumed	32.337	.00	18.907	394.61	.000	11.539	.61031	10.33930	12.73903			
	Equal variances assumed	0		12.894	397	.000	3.553	.276	3.011	4.095			
Media Advocacy	Equal variances not assumed	6.611	.01	12.713	339.69	.000	3.553	.279	3.003	4.103			
	Equal variances assumed	0		-14.235	397	.000	-8.642	.607	-9.835	-7.448			
Health Practices	Equal variances not assumed	10.268	.00	-14.281	396.96	.000	-8.642	.605	-9.832	-7.452			
	Equal variances assumed	1		8.428	397	.000	4.754	.564	3.645	5.862			
Patient Related	Equal variances not assumed	8.355		366.68	.000	4.754	.569	3.635	5.872				

Independent Sample T Test in Term of Residential Background: Table 4.15.3 analyses the data through independent sample T test in term of residential background differentials. The data reflects that there is a significant difference of health related anxiety, disease related stigma, health behaviour, media advocacy, health practices and patient related health outcomes among hepatitis patients of urban and rural backgrounds in Balochistan.

Table 3.15.4 *Independent Sample T Test in Terms of Gender differentials (Reference = Male)*

		t-test for Equality of Means							
		Levene's Test for Equality of Variances			t-test for Equality of Means				
Variables	F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Cultural Competence	4.623	.032	3.923	397	.000	2.509	.639	1.252	3.766
Media Advocacy	4.052		4.261	397	.000	2.509	.619	1.289	3.729
Patient Related Health Outcomes	28.602	.000	-3.806	168.423	.000	-1.512	.355	-2.210	-.815

Independent Sample T Test in Term of gender differential Background: Table 4.15.4 analyse the data through independent sample T test in term Gender Background differentials. The data reflects that there is a significant difference of cultural competence, media advocacy and patient related health outcomes among male and female hepatitis patients in Balochistan. The findings by Liuccio (2015) also depicts that encouraging gender sensitivity through health communication requires community based awareness of gender issues. For these purposes women's worries of health .i.e. how they perceive health, health needs and their concerns must be the focus of the area. Health communication as a research area may overcome the miseries of women by focusing on the issue of how women communicate, deliver and perceive the health messages. Women must be encouraged to participate in public health communication campaigns so that they could easily comprehend their health status and make effective decisions.

3.16. Multivariate Analysis

This section deals with multivariate analysis where different variable affect each other in a specific way. I employed Structural Equation Modeling twice to thoroughly catch the effective results from analysis. I also included the results of indirect effect of both SEM Model 1 and SEM Model 2.

Results and Hypothesis testing of SEM Model 1:

Hypothesis 1: There is a direct effect of Health Literacy and Cultural Competence of patients on their Health Practices in Balochistan.

Table 4.16.1 shows the data that health literacy ($\beta = -.736$) and cultural competence ($\beta = .134$) of hepatitis patients in Balochistan has a significant direct effect on their health practices.

The finding is supporting the hypothesis 1. The results depict that health literacy of patients has direct links with health practices of patients and their quick recovery. Patients with high health literacy can have good chances of using modern medical system as compared to the patients having less knowledge about the health care and their diseases. It has also been observed that lay approaches toward health simply mean that how individuals think about their health, illness and its recovery. Different lay approaches in different people push them away from the contemporary scientific ways of medication and hospitalization (Hughner, Kleine, 2004). The results also show that patients who are culturally competent with health care system have direct links with their health practices. Culturally competent people use modern health care system more often than those who are not competent with the health care system. Some believe that fasting is a remedy; some think that living normal routine can restore health while others believe that cleanliness and proper life can be a source of healthy life. Other than these beliefs, some people have opinion that living spiritual life can maintain good health. For some illness means only spiritual and personal fault. All these beliefs and connotation of these beliefs reflect the disassociation of people with the scientific and objective approach of the day (Hughner, Kleine, 2004).

Hypothesis 2: There is direct effect of health literacy and disease related stigma of patients on patient elated health outcomes in Balochistan.

The findings presented in table 4.16.1 further show that health literacy ($\beta = .123$) and diseases related stigma ($\beta = .136$) of hepatitis patients in Balochistan has a significant direct effect on their health outcomes. The results clearly say that patients with basic awareness about their diseases and health care system are more likely to show quick recovery than those who are less literate about their health and health care system. Health literacy is of much importance because its relationship has been traced to health status and better health outcomes both at

clinical as well as societal level. A sophisticated understanding of health communication and health literacy is required at both interpersonal and organizational levels to enhance better life chances (Nutbeam, 2008). The results also reveal that patients with disease related stigma have direct links with their health outcomes. Virus infected patients may have very sensitive feelings due to others' behavior with them; which can cause discrimination and bias. Identifying and suppressing such type of behaviors is very important for health care providers, because these feelings can have bad effects on the recovery of patients from the diseases (Rintamaki, Scott, Kosenko, Jensen, 2007).

Hypothesis 3: There is direct effect of health practices, health behavior and media advocacy of patients on patient related health outcomes in Balochistan.

Table 4.16.1 further reveals that there is a significant direct effect of health practices ($\beta = -.318$), health behavior ($\beta = .398$) and media advocacy ($\beta = -.110$) on patient related health outcomes of hepatitis infected patients in Balochistan. The results depict that folk health practices has negative effects on hepatitis infected health outcomes. Lay people do not necessarily make their health view according to science and proven knowledge. For them, multiple sources of knowledge are contributing to construct images of health and illness. Folk wisdom, personal experiences, spiritual and cultural beliefs play an important role in constructing about health, illness and treatment (Rogers, 1991). The analysis also reveals that health behavior of people is contributing in their health outcomes. Tailored health communication (THC) is the information and behavior change technique targeted at individual to focus the health outcomes and interest. The technique of tailored health communication has been studied as a source of changing health behavior by influencing individuals to adopt health related strategies (Rimer, Kreuter, 2006). Along with these facts the data also suggests that non-

involvement or non-advocacy of media has also negatively affected the health outcomes of hepatitis infected patients in Balochistan. Media has the potential to alter the conduct of people through its extensive and powerful ways of infiltrating information and opinions into the minds of people. It can be positively used in propagating messages of public interest. The more it focuses a specific health problem the more chances of remedy can be ensured (Snyder, 2007).

Hypothesis 4: There is direct effect of health literacy on health behavior of hepatitis patients in Balochistan.

Along with the above facts table 4.16.1 also reveals that there is a significant direct effect of health literacy ($\beta = .747$) on health behavior of hepatitis infected patients in Balochistan. Therefore hypothesis 4 is accepted. The results prove that health behavior is prone to be changed with health literacy. The patients with effective health literacy had better health behavior toward their health condition. Array of literature has shown that THC in most of the cases have changed health behavior in number of health related habits; i.e. smoking, diet, exercise and screening. The role of THC can be further enhanced if more information transmitting pathways are incorporated instead of relying on the one-directional way (Rimer, Kreuter, 2006).

Hypothesis 5: There is correlation between health literacy and cultural competence among hepatitis patients in Balochistan.

Table 4.16.1 further reveals that there is a significant correlation between health literacy and cultural competence. The results support the hypothesis 5 with p-value of .000. The analysis also shows that health literacy of hepatitis patients is correlated with their cultural competence toward health care system. It is worth to mention that health literacy of patients can enhance cultural competence and vice-versa. Cultural competence as a field of health care has been

emerged in parts to analyze the causes that may influence the health status and contribute to health disparities among diverse ethnic and racial minorities. The major aim of the field is to make health care system effective to diagnose patients' problem along with focusing diverse cultural and religious sensitivities relating to their health (Betancourt, Green, Carrillo, 2002).

Hypothesis6: There is correlation between Cultural Competence and Diseases Related Stigma among hepatitis patients in Balochistan.

Table 4.16.1 further portrays that there is a significant correlation between cultural competence and diseases related stigma. The data supports the hypothesis with p-value of .000. The results also show that cultural competence and disease related stigma of hepatitis infected patients in Balochistan are correlated. It is pertinent to mention that cultural competence toward health care system and diseases related stigma among hepatitis patients are affecting each other. Organizational cultural competence is a step forward way to overcome health disparities among marginalized groups. Recruiting minorities and promoting them to positions of organizational leadership can lead to minimize the gap. Systematic cultural competence focuses the underlying barriers that contribute to undermine marginalized groups preferences and their health related beliefs and behavior (Betancourt, Green, Carrillo, 2002).

Table 3.16.1 *Direct Effects of the SEM Model 1*

Variables		Standardized Regression Weights	Estimate	S.E.	C.R.	P
HELI	--->	HEBE	.747	1.130	.050	22.386 ***
CUCO	--->	HEPR	.134	.170	.041	4.134 ***
HELI	--->	HEPR	-.736	-.983	.043	-22.662 ***
HEBE	--->	PRHO	.398	.303	.037	8.183 ***
HELI	--->	PRHO	.123	.142	.072	1.962 .050
DIRS	--->	PRHO	.136	.128	.031	4.194 ***
MEAD	--->	PRHO	-.110	-.216	.063	-3.414 ***
HEPR	--->	PRHO	-.318	-.274	.044	-6.203 ***
Covariances						
HELI	<-->	CUCO		-9.682	1.642	-5.896 ***
CUCO	<-->	DIRS		10.901	1.973	5.524 ***
Variances						
HELI			30.860	2.188	14.107	***
CUCO			34.343	2.418	14.202	***
DIRS			45.708	3.240	14.107	***
e2			10.672	.757	14.107	***
e1			21.064	1.493	14.107	***
e3			31.271	2.217	14.107	***
e4			17.017	1.206	14.107	***

Chi-square = 440.992, df = 11, p-value = .000, AGFI = .902, GFI = .924, CFI = .899, RMSEA = .076

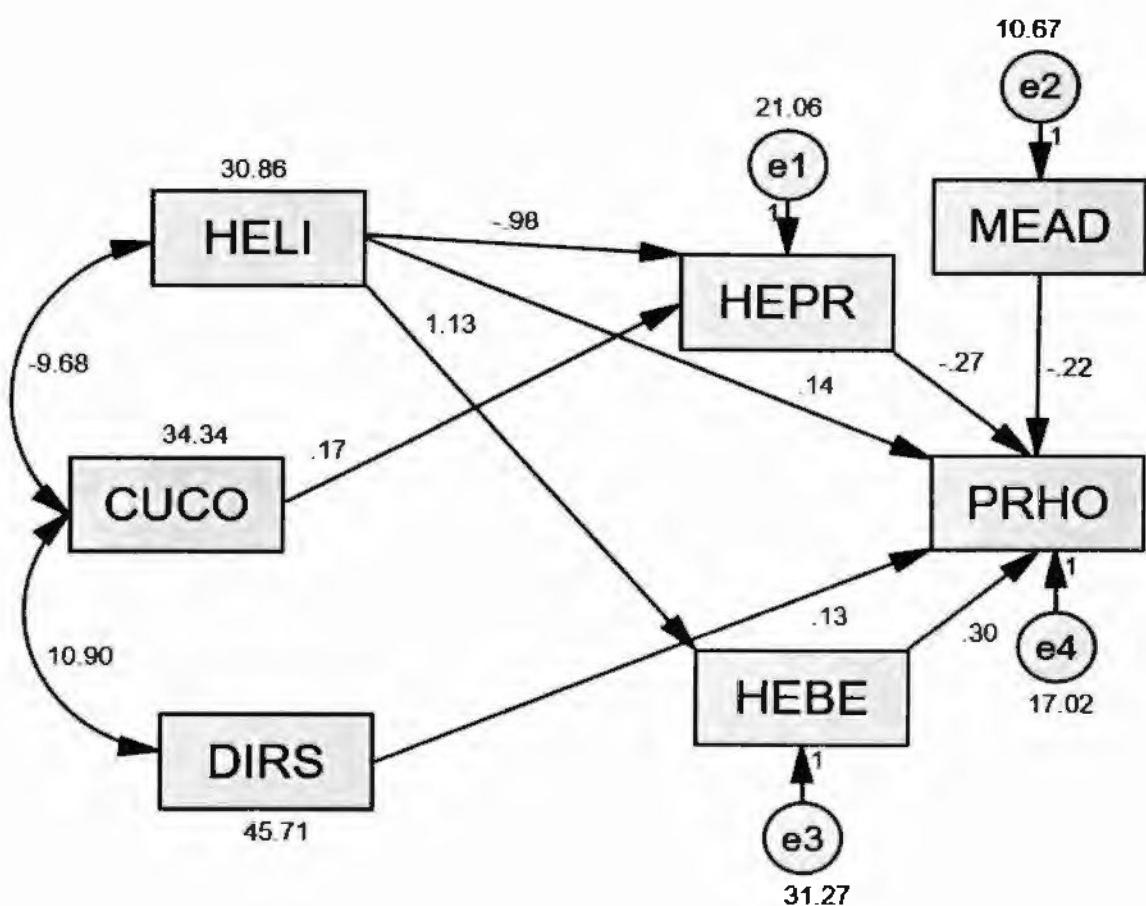


Figure 3.1 Model Fit Diagram

SEM Model 1 indirect effects:

Hypothesis 7: There is an indirect effect of cultural competence on patient related health outcomes through the mediation of health practices.

Data statistics in table 4.16.2 asserts that there is significant indirect effect (SE = -0.043***) of cultural competence of hepatitis infected patients on patient health related outcomes through the mediation of their health practices. Therefore hypothesis 7 is accepted. The findings of Green and Carrillo (2002) also show that clinical cultural competence recommends strong and effective health care skills to incorporate patients' cultural and religious

beliefs and negotiate and interact with them accordingly. According to them, organizational cultural competence is also an effective step to minimize health disparities among ignored groups. Recruiting health care professionals from these groups and promoting them to policy making positions of organizational leadership can lead to minimize the gap.

Hypothesis 8: There is an indirect effect of health literacy on patient related health outcomes through the mediation of health behavior.

Table 4.16.2 also depicts that there is a significant indirect effect (SE = 0.297**) of health literacy of hepatitis infected patients in Balochistan on their health outcomes through the mediation of health behavior. As a result hypothesis 8 is accepted. It is pertinent here to mention that health literacy firstly affects the health behavior of patients which resultantly affects their health outcomes. The findings of this research are aligned with the study findings of Nutbeam (2008) in that health literacy among people has much importance because its relationship has been drawn to health status and better health outcomes, both at clinical as well as at societal level. A refined understanding of health communication and health literacy is mandatory at both interpersonal and organizational levels to improve better life chances.

Hypothesis 9: There is an indirect effect of health literacy on patient related health outcomes through the mediation of health practices.

The statistical data of the model also reveal, in table 4.16.2 that there is a significant indirect effect (SE = 0.234***) of health literacy among hepatitis patients on their health outcomes through the mediation of health practices. Therefore hypothesis 9 is approved. It is worth to explain that health literacy of hepatitis patients in Balochistan at first affects the health practices which eventually affect their health outcomes. In other words the health literacy levels

of patients affect their tendency of adopting certain health practices. Patients with satisfactory level of health literacy are more likely to practice modern ways of medicine. However, patients with low level of literacy will still use folk methods of treatment. Kindig, Panzer and Bohlman, (2004) also opine that health literacy is of greatest importance for patient's interest and better health outcomes because the patients with better health literacy are more adherent to modern health care system and follow better strategies to overcome the diseased condition.

Table 3.16.2 *Indirect Effects of Model I*

Indirect Path	Unstandardized		Lower	Upper	P-Value	Standardized
	Estimate					Estimate
CUCO --> HEPR -->	-0.047		-0.070	-	0.000	-0.043***
PRHO				0.030		
HELI --> HEBE -->	0.342		0.242	0.463	0.001	0.297**
PRHO						
HELI --> HEPR -->	0.269		0.195	0.345	0.001	0.234***
PRHO						

Significance of Estimates: *** p < 0.001, ** p < 0.010, * p < 0.050, † p < 0.100

Results and Hypotheses Testing of SEM Model 2:

Hypothesis 1: There is a direct effect of health practices on health literacy, patient health related outcomes and disease related stigma of hepatitis patients in Balochistan.

Data in table 4.16.3 shows that there is a significant direct effect of health practices ($\beta = -.400$) on health literacy of hepatitis patients in Balochistan. It has also been found that health literacy among patients is very important for patient's better health outcomes because the patients with good level of health literacy are more prone to believe in modern health care system and adopt better medical approaches to overcome the diseased condition (Kindig, Panzer and Bohlman, 2004). The table also explains that health practices ($\beta = -.325$) has a significant direct effect on patient related health outcomes of hepatitis patient in Balochistan. Adopting outdated and unprofessional cure approaches toward health reflect the patients' conceptualization of health, sickness and recovery. The outdated and unprofessional health cure approaches, abundant among different sections of people, push the people away from the modern-day scientific ways of medication and hospitalization (Hughner, Kleine, 2004). The data further depicts that health practices also has a significant direct effect ($\beta = .126$) on disease related stigma in hepatitis patients in Balochistan. Hence the above stated hypothesis is accepted based on the confirmation by research data. The analysis clearly shows that health practices of people have direct links with their health literacy, health outcomes and diseases related stigma among hepatitis patients in Balochistan. Deacon (2006) also states that stigma mostly end with status loss, blame as well as humiliation for the people who are stigmatized. Stigma continuously drags the victim to a disadvantaged and discriminated position which may generate social and monetary losses. For this reason the stigmatized patients try to avoid professional health measures to hide their diseased condition.

Hypothesis 2: There is direct effect of Health Behavior on Health Literacy and Patient related health Outcomes of hepatitis patients in Balochistan.

Table 4.16.3 shows that there is a significant direct effect of health behavior ($\beta = .302$) on health literacy among hepatitis infected patients in Balochistan. The data also depicts that health behavior ($\beta = .436$) of hepatitis patient in Balochistan has a significant direct effect on patient related health outcomes. The data reveals that there are direct effects therefore hypothesis 2 is accepted. The above facts reveal that health behavior of hepatitis patients in Balochistan has directly affected both their health literacy and patient related health outcomes. Various literature has shown that tailored health communication in many cases have altered health behavior in many health related conducts; i.e. diet, smoking, exercise and screening. Its effects can further be enhanced by incorporating multi messaging pathways instead of relying on the dominant doctor-patient communication. Individuals with healthy behavior are health conscious to know about their health status. (Rimer, Kreuter, 2006).

Hypothesis 3: There is direct effect of media advocacy on health literacy, patient related health outcomes and disease related stigma of hepatitis patients in Balochistan.

Table 4.16.3 depicts that there is a significant direct effect of media advocacy on health literacy ($\beta = .253$) of hepatitis patients in Balochistan. The data also shows that there is a significant direct effect of media advocacy on patient related health outcomes ($\beta = -.149$) among hepatitis infected patients in Balochistan. Along with these facts, the data also reveals that media advocacy of health care system in Balochistan has a significant direct effects on disease related stigma ($\beta = .120$). The data supported the hypothesis 3 therefore it is accepted. The analysis clearly shows that there are direct links of media advocacy of health care system in Balochistan on patients' health literacy, their quick recovery and patients' disease related stigma. Conducting communication campaign by involving media is an effective way to alter the health behavior of people while making them attentive to their health. Attaining actual health goals is possible by

involving community in health communication campaigns for a specific period of time. Communication campaign is a structured activity of engaging a large community in social marketing. Changing health behavior of people through communication campaign includes use of health services i.e. Dietary habits, family planning, dental care, exercise, testing and screening, medication use and substance use prevention (Snyder, 2007).

Hypothesis 4: There is direct effect of health literacy, cultural competence and disease related stigma on patient related health outcomes of hepatitis patients in Balochistan.

Data in table 4.16.3 reveals that there is a significant direct effect of health literacy ($\beta = .135$) among hepatitis patients in Balochistan on their health outcomes. The data further suggests that cultural competence ($\beta = -.056$) of health care system in Balochistan has also a significant direct effect on patient related health outcomes. Furthermore, the data proves that there is a significant direct effect of disease related stigma ($\beta = .160$) on patient related health outcomes among hepatitis patients in Balochistan. On the basis of above described results the hypothesis 4 is accepted. The findings of various research studies also verify that better health care is reliant on vibrant communication and patients' awareness about their health condition. Patients spend a lot of time and energy in dealing with the doctors. A considerable amount of money is spent while screening and resulting the disease. (Kindig, Panzer, Bohlman, 2004). However, if the cultural competence of the patients come in between the treatment, all the resources wasted is to no vain. The major aim of the field of cultural competence in health care system is to make health care system operative to diagnose patients' problem along with focusing their various cultural and religious tilts relating to their health (Betancourt, Green, Carrillo, 2002). Patient's reaction to disease and their appropriate decision is a necessary practice in the healing process. Different studies have shown that the costs of getting medical attention

and better health condition result from patients' response and decision making. Fearful situation caused by illness may result in low patients' capability in decision making. Patients often avoid consulting doctors in sever anxious situations. They may not avoid doctors in small and minute health problems (Koszegi, 2003).

Hypothesis 5: There is correlation between health practices and media advocacy among hepatitis patients in Balochistan.

The table 4.16.3 also reveals that there is a significant correlation between health practices and media advocacy. The results supported the hypothesis 5 with p-value of .000. The analysis also shows that health literacy of hepatitis patients in Balochistan is directly correlated with media advocacy of health care system. It is worth mentioning here that health literacy of patients can be enhanced by media advocacy of health care system among hepatitis patients in Balochistan and vice-versa. Altering health behavior through media campaign is an effective practice. Propagation of healthy routine and health communications in customary population through media has effective health outcomes. Media campaigns can produce constructive behaviors or limit negative behaviors in population. Media campaigns make the people more health sensitive to report the disease on time. By involving media, patients' behavior can be changed from relying on cultural medicine to using contemporary medicines. (Wakefield, Loken, Hornik, 2010).

Hypothesis 6: There is correlation between health practices and health behavior among hepatitis patients in Balochistan.

Data in table 4.16.3 suggests that there is a significant correlation between health practices and patients' health behavior. The facts support the hypothesis 6 with p-value of .000.

The information also reveals that health practices of people in Balochistan are directly correlated with their health behavior. This means that the use of folk or modern health practices is linked with the health behavior toward their diseases. Health behavior in its wider sense means the cumulative efforts of organizations, groups and individuals in bringing social change which would eventually enhance policy expansion and encourage implementation of modern health practices; thus ensuring quality of life (Parkerson ,1993).

Hypothesis7: There is correlation between health behavior and media advocacy among hepatitis patients in Balochistan.

Table 4.16.3 further suggests that there is a significant correlation of health behavior of people in Balochistan with media advocacy of health care system. This hypothesis is supported by the data with p-value .000. The analyzed data reveals that health behavior of people and media advocacy are dependent on each other. The study findings are synchronized with the study finding of Glanz, Rimer, Viswanath (2008) that change in social environment eventually brought change in health behavior with speedy means of communication. Media and other personalized means of communication can create an environment of education which would finally produce health literacy by promoting modern medical system; thus promoting positive health outcomes.

Table 3.16.3 *Direct Effects of the Model 2*

Variables		Standardized Regression Weights	Estimate	S.E.	C.R.	P
HEPR	-->	DIRS	.126	.115	.060	1.919 .055
HEBE	-->	HELI	.302	.200	.027	7.528 ***
HEPR	-->	HELI	-.400	-.299	.030	-9.956 ***
MEAD	-->	HELI	.253	.430	.064	6.682 ***
MEAD	-->	DIRS	.120	.248	.136	1.821 .069
DIRS	-->	PRHO	.160	.143	.031	4.650 ***
HEPR	-->	PRHO	-.325	-.264	.047	-5.659 ***
MEAD	-->	PRHO	-.149	-.275	.094	-2.912 .004
CUCO	-->	PRHO	-.056	-.058	.035	-1.648 .099
HELI	-->	PRHO	.135	.147	.070	2.110 .035
HEBE	-->	PRHO	.436	.313	.039	7.943 ***
Covariances						
HEPR	<-->	HEBE		-43.667	3.818	-11.436 ***
HEBE	<-->	MEAD		17.891	1.643	10.891 ***
HEPR	<-->	MEAD		-15.796	1.451	-10.886 ***
Variances						
	HEPR		55.150	3.909	14.107	***
HEBE			70.644	5.008	14.107	***
MEAD			10.672	.757	14.107	***
e2			34.414	2.440	14.107	***
e1			8.793	.623	14.107	***
e3			45.225	3.206	14.107	***
e4			16.941	1.201	14.107	***
Chi-square = 172.118, df = 7, p-value = .000, AGFI = .912, GFI = .891, CFI = .872, RMSEA = .079						

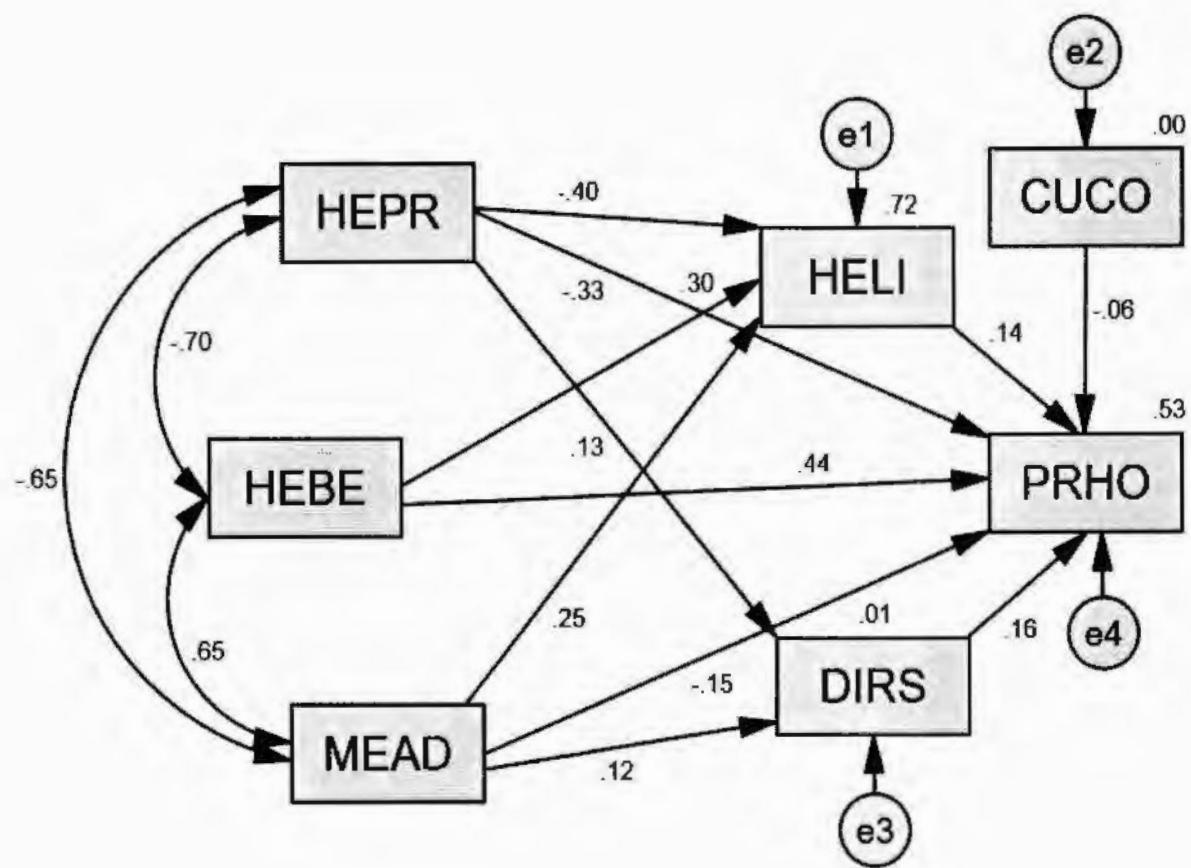


Figure 3.2 Model Fit Diagram of Model 2

SEM Model 2 Indirect Effects:

Hypothesis 8: There is an indirect effect of media advocacy on patient related health outcomes through the mediation of disease related stigma.

Data statistics in table 4.16.4 asserts that there is a significant indirect effect (SE = 0.019*) of media advocacy of health care system in Balochistan on patient health related outcomes through the mediation of their disease related stigma. Therefore hypothesis 8 is accepted. The data analysis shows that media advocacy of health care system at first affects the disease related stigma and which in turn affects patient related health outcomes. The practice of tailored health communication through media has been studied as a source of altering health

behavior by prompting individuals to adopt health related strategies. These strategies include the strength of peoples' interests in attending to communication, perceiving it relevant and preparing themselves for action. The strategy has been found as very effective for people who fail to take timely decision due to stress caused by their disease condition. (Rimer, Kreuter, 2006).

Hypothesis 9: There is an indirect effect of media advocacy on patient related health outcomes through the mediation of patient health literacy.

Data information in table 4.16.4 also suggest that there is a significant indirect effect (SE = 0.034*) of media advocacy of health care system in Balochistan on patient health related outcomes through the mediation of patients health literacy. On the basis of the above facts hypothesis 9 is accepted. The data reveals that media advocacy of health care system at first affect the level of health literacy of people and then affect patient related health outcomes. A behavior change toward a desire action could be achieved whenever both input and output communication variables are tuned in specific order while conducting an effective mass media campaign (Corcoran, 2007). Health behavior is a manifest action of individuals, organizations and groups to bring change which would finally enhance development and encourage of improvement of skills and practices to ensure quality of life (Parkerson, 1993).

Hypothesis 10: There is an indirect effect of health behavior on patient related health outcomes through the mediation of health literacy.

Table 4.16.4 shows that there is a significant indirect effect (SE =0.041*) of health behavior of people toward their health condition in Balochistan on patient health related outcomes through the mediation of patients health literacy. On the basis of above facts hypothesis 10 is accepted. The data reveals that health behavior of people affects the health

literacy and then patient related health outcomes. A behavior change in the direction of a desire action could be potential whenever both input and output communication variables are exercised in this specific direction while conducting an effective mass media campaign for accelerating health awareness of people in community (Corcoran, 2007).

Hypothesis 11: There is an indirect effect of health practices on patient related health outcomes through the mediation of disease related stigma.

Data statistic in table 4.16.4 further reveals that there is a significant indirect effect (SE = 0.020**) of health practices of people, in Baluchistan, on patient health related outcomes through the mediation of diseases related stigma. On the basis of above facts hypothesis 11 is accepted. The data reveals that health practices of people at first affects disease related stigma and then patient related health outcomes. Similarly, Easton, Entwistle & Williams (2013) found that health related stigma is prominent barrier in health communication i.e. fear of segregation, label of deviant behavior and loneliness. Different aspects of stigma are found to be responsible in undermining public health communication. A prominent dark side of health related stigma is the stigma of low literacy of patients while giving health related information to health professionals.

Hypothesis 12: There is an indirect effect of health practices on patient related health outcomes through the mediation of health literacy.

Data in table 4.16.4 further suggests that there is a significant indirect effect (SE = 0.054*) of health practices of people, in Baluchistan, on patient health related outcomes through the mediation of patients health literacy. On the basis of above facts hypothesis 12 is accepted. The data reveals that health practices of people at first affects health literacy of people, in

Balochistan, which in turn affect the related health outcomes. The study findings also synchronizes with the study findings of Cockerham (2015) that a major part of people are still practicing traditional methods of treatment; osteopaths, chiropractors, acupuncture, folk healers and faith healer because of their normative structure and religious beliefs. The conceptualizations of the people about healing practices are mostly structured by their normative system of culture and religion. Change in this specific behavior can be accomplished by making the people aware of contemporary medical system.

Table 3.16.4 *Indirect effects of Model 2*

Indirect Path	Unstandardized Estimate	Lower	Upper	P-Value	Standardized Estimate
MEAD --> DIRS --> PRHO	0.035	0.011	0.074	0.012	0.019*
MEAD --> HELI --> PRHO	0.063	0.013	0.117	0.042	0.034*
HEBE --> HELI --> PRHO	0.029	0.009	0.055	0.028	0.041*
HEPR --> DIRS --> PRHO	0.016	0.005	0.035	0.009	0.020**
HEPR --> HELI --> PRHO	-0.044	-0.088	-	0.043	-0.054*
			0.008		

Significance of Estimates: *** p < 0.001, ** p < 0.010, * p < 0.050, † p < 0.100

3.17. Conclusion

This chapter explored the factors contributing to health communication and health outcomes of hepatitis patients in Balochistan. The analysis revealed that health literacy of patients has direct link with health practices of patients and their quick recovery. Patients with high health literacy can have good chances of using contemporary means of medical system as compared to those patients who have inadequate knowledge about the health care system and the diseases. Furthermore the results also highlight the fact that patients who are culturally competent with health care system are having positive direct relationships with health practices. Culturally competent people use western health care system more frequently than those who are not culturally competent with the health care system. The traditional beliefs like; fasting as a cure, following strict timetable as a guarantee of good health, diseases are the causes of sins etc., are pushing the people away from the utilization of modern health care system.

The results further depicted that patients with disease related stigma also has direct links with their health outcomes. Viruses' infected patients have very sensitive feelings related to others' behavior toward them, which can cause discrimination and bias. The data analysis also showed that media advocacy of health care system at first affects the disease related stigma which consequently affects patient related health outcomes. The results also prove that health behavior is prone to change with health literacy. The patients with effective health literacy had better health behavior toward their respective health conditions.

The study analysis further revealed that folk health practices had negative impact on hepatitis infected health outcomes. Lay people do not necessarily make their health view according to medical science. Their conceptions of health, illness and cure are shaped by

multiple sources of knowledge and information including; folk wisdom, personnel experiences, religion, spirituality and cultural beliefs. It has also been observed that health practices have direct effects on disease related stigma in hepatitis patients in Balochistan. The analysis clearly shows that health practices of people have direct links with their health literacy, health outcomes and diseases related stigma among hepatitis patients in Balochistan.

CHAPTER FIVE

QUALITATIVE DATA ANALYSIS AND INTERPRETATIONS

4.1. Introduction

The previous chapter dealt with quantitative analysis that includes univariate, bivariate and multivariate analysis. Different factors of health communication have been analyzed through different statistical tests along with the structural equation modeling (SEM). The analysis explained the effects of multiple factors on patients' health related outcomes. The analysis found that health communication is undermined at three levels; individual level, organizational level and societal level. Each level of communication has its own factors. Like at individual level, anxious condition caused by illness and disease related stigma affects health communication with the physicians and family members. At organizational level health literacy and media advocacy has strong relationship with peoples' health communication. At societal level cultural competence, health behavior of people and health practices or health approaches affect health communication.

As the study incorporated both quantitative and qualitative approaches, hence this chapter elaborates on the phenomenon through qualitative analysis. During the course of qualitative data collection, fifteen physicians who by any means treat hepatitis patients, were interviewed. The chapter aims to explore the factors that affect health communication among hepatitis patients in Balochistan. The chapter further elaborates health communication from the point of view of the respondents who frequently practice the phenomenon. It is pertinent to mention here that the findings of qualitative analysis are aligned with the findings explored through quantitative

analysis. By going through in-depth interviews of the respondents the following themes have been derived from the qualitative interpretation.

4.2. Role of Language in Health Communication

The study respondents argued that language is a primary barrier of health communication in Balochistan. Majority of respondents asserted that Balochistan is multi-lingual region, the people speak multiple languages. Patients come to Quetta from multiple ethnic backgrounds. They speak different languages such as Pashtu, Balochi, Barahvi and Hazargi. A small portion of them can speak Urdu and very small numbers of patients are good in speaking and understanding English. Due to this linguistic barrier many cannot properly communicate their health issues with physicians. It is very difficult for doctors to learn and understand all languages although they try their best to understand the patients' language. Despite their efforts, sometimes the real issues about the diseases are not addressed. That is why they think that the language is a primary barrier in proper health communication.

Some of the respondents opine that the basic approach in diagnosis process is the history of the disease. Due to multilingual environment, patients cannot share the proper history of the disease with their physicians. When a doctors do not get a thorough history of the disease from their patients it may affect the diagnosis negatively. Most of the times, physician diagnose patient's problem by knowing the medical history of patients, despite going for screening, therefore it is necessary to communicate properly. At the diagnosis stage language play important role. Some respondents also asserted that they attract patients of their own language just because the patients prefer them due to language adherence. The respondents also shared that diagnosis is dependent on a clear history of the disease and sketching proper history of

patient's disease requires effective communication that is impossible without language comprehension. In majority of the cases in which the doctors do not understand the patients due to language barrier, they rely on screening which cost both time and money.

To overcome the issue the government has devised the policy of placing the doctors at their home Districts and Tehsils. Some of the physicians are of the view that they feel the need of learning new languages instead of just relying on their mother tongue.

A physician, Dr. Sherzaman asserted that:

I think language is a very important component in communication. Sometimes when I talk in Urdu with Pashtoon patients, they immediately say, please speak Pashto. I have also experienced that patients speak for long time in their mother tongue, because they can express their issues freely. I think the doctors of same language can develop a kind of trust in patients. This is why I have more Pashtoon patients than patients from other ethnic backgrounds.

One of the physicians, Dr. Zaheer Ahmad Shah opined that:

For proper communication with patients I often feel the need to learn other languages rather than relying on Urdu and other languages that I know, because majority of the patients cannot even speak Urdu. I cannot understand Pashto, Hazargi and Balochi. This really disrupts the communication'.

Majority of the physician have hired translators to communicate between them and their patient. But this approach too cannot completely overcome the issue because of the multi-lingual nature of the province.

4.3. Lack of awareness, health behavior and health education.

The study findings reveals that due to lack of health awareness and poor health behavior a sufficient number of patients cannot even approach the relevant doctors about their diseases. Due to this factor they roam for searching relevant doctors meanwhile wasting the accurate time for diagnosis. They visit different doctors and finally get relevant doctors when their health condition has already started getting deteriorated. This happens due to lack of awareness about the diseases and their proper treatment, which can be overcome by conducting proper health campaign. The province's facilities of health care system are not fully utilized by the people due to the lack of awareness of the community. It has been observed that the areas with good indicators of education have low prevalence rate of diseases. Literate and urban people have comparatively health seeking behavior then uneducated and rural people. Female, uneducated and rural people are less confident with doctors while communicating. For instance prevalence of hepatitis B is more in Nasirabad, Jafarabad, Musakheil and Barkhan region of Balochistan and these districts also have less literacy rate.

A study respondent, Dr. Assad Kakar, is of the view that;

A lot of patients with five or six years old history report their disease, because they don't know about the severity of disease or symptoms of disease. The problem is in our health management system. This only means that either they are incompetent or not willing to resolve the issue.

Some other respondents also expressed that health literacy and media advocacy are affecting health outcomes. They think that health literacy is not the focus of health institution and government. Many communicable diseases are being spread by hair dressers, acupunctures,

tattoos maker, and tooth extractors. It can be prohibited through effective health campaign by enhancing health awareness of the people. An almost similar response was given by another respondent Dr. Syed Mir Usman Shah that;

Once I posted a health message on social media that taking a pair of scissors and comb, is very easy, to the hair dresser for preventing communicable diseases. I then got very positive responses from people. A lot of them adopted the habit. It reveals that people adopt health seeking behavior if these are the focus of media'.

At individual level it is very difficult for a doctor to completely alter the patient's behavior about their health. Health literacy is a necessary component in prevention. The whole health care system can be made effective if the government take serious steps in this regard.

Majority of the respondents asserted that health education is a primary component of health communication. They argued that majority of the patients have no information about their diseases and health care system. Some of the physicians also argued that proper communication between a literate and an illiterate cannot be carried out. The patients understand their diseases according to the lay conceptualizations about diseases, in contrast to the conceptualizations of the doctors. This phenomenon leads toward ambiguity. Majority of the physicians also argued that patients prefer doctors of their own culture because they feel easy while communicating their health issues. Some physicians opine that the patients' education regarding the whole health care system, awareness about health, disease process and better wellbeing is not satisfactory, and this is the reason they cannot understand dealing with ill situation. Most of the time ill people prefer faith healers and cultural medicine, because their conceptualization synchronizes with the treatment process. These practices resultantly prolong their delay their complications. On the

other hand educated people perform better while communicating with doctors and health care professionals. Their approaches toward the treatment are adhering to their conceptualization of the diseases. They follow their checkups and take their medicine according to prescription. Majority of the doctors have the opinion that proper health education and patient counseling can overcome the situation. Health literacy campaign could enhance patient's behavior to follow the scientific methods of medicine and treatment.

One of the physicians named Dr. Sherzaman narrates;

Once I attended three patients with internal bleeding in their abdomens. When asked what they have taken in their food. They all responded that they have taken gallbladders of an animal for the treatment of diabetes. When asked why they have done so, they replied that one of our *pir* (a faith healer) recommended so.

The above narrated incident depicts the conceptualization of disease and its treatment by the patients. All the respondents have shared their concerns about health education of patients and their impacts on their health outcomes.

One of the Physicians, Dr. Zahoor Shah asserted that;

Majority of the patients visit doctors without any understanding about the expertise of the physician. They only focus the availability of doctors and their own convenience. Most of the times I receive patients of diabetes and other diseases where as I have specialized only in gastric problems.

This argument also depicts the overall situation of health literacy of the population about the disease process and its treatment. Enquiring about relevant doctors and treatment is a primary

process of proper treatment, but due to lack of health education people are unaware about the importance of doctors' expertise.

Majority of the study respondents revealed that health seeking behavior of people at societal or community level is of dissatisfactory level. This is because illiteracy about disease and its available treatment. Health has not been communicated to the masses. They are still unaware about the fatalistic nature of diseases and treatments available. Most of the time doctors find the patients in complication, because they remain in denial while at earlier stages of diseases. This is because the health care system is not promoting the preventive measures. Government has yet to invest on this aspect of health care system. Once the patients have been through disease and treatment process they realize the importance of health consciousness. But this is at the cost of going through pain and troubles; however, the government should pay heed to the preventive aspects health care system. People's attitude toward health can be altered and changed to the desired behavior.

Some of the study respondents also asserted that health behaviors of the people is dependent on their physicians counseling. If a physician properly communicate the treatment and council them according to their disease, the patients show adherence and adopt a conscious behavior. At community level people are not health conscious, because they are not aware of health sensitivities and still rely on folk health practices.

Few of the study respondents opine differently. They assert that many of patients come for treatment after they have suffered a prolonged disease related stress, because the patients are not aware of the nature of their diseases. This makes them confused to take a proper decision.

Once they become aware of their disease, their behavior automatically changes with the treatment.

They respondents also revealed that along with patients' behavior, the behavior of doctors' also requires to be improved. They should treat the patients with compassion and humility. People are very reluctant toward doctors because they treat them as objects not as patients. This behavior makes the patients less attentive to the health care system. If a doctor properly communicates the treatment and disease with the patients, they will show adherence.

A study respondent, Dr. Syed Zaheer Ahmad Shah, asserted that;

In the recent wave of covid-19, we could not convince the patients to follow health measures. Despite a strong health campaign, people were not ready to accept the diseases as fatal. Even infected people were not that much conscious. I think religious beliefs also has important role in making health behavior. Like some people don't follow health related behavior because they believe that the day of death is fixed by God, and all other things are secondary in saving life.

The above responses enable me to argue that health seeking behavior is possible only through propagating health literacy. Health literacy at societal level can be enhanced by conducting effective health campaigns. The government as well as media must take steps in this regard.

4.4. Gender and Health Communication

The study found that gender of the patient also matters in doctor patient communication. Female patients could not freely discuss their disease condition with male doctors, and they cannot properly reveal their ailment and symptoms, neither in front of the male staff nor their male

attendants especially in cases related to their menstrual cycle or other maternity issues they are reticent. They prefer female doctors because they feel easier with them when sharing their issues.

Some physicians also asserted that majority of people are not investing on female health therefore they are not getting much care. Some of the areas are comparatively worse because of the non-availability of female doctors. People are reluctant to use the services of male doctors for their female patients. Most of the time female patients hide their disease history, because of avoiding cultural stigma and taboo. Due to the patriarchal structure, the female patients cannot freely express their issues. Their issues are being expressed by their male attendants. They cannot express their health problem in front of male attendants. This causes problems for doctors in diagnosing the disease. Both the male and female patients from rural tribal areas are shyer than urban areas.

A study respondent, Dr. Zaheer Shah reveals that;

Most of the time, I see female patients visiting female doctors even though they are not specialized in that particular field. It means that the female patients feel easier with female doctors as compared to the male doctors. This is because of their personal choice and the influence of their culture. I think urban people are more adoptive than rural people in this regard.

In a similar fashion another study respondent Dr. Assad Kakar also narrated that;

Female patient hide their diseases due to fear of hurdles in their marriages. Our society is reluctant to those female who gets sick once in their lives. These cultural taboos pushed them away from treatment and proper health facilities.

Based on the above responses the researcher argues that females in our tribal societies of Balochistan are taught to be quiet and talk less that is why they hesitate while communicating. Young female patients are reluctant, and they're represented by their mother or mother-in-law. Female patients also hesitate in sharing personal attributes regarding their diseases in front of their brothers or father.

4.5. Culture, Religion and patients' misperception.

Majority of the study respondent reveal that Balochistan is a strict tribal zone. People are living with strong cultural norms and religious beliefs. Their cultural understanding and religious beliefs about health and illness keep them away from the new medical system. This makes the situation worse for female patients. Female are not allowed to interact with male doctors. They must be accompanied by brother, father, uncle etc. In front of whom, the female cannot express their health problems. They cannot properly interact with male doctors and so they try to avoid male doctors for checkup. Some of them want their issues to be discussed in isolation but this practice is also not culturally appreciated. This is why they avoid western medicine and try to treat the disease at home by using cultural medicine and faith healing.

One of the respondent; Dr. Sherzaman said that;

Most of the time married female patients cannot visit doctors without having male attendants. Strict cultures even don't allow them with husbands. Therefore they

cannot reveal freely in front of brother in law or father in law. I have also observed that some female patients feel hesitation even checking their blood pressure. They are very reluctant to unclothe their arms. This is because of their strong normative culture that does not appreciate them to do so. Most of the time female are not even allowed to talk to the doctors. In such a situation the communication is definitely disturbed.

An almost similar response was also given by another study respondent, Dr. Zaheer Shah that;

In the context of Balochistan, where there are many ethnic identities. Culture and religion are the main barriers in communication, especially when it comes to female patients. It has happened many times that when I ask something from female patient, she looks at me and then gaze toward her attendant, yet telling nothing. They expect their attendant to tell about their disease. I think this is due to both our cultural norms and religious beliefs. Female is not appreciated to talk freely either in disease or in ordinary life activities. Female Patients are even not allowed to visit doctor without having male attendant which is again disrupting their communication with doctors.

The above responses enable me to assert that people avoid disease related stigma due to cultural norms therefore they cannot disclose many health complications. To deal with this kind of situations the province also lacks enough female doctors for female patients. This is why the patients avoid follow up more early than male patients. I can also argued that strict religious belief also affect female health while pushing them toward faith healing. In many cases religious

people prefer healing approaches rather than western medicine. They finally visit doctors in complications. However, at that time the doctors treat complications not diseases.

In the said study majority of the respondent revealed that due to poor health care system and meager public health communication at all levels, different diseases are socially stigmatized. Even those diseases are also being stigmatized, which have no relevance with Sexually Transmitted Diseases (STDs) or different social evils. This is because health awareness of people is undermined where cultural norms and religious beliefs play important role.

One of the physicians, Dr. Syed Mir Usman Shah asserted that;

A lot of people still believe that the cause of spread of viral diseases is only sexual transmission, but this not right. There are many ways through which patients get viral diseases. I think we need to communicate to the people the accurate information about the diseases and its treatment. I think this will have an effective impact on the overall health condition.

Going through enough evidences from the respondent I argue that health situation is worse in the remote areas of province where strict cultural values are in practice. These cultural values play negative role in stigmatizing the diseases. Along with the above stated facts the physicians also stated that misperception about hepatitis is a serious issue. People believe that hepatitis is a fatal disease, therefore it definitely produces fear and anxiety among them, which again push them away from attending to the proper treatment.

Some of the physician also asserted that disease related stigma produce stress and anxiety among people. They think that people are unaware about the diseases and their treatment which

is dependent on proper health communication. Disease related stigma is higher in female than male because society is more sensitive to female marriages as compared to male marriages.

4.6. Health facilities and overburden on health care system

Few of the study respondents opine that due to lack of proper health facilities the doctors are still serving in that outdated structure which was established in 1980s and 1990s. The OPDs are still much burdened. The province has only two government hospitals in its cosmopolitan city Quetta. Balochistan is not adequately equipped with health care system and a good number of physicians. Majority of patients from rural areas and far-flung districts visit the city for treatment. A large number of patients at single time gather around the physician with a bundle of documents that makes the communication disturbed. One of the major problems of proper communication between doctor and their patients is the overburden of patients in government hospitals. Many patients could not be diagnosed at initial stages because of the lack of proper communication with doctors, which in turn is caused by patients' load on hospitals. In such situation of overburden on doctors, the doctors cannot give enough time to their patients. This kind of diagnosis procedure will definitely fail.

One of the study respondents, Dr. Bawadin Achakzai opines that;

In government hospitals we are provided with those numbers of operation theaters and other equipment which were provided in 1980s and 1990s. The equipment must be increased with the increase in the number of patients, but the reality is opposite.

He also stated that;

Every physician checks a line of two hundred to three hundreds patients daily. And every patient has a file of documents of twenty to thirty pages. In such a situation how a doctor can fully communicate with his or her patient. I think this makes the communication severe.

Another respondent, Dr. Assad Kakar assumes that;

The province has a scarcity of better equipment along with good physicians. From all over the province, patients come to provincial headquarter. This puts burden on the doctors both in government as well as in private hospitals. Every doctor checks hundreds of patients in a single day. I think it is not possible for a doctor to give enough time to each patient for full communication'.

4.7. Denial of Treatment, Economic and Residential Backgrounds of Patients

Majority of the study respondents agreed that hepatitis B and C are also chronic diseases. A kind of stigma is attached to these diseases. People are still reluctant to confront these diseases due to their chronicity. Patients with hepatitis B or C are anxious because of the related stigma. Many of the patients think that if they are diagnosed with Hepatitis B or C, they will face social alienation. Disease related anxiety pushes the people away from diagnosis and treatment. Majority of the people rely on folk approaches of medication. Some of the respondents provided the information that majority of the patients report their disease in late stages when complications have developed. This is because they remain in a situation of denial to avoid stress caused by diseased related stigma.

They respondents were of the opinion that people are not accepting diseases. They continuously remain in denial e.g. in the First wave of covid-19, people were not ready to accept it as a pandemic or even a contagious virus. Every person dealt it according to his/her respective belief. Many conspiracies were attached to it just because they were trying to make look the situation as normal.

A physician, Dr. Syed Zaheer shah, asserted that;

In the recent wave of Covid-19, I got a patient with corona symptoms. When I recommended him to get tested he immediately responded that I have no trouble while breathing or I have not lost taste and smell sense. When tested for Covid-19, he was shown to be infected. This means that he tried till the end to avoid disease related stress.

The respondents also asserted that in avoiding anxiety people are not ready to accept fatal disease therefore they ignore proper diagnosis and treatment. Denials of disease keep them away from the entire health care system. The respondents stressed that effective health communication campaign is needed to bring change in the health behavior of people. Some of the respondents also asserted that a lot of people avoid screening and visiting physician to avoid disease related anxiety.

A respondent Dr. Daud Ghilzai, said that;

When I ask patients the reason for being late in treating the disease? Most of the times, they would say that doctors and screening make them anxious for minute health problems. Once I diagnosed a patient with Covid-19, he asked many times

that could he survive. This kind of fear related to diseases push the people away from health care system. I think overcoming the fear of patients is the responsibility of physicians, but unfortunately they are not trying to deal with this.

Few respondents also highlighted that economic and rural backgrounds of the patients also matters in health communication. Poor and rural people are not fluent with doctors as compared to rich and urban. They cannot take active part in conversation with their physicians. There are many reasons but the common reason they share is their orientation of the health care system. The poor and rural people ignore minor health issues therefore they do not come across the system frequently. They consult cultural medication in minor cases.

One of the study respondents Dr. Syed Zahoor Shah said that;

I think unaffordability of resources also pushes the people away from western medical system. In peripheries of the province health system is weaker, people cannot come to Quetta, and therefore they prefer cultural medicine and faith healing.

He also asserted that;

Majority of patients come from relatively poor economic backgrounds. Therefore class difference may become a barrier between them. Doctors become reluctant to them while communicating and interacting with them. Because their way of conversation with doctors is not participatory therefore the attitudes of doctors resultantly become rude with them.

Another respondent Dr. Nasir Azeem Kakar, asserted that;

I think the urban and rural structures also make differences in communication. I experience that urban people are better at communicating with doctors as compared to rural people. They are a slightly more aware of the disease process and also they are unhesitant in interaction'.

4.8. Fear of Anxiety and Health Communication

According to the majority of study respondents, stigma and anxiety always plays important role in communication and patients health outcomes. Anxiety is common in our society, especially in Pashtun and Baloch communities. For instance people feel chest pain which might be a sign of cardiac infection but they don't discuss it and stigmatize the issue. Same is the case with female patients; they try to deny the symptoms. People try to hide their hepatitis. Even some patients requested their physicians to not disclose their disease. Especially educated and high profile people ensure their confidentiality. Female health is at stark risk, because they continuously feel fear of hurdles in their marriage. It has also been observed that many patients take their medicine in isolation because they hide their disease to avoid stigma.

One of the study respondents, Dr. Sharbat Khan narrated that;

A person having 5 children (daughters and sons) infected with hepatitis B was worried about their marriages. He came to me and said that his brother is even not ready to marry his son to his daughter.

Some of the respondents also asserted that disease related stigma on one hand pushes away the patients from proper treatment, while on the other hand it makes the people sensitive to health. Some of the study respondents also revealed that chronicity of the disease have both stigma and

anxiety. Both cases affect the health outcomes because patients lose their confidence in taking timely decisions.

Another respondent, Dr. Sherzaman also asserted that;

One of married female patients came with high diabetic level. And she was facing the problem from three or four years. When I inquired the reason of late reporting the disease, she replied that she tried to avoid the disease related stigma. These factors made the situation worse for all but especially for female patients. Some of my patients request to not prescribe insulin because they cannot take it in confidentiality. Even though diabetes is not a stigmatized disease yet still female patient avoid and hide it.

Based on the above responses I can assert that majority of the people with anxiety are less expressive but with the passage of time and experience the doctors are able to dig out the necessary information from patients. The methods employed in digging out information vary from case to case, however employing such techniques are time consuming. Stigma and anxiety also results in poor compliance to treatment. These both factors are affecting the patients' confidence in interacting with the physicians. In some cases like Sexually Transmitted Diseases or AIDS etc. patients even try avoid disclosing about their disease. The respondents also reveal that stigma and anxiety is more affecting female patients in rigid societies like that of Baloch and Pashtoons.

4.9. Government, Health department and Media Advocacy

Majority of the study respondents asserted that the government does not have an effective strategy for health campaigns. Health miseries at societal level can be reduced when all the stakeholders consider the overall situation of health care system. The public health department has a policy of public health awareness and communication. But due to lack of financial resources it has not been implemented yet as required. The department conducts sessions of health education, visits schools, madrassas and other public institution to mobilize people in preventing the outbreaks of different diseases. But again there is a huge and scattered population which cannot be approached with limited resources and staff. The diseases like hepatitis and other chronic conditions need proper strategies and programs of health communication. This is the responsibility of government to educate people and prevent diseases. But unfortunately the province has no effective program in this regard. Still the government does not show any interest in this field. This is the major reason that health care system in Quetta city is overburdened.

One of the study respondents, Dr. Sharbat Khan, asserted that;

I personally requested the government at different forums to focus the hepatitis prevention and suggested them to take steps at preventive side. But the officials never gave positive response. I think the governments can effectively engage media for this purpose.

The arguments concluded that health institution has never published pamphlets and magazines for public health awareness. Public health policies are limited to documents only. The respondents have never observed any sort of public health campaign in the province. The government has the policy of health education and proper communication in place, but the

problem lies in the inefficiency of management cadre e.g. when the Director General or Secretary Health starts to understand the issues, the government transfers them to another position and department. This break in policy engagement brings challenges for implementations. The respondents consider that the management cadre must have medical background for enhancing policy implementations.

Dr. Zahoor Shah, responded that;

As a physician, I never saw any type of health education or communication campaign regarding preventive measures. The government never took serious steps while protecting people from infectious diseases. I think non-governmental organizations are more serious than governmental ones in this regard. Being a physician I never had witnessed any health campaign to contain hepatitis.

Some of the respondents also complained that our health care system is more backward than the health care systems of other provinces. The system is not up to date. World has reached to telemedicine, but we still lag behind in propagating public health messages. We see advertisements of Hakeems, and faith healers, but we have never seen mass campaigns on health issues. Health department with no good reason has left this issue of public importance unattended. For medicines to be effective, patients must have trust in it. So it will have placebo effect. This can only be done through proper health communication. This can brings a change of paradigm from treating complication to prevention.

The above enable me to argue that that population of Balochistan has many problem regarding individual health as well as the whole health care system. The province is very vast; people came to Quetta from far-flung areas for minute health problems. The government and

health institutions have never been attentive to focus the health literacy for the prevention of the diseases. People are still unaware of common diseases and their treatments. Many health problems in Balochistan can only be eradicated through effective media campaigns like; Obesity, blood pressure, diabetes, because these diseases can be minimized through adopting proper diet behaviors. People are using fats rich foods in their meals. Due to unawareness people are still using faith healers and cultural medicine as remedies. Media can have very positive role if takes steps in this aspect. It can enhance basic awareness about hepatitis and related care. Few public health messages i.e. using disposable equipment in hair cutting, ear piercing, tattooing etc. can save hundred and thousand lives. Unfortunately the government has paid less attention toward this aspect of public health.

A study respondent, Dr. Sharbat Khan narrated that;

In my thirty years of service, I have been invited by PTV only two times on world hepatitis day. Those talks on TV had very good effects on people health seeking behavior. Once I was interviewed by Voice of America, I even got a phone call from Afghanistan, asking about Hepatitis. I think health awareness and literacy is dependent on proper health campaign, which is much easy and feasible in the modern times while utilizing media.

The respondents also stressed that media can play important role in awareness of people. Public health messages have always played important role in preventing communicable as well as chronic diseases. See for example the world is still focusing preventive side in the recent pandemic. The prevention is impossible without utilizing mainstream media. This is also a dark side of our health care system. The government does not take interest to utilize media for this

purpose. The politicians are interested in their vested interests for which the media is being used. It needs proper strategy to be developed by the government to communicate health information at gross root level through using mainstream media.

Some of the study respondents highlighted the other side of the issue; they asserted that if there had been comparatively better management, the private doctors would not have been earning that much. Government hospitals in Quetta would not have faced that much burden. This is just because the government is not willing to educate and spread awareness among the people.

Dr. Zahoor Shah, highlighted that;

One thing I can say is that we have developed the curative side of health but completely ignored the preventive side. Our peripheral areas are acting like factories for doctors. Patients come to hospitals in huge numbers. They are the source of income for doctors. The system is working as an industrial complex. Therefore the government and other interest groups are not willing to promote health literacy. The more the ratio of diseases the more is business related to health.

The government must come forward to enhance health literacy by using mainstream media. Majority of media sources are privately owned. The media owners only focus those things that can be beneficial in terms of their earning. However, in health care system media has little monetary interests, thus promoting health awareness through media defy the commercial logic. It is government's responsibility to utilize media for health literacy and health advocacy.

4.10. Diagnosis and the Doctors' Responsibility

Some study respondents also revealed that patient usually miss the chances of early diagnosis for a number of reasons. One of the reasons is their unawareness about the diseases and its treatment. They have even no acquaintance with the primary health facilities. Therefore, they rely on faith healers and cultural medicines. Most of the patients who have the opportunity of visiting doctors have no enough information about the doctors and their specialties. A lot of patients at first waste their critical time of diagnosis with folk healing and then with the doctors of no relevancy. In such situations it is doctors' moral responsibility to refer them to the concerned doctors.

Dr. Sherznam, narrated that;

One of my patients having stomach pain was diagnosed with thyroid deficiency and he soon recovered with my prescriptions. A flux of stomach patients start coming here for their gastro problem, because their knowledge of the disease was null. I think it is the doctor's duty to refer the patients to the relevant doctors.

The respondent also opined that health awareness among the people is a primary component of good health. It might be achieved through combined efforts of government, health institution, community and the Physicians.

4.11. Cultural Competence, Health Practices and Health Care System

Majority of the study respondents revealed that strict cultural norms and their religious beliefs push people away from using western medicines. People are not culturally ready to accept the system as they consider it as alien. The community still does not recognize the civic

responsibility of giving way to ambulance and firefighter vehicles. This is just because of the lack of awareness. Our institution like schools, colleges and even universities are not discussing health at societal level. Health is not the priority of our culture. Our culture appreciates power, wealth and status.

Some of the respondents also revealed that the aspect of non-competency affected the female health more severely. People are still reluctant to treat female by a male doctors. Apart from gynecologists, the province does not have enough female doctors for all other diseases. Therefore female health is affected. Female patients in some remote areas even avoid interaction with male staff in hospitals. Therefore their admission in hospitals becomes much difficult. They respondents recorded that in some cases female are very reluctant to some medical techniques and equipment's e.g. they avoid catheterization, stethoscope at their chest etc. On one side, majority of people prefer female doctors for their female patients, but on the other side they are not allowing their female to get education. This ironic approach shows the level of people's disregard toward the health care system.

A study respondent, Dr. Ismail Mirwani, asserted that;

We would conduct camping once in a year for hepatitis patients in remote areas of the province. People in some areas show prejudice because they still believe that these people are the agents of non-Muslims. It shows their level of neglect toward health and health care system.

Majority of the respondents agreed that there are multiple reasons of non-compatibility of people with health care system. According to them, strong religious beliefs and cultural norms play its role in this regard. Educated and urban people show better adherence toward health care system.

Their adoptability to medical system is better than uneducated and rural people, they also narrated that this is the reason that rural and uneducated rely more on folk healing practices than that of urban and educated people.

Study respondent, Dr. Zahoor Shah asserted that;

Some of my patients left the treatment, because someone told them that, *Molvi* or *Pir* is very effective for this particular disease. Therefore they left the treatment and started those practices. I think the situation can be made effective if we try to alter the collective thought process of people by educating them.

Some of the respondents also stated that the problem here is that the people are not aware about the health care system, neither government, nor other non-government organizations play their role to communicate about the proper health care system. Far flung areas of Balochistan are still too much detached from the system. They have not been convinced to adapt to the medical care system, therefore their reluctance toward the system is natural.

As the province has a very scattered population, so it is very difficult for government to ensure strong rules in mountainous and far flung areas. Therefore a parallel system of quacks, faith healers, and folk healers is in practice. These health practices brought many challenges to health care system. People follow these practices more convincingly than the proper medical system. The respondents believe that proper health care system has not been delivered and communicated to them, therefore they believe in folk practices. The respondents also believe that many factors play role in this regard i.e. culture, religion, non-accessibility and non-affordability are the major factors of using folk healing practices. They even said that these practices are the patient's first priority, because these are affordable, compatible and available everywhere. People

always search for shortcut treatment due to unaffordability, non-accessibility and cultural taboos regarding female health.

A study respondent, Dr. Syed Mir Usman Shah, narrated that;

Once I diagnosed a patient with Paralysis attack. The attendants with him abruptly said that 'it is not doctors concern further' because it can be cured by *Taveez* and *Dhum*'. They believed that Paralysis is not a disease. It is actually a state of unconscious mind which cannot be treated by medicines'.

Some other respondents also asserted that Quacks and faith healers i.e. *Mulla*, *Peer* etc. actually exploit those diseases which are self-resolving. They attract people when they show results in self-resolving diseases e.g. hepatitis A and D is self-resolving, people also treat hepatitis B and C through folk healers, where they suffer in complication. They finally visit doctors when their disease is in its final stages.

Another respondent, Dr. Sharbat Khan, highlighted that;

A lot of my patients have *Taveez* in their necks even after a long follow up visits. They still believe in these practices even though they are taking medicines. Culturally and religiously we are still having problem while accepting the proper health care system.

Some of the respondents also stressed that misperception of people about the disease also play important role to convince people on folk health practices. People understand the diseases by their cultural meanings. Their unawareness pushed them away from the scientific approaches of medicines.

A study respondent also said that;

One of my patients is still using only onion in his meal, this is just because he believes that hepatitis is the cause of heated liver, and this heat can be reduced with only eating onion. This again caused him Immune-depressed. These cultural beliefs always take them away from proper treatment.

A small number of the study respondent also revealed that, people are not much easy with proper health care system, because of its expensiveness and inaccessibility. Proper health system in Balochistan is not available in every part. People have to go to major cities of the province. This requires a sufficient amount of money. Therefore people at first stage of their diseases prefer folk methods. When they come to proper health care system, and see the result, they show adherence and keep follow ups. They also believe that if a proper health care system is arranged at their door steps, it will attract the people to proper health care system.

4.12. Health Communication in Vertical Programs and Physicians' Efforts

A sufficient number of the study respondents narrated that there is no effective process for health communication. Therefore, doctors at individual levels try to use social media for health awareness or they try to educate people through direct counseling. However, this does not address the whole population. Doctors may alter patients' behavior but people who have not been through diseases also need health awareness. At individual levels doctors and paramedics time and again demanded a comprehensive program from the government. But their demands have never got attention.

One of the study respondents, Dr. Sherzaman Kakar, responded that;

All efforts done here are at individual or pharmaceutical basis. Pharmacy also intervenes when they see their financial benefits e.g. so many companies are producing diabetes drugs, and these drugs are very expensive. Therefore the market is very competitive for them. So we see many seminars and awareness program on diabetes from pharmacies. Their purpose is only advertisement under the fake umbrella of philanthropy. On the other hand thyroid is also a common disease, but its drug costs only Rs: 150, having no competition. Therefore we never saw any seminar or health campaign about thyroid.

Majority of the study respondents asserted that the province does not have an effective strategy of health communication. Health at organizational and societal level is ignored. Neither electronic nor print media has played its role in this regard. A number of respondents even said that they never witnessed any program at preventive side of health. They believe that we only treat the diseases and never try to prevent them.

The province has few vertical programs, like hepatitis control program, malaria control program, AIDS control program, along these programs some non-governmental organization are also working on the preventive side. At governmental as well as departmental level the province has no strategy.

Study respondents, Dr. Daud Ghilzai, narrated that;

The government and health department only take part in those programs in which they see any kind of financial support from the donors. World health organization sometimes supports them in preventing the communicable diseases. Otherwise I have never seen any health communication campaign conducted by the government.

The respondents believe that only doctor at individual levels are playing their role while altering patients' behavior in this regard, which is not enough. On individual basis a lot of talk shows are conducted on social media. Doctors on media are trying to prevent communicable diseases. But without the help of government and health institution these efforts are not enough.

4.13. Conclusion

The chapter thoroughly highlighted the factors that affect health communication at three levels in Balochistan. It explored the underlying reasons of poor health communication. It is worth mentioning that the chapter also explored some themes which were new for the researcher. Along with individual, organizational and societal factors the analysis also revealed some structural factors of health communication. As noted above that gender, education, health literacy, disease related stigma, anxiety, media advocacy, cultural competence, health behavior and health practices significantly affect health communication. Some other factors like physicians' behavior, residential and economic background of the patients and over burden on health care system also contribute to poor health communication in Balochistan. The study examined the issue with a clear understanding that this aspect of health miseries has not yet been discovered at both country and provincial levels. It is therefore stated that the study finding can provide clear insights for further enquiries. Health as an important social institution needs better scientific investigation to overcome the miseries. Without clear picture of the health condition it is very difficult for an ordinary person to take care of his/her health. Therefor it is pertinent to mention that a comprehensive debate is needed to explore this issue of public importance.

CHAPTER SIX

SUMMARY, IMPLICATIONS, THEORETICAL UNDERPINNING AND RECOMMENDATIONS

5.1. Summary of the Argument

The study explored that how health communication of patients at individual, organizational, societal and structural level is undermined. The study shed light on the underlying factors of health communication, of hepatitis patients, with their physicians and families. The study explored that this important aspect of public health has not been properly inquired by the primary stakeholders. For instance the government, public health department and media have not played their respective roles. Therefore the situation of ordinary health care in the province is not satisfactory. The results also unpacked that along with other factors proper health communication is also a prominent factor for good health condition. Both quantitative and qualitative analysis manifested that the hypothesis and research questions were supported throughout the study.

Chapter four provides the quantitative results of health communication and health outcomes. The statistical tests employed shed light on the prevailing conditions of health communication in hepatitis patients in Balochistan. The arguments were built on the basis of hypothesis that health outcomes are the preliminary product of better health communication. The statement assumed (hypothesis) were confirmed while employing statistical tests.

Chapter five with qualitative analysis thoroughly discussed the factors involved in poor health communication of hepatitis patients in Balochistan. The discussion unpacked the

underlying factor involved in poor health communication that resultantly affects health outcomes. Along with the confirmation of the assumed factors the analysis also explored some new factors of health communication which includes physicians' behavior toward their patients, residential and economic background of the patients and over burden on health care system. The respondents believed that these new factors are also contributing in health communication.

Conceptual Frame Work 1:

Independent Variables	Mediating Variables	Intervening Variable	Dependent Variable
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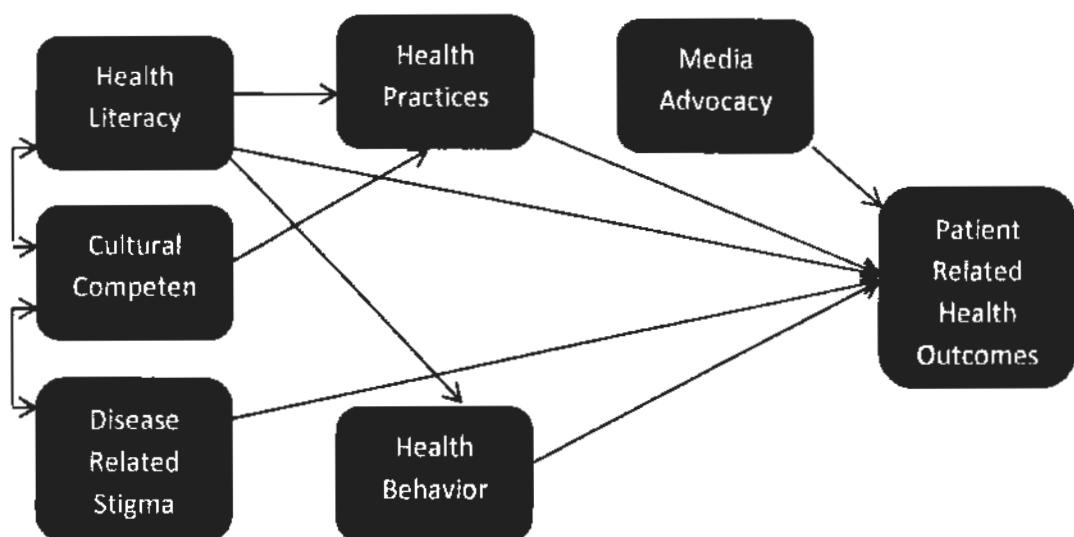


Figure 5.1 Conceptual Framework 1

Conceptual Frame Work 2:

Independent Variables Mediating Variables Intervening Variable Dependent Variable

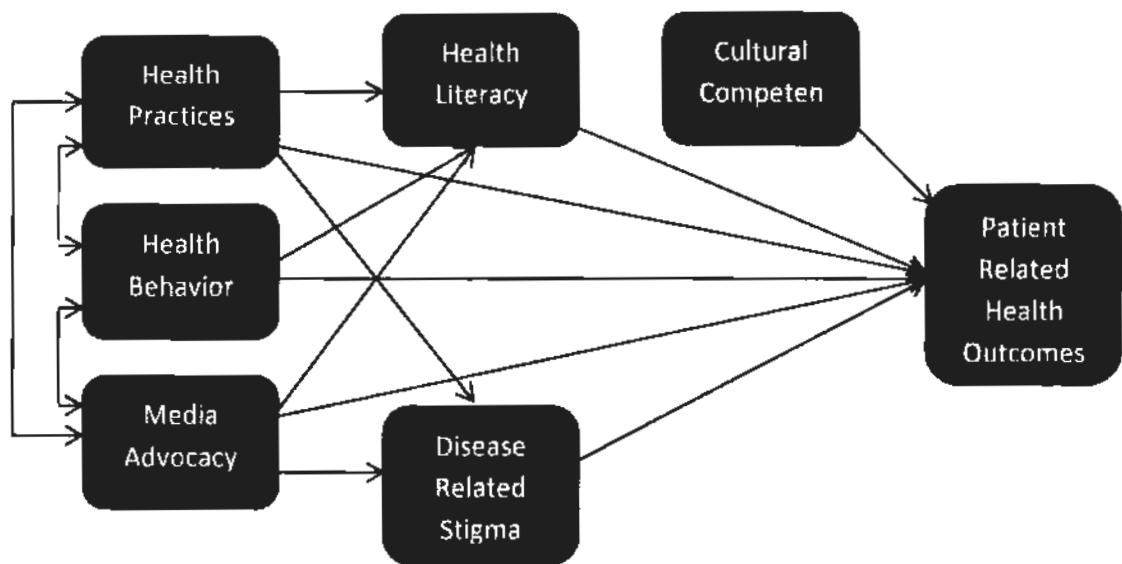


Figure 5.2 Conceptual Framework 2

5.2. Application of Theory

The chapter includes the application of different theoretical concepts used in the field of sociology of health. The study is comprised of different variables from individual level to societal level. Therefore different theoretical concepts have been incorporated to support the arguments. Here the researcher used a sequence of theoretical concepts whose arguments supported the study variables.

The Health Belief Model (HBM) is a theoretical approach and was developed in 1974 by Becker from the work of social psychologists Hoshbaum, Rosenstock and Kegels. The model mainly focuses the individual behavioral change. According to this model two main factors are

involved in influencing health related protective behavior; 1) person's susceptibility to diseases and its subsequent sever consequences, 2) his/ her belief of benefits of taking recommended actions that must outweigh the necessary barriers or costs of taking actions (Naidoo & Wills, 2000). A behavior change toward a desire action could be possible when both input and output communication variables are practiced in a specific order while conducting an effective mass media campaign (Corcoran, 2007). Health behavior in its broader sense refers to manifest actions of organizations, groups and individuals, bringing social change which resultantly enhance policy development and encourage implementation, to improve skills and finally ensure quality of life (Parkerson, 1993). The analysis depicts that health literacy of patients has direct links with health practices of patients and their quick recovery. Patients with high health literacy can have good chances of using modern medical system as compared to those patients who have less knowledge about the health care and diseases. It has also been observed that lay approaches toward health simply mean that how individuals think of their health, illness and recovery. Health conscious behavior can be encouraged through health belief model, where the patient feel the susceptibility to diseases and its subsequent sever consequences and also recognize the benefits of taking recommended actions. Change in social environment ultimately brings change in health behavior with rapid means of communication. Media and other personalized means of communication can produce an environment of education which will finally enhance health literacy. Health literacy in return accelerates health communication (Glanz, Rimer, Viswanath, 2008).

The concept of communication persuasion model in strict sense is slightly different from other communication models in field of public health communication. The use of persuasion communication model is dominantly found in the field of advertising health related messages.

This model mainly focuses public health communication particularly through the use of mass media. This feature of involving mass media makes the model different from other communication models where only small-scale risk population is treated. The model can be used in variety of ways; which include the evaluation of consumer behavior while responding to a public health message. The communication persuasion model works at two levels; input communication factor and output communication factor. The input communication factors of change contain five stages; source, message, channel, receiver and destination. These input variables or stages of communication change, allow the practitioner to select, reject or manipulate. The output variable are dependent over these input communication variables. Output communication variables are a series of related occurrences that shall take place in a specific order so that a message could have the effect of change. These output communication variables include; tuning in, attending, liking, comprehending, generating, acquiring, agreeing, storing, retrieving, deciding, acting, post acting and covering. A behavior change toward a desire action could be possible when both input and output communication variables are practice in the specific order while conducting an effective mass media campaign (Corcoran, 2007). The findings are supported by this model where it is apparent that patients with basic awareness about their diseases and health care system are more likely to show quick recovery than those who are less literate about their health and health care system. Health literacy is of much importance because its relationship has been traced to health status and better health outcomes both at clinical as well as societal level. The results shares that health behavior is prone to be changed with health literacy. The patients with effective health literacy had better health behavior toward their health condition.

Theory of Reasoned Action (TRA) was originally proposed by Ajzen and Fishbein in 1980 which focuses on the performance of a specific behavior. According to this theory the role of a specific behavior change is determined by an individual's intentions to perform that specific behavior. Intention of performing a specific behavior is the product of two factors; individual's attitude for adopting a specific behavior (positive/negative), individual's subjective norms toward that specific behavior (overall perception of significant others toward person's specific behavior). According to this theory attitudes are the outcomes or functions of behavioral beliefs and their evaluative outputs whereas subjective norms are the outcomes of an individual's normative belief and inspirations to comply with a specific task (Montano & Kasprzyk 2015). The study analysis depicts in the same manner that folk health practices had negative effects on hepatitis infected health outcomes. Lay people do not necessarily make their health view according to science and specifically to the medical science. Their normative structures always push them away from the dominant modern style of treatment.

The demands that make the balance between external and internal environmental factors are called stressors. These demands or stressors affect psychological as well as physical well beings by restoring balance (Lazarus, & Cohen, 1977). The transactional model of stress and coping is thus a comprehensive framework of analyzing and evaluating the procedures of coping with stressful situations. These situations are the product of an individual's environmental transactions. This procedure of transactions is dependent on the power of external stressor. Therefor it is firstly facilitated by individual's appraisal of stressor and secondly his/ her ability of coping or the social and cultural means at disposal (Antonovsky, & Kats, 1967). According to the analysis, stigma and anxiety always play important role in communication and patients health outcomes. Anxiety is common in our society, especially in Pashtun and Baloch communities.

For instance people feel chest pain which might be a sign of cardiac infection but they do not discuss it and stigmatize it. In majority of the cases patient avoid visiting physicians and deny treatment while avoiding stressful anxious conditions caused by diseases.

The concept of health life style also supports the analysis of the processed data. In prior years no heed was paid in academia to the concept health lifestyle of people. Health life style theory was proposed by the author (Cockerham 2005, 2013a, 2013b; Hinote 2015), which suggested a theoretical model for the behavior change and focused the life style of people. The author assumed that it was needed in the response to the epidemiological transmission which had occurred during twentieth century. Health life style was linked to the mortalities from both communicable and chronic diseases. The idea carried the revelation that poor health is the ultimate result of one's life style. Health has not been communicated to the people therefore their life style is not satisfactory.

The concept of collectivities also strengthens the argument in the thesis of present study that strict cultural norms and their religious beliefs push the people away from using western medicines. People are not culturally ready to accept the system as other nations have done. There is still a lack of civic sense in the masses, in the context of Pakistan, related to health consciousness as still people do not clear the way when an ambulance or a firefighting vehicle is rushing to its target destination. This is just because the people do not discuss health in their folk gathering. Our institution like schools, colleges and even universities are not discussing health at societal level. Health is not the priority of our culture. Our culture appreciates power, wealth and status. Collectivities establish "thought communities" which are groups of people linked through common relationships, like culture, religion, workplace, politics and kinship. These common factors bring them to common frame of thinking therefore these communities are called as

thought communities. Along with individual thinking they reflect a cumulative world view (Zerubavel 1997). According to Berger and Luckmann (1967), the concept of thought communities is analogous to Mead's idea of 'generalized other' in that they both are the concepts of the perspectives of collectivities.

5.3. Implication of the Study

As mentioned above that this study utilizes both quantitative and qualitative approaches. The quantitative and qualitative data analysis revealed that health communication has long lasting effect on health outcomes in hepatitis B and C patients in Balochistan. Indicators of health communication are; anxiety, health related stigma, health literacy among people, media advocacy of health, cultural competence, health behavior and health practices. The findings of the study shed light on the underlying factors that undermine health communication in Baluchistan

The results of the study have potential implications to strengthen the whole health care system by considering the communicative aspect of public health. The study further highlights the available resources to health care system and government interventions in this regard. The findings also suggest that the situation can be made better by involving media to promote awareness among the people.

Along with the above implications the study has presented potential suggestions to improve the conditions of patients with chronic diseases. Patients with chronic conditions need enough support to overcome the stressful situation. For example right decision at right time is a pre-requisite of proper treatment. The study can enhance patients' courage to consult their doctors in every condition.

Similarly, the findings propose that structural barrier at organizational level can be removed by encouraging community involvement. For example minimizing overburden, making sure the availability of female doctors, promoting health literacy and ensuring media advocacy can have good outcomes on overall health condition.

The study findings have the potential to divert full attention of academia toward this aspect of public health. During the course of the research, the researcher faced the problem of unavailability of the literature on this specific area. This clarifies that no efforts have been made in this field. This study can potentially provide inputs in the policy making and implementation. The findings further reveal that folk health practices in Balochistan are still in use especially in rural areas. This is because the proper health care system has not yet been operationalized. Majority of the people still rely on the outdated cultural practices. Cultural norms and religious beliefs further undermine the situation especially for women's health. The findings elaborate the situation with a comprehensive understanding. The study thoroughly unpacks the situation for community, media and government interventions.

5.4. Policy and Academic Recommendations

The primary focus of this research study was to explore the factors involved in health communication that resultantly undermine the health outcomes in hepatitis B and C patients in Balochistan. Hence the study was restricted to patients infected with hepatitis B and C viruses in the provincial capital of Baluchistan, Quetta. Thus comprehensive studies need to be conducted in other regions of the country. This study was limited to only chronic hepatitis patients, therefore health communication and health outcomes of other chronic patients with diseases like diabetes, cardio vascular diseases, pulmonary diseases, cancer etc., should also be enquired

through academic researches. As this study explored the factors of health communication and health outcomes from the perspectives of physicians and patients, thus it is mandatory to explore the factors from the perspective of patients' attendants, family members, community stakeholders and other health care providers.

To conclude, the study explored the factors that promote or undermine the health communication among people and patients in Balochistan. Thus it is recommended that the government, health department and media must play their respective roles to overcome the present situation of health communication. It is also recommended that health communication campaigns should be launched so that health awareness at societal level could be propagated. It is pertinent to mention here that cultural norms and religious beliefs must be made lenient toward health, in general, and women's health in particular. The study also recommends that health should be discussed at forums like schools, colleges, universities, madrasas, public seminars and workshops. It must be a part of public discourse.

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APPENDIX-I

Item # _____

Socio-demographic information

1. Age of the Respondent(in complete years) _____

2. What is your area of Residence? i. Urban ii. Rural

3. What is your Education

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	16+
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4. What is your marital status?

 i. Single ii. Married iii. Divorced iv. Separated

5. What is your Family type? i. Nuclear ii. Joint iii. Extended

6. How many Family members are there in your family?

 i. No of Male members _____ ii. No of Female members _____

7. What is your Monthly income from all sources? Rs. _____

8. Have you ever heard of hepatitis before your infection?

 i. Yes ii. NO

9. Have you ever heard that hepatitis is a fetal disease?

 i. Yes ii. NO

10. Did you knew that hepatitis is a curable disease?

 i. Yes ii. NO

11. Do you have another member of your family infected with hepatitis?

 i. Yes ii. NO

12. Where you come to know to about chief minister Hepatitis control program?

 i. Family. ii. Friends iii. Doctor

13. Have you ever been hospitalized for hepatitis?

 i. Yes ii. NO

14. Are satisfy with the treatment of hepatitis provided to you?

 i. Yes ii. NO

Health related Anxiety

(Not at all=1, rarely=2, Sometime=3, Often=4)

No	Statement	1	2	3	4
15	Any reference to hepatitis brought strong feeling in me				
16	Even though it's a good idea I found that getting a hepatitis test scared me				
17	Whenever I heard about friends or public figure with hepatitis I got more anxious about my condition of hepatitis				
18	I felt kind of numb when I thought about Hepatitis				
19	I thought about hepatitis even though I did not mean to				
20	I had a lot of feeling about hepatitis , but I did not want to deal with them				
21	I had more trouble falling asleep, because I could not get thoughts of hepatitis out of me				
22	I was afraid that the result of my hepatitis test would show that my disease was getting worse				
23	Just hearing the word hepatitis scared me				
24	I have been so anxious about my hepatitis test that I have thought about delaying it				

Source: The Memorial Anxiety Scale for Prostate Cancer

Disease related stigma

(Strongly Dis Agree=1, Dis Agree=2, Agree=3, Strongly Agree=4)

No	Statement	1	2	3	4
25	I felt ashamed about hearing my hepatitis				
26	People avoid close contact with hepatitis infected patients				
27	I am discriminated against hepatitis at work				
28	We are not desirable as spouse				
29	I feel that I am falling others at risk due to HB or C				
30	People avoid getting gifts from HB or C patients				
31	People do not let their children playing with hepatitis patient's children				
32	People avoid taking meal with hepatitis patients				
33	People avoid hand shake with hepatitis patients				
34	People avoid continuing friendship with HB and C patients				
35	Doctors and health professionals treat hepatitis patients differently				
36	Hepatitis patients get little care from doctors and nurses				

37	Doctors and nurses are reluctant with hepatitis patients			
38	Doctors and nurses keep distance from patients diagnosed with HB and C virus			
39	HB or C patient hardly get admission in wards			

Source: Impact of Stigma on People Living with Chronic Hepatitis B
Health literacy

On a scale from very easy to very difficult, how easy would you say is to..
(Very Difficult=1, Fairly Difficult=2, Fairly Easy=3, Very Easy=4)

No	Statement	1	2	3	4
40	I find information on treatments of illness that concerns me				
41	I understand what the doctor said to me				
42	I understand my doctor instructions on how to take medicine				
43	I judge when I need to get second opinion from another doctor				
44	I use information that doctors give me to make decision about my illness				
45	I follow instructions from my doctors or pharmacists				
46	I find information on how to manage mental health problems				
47	I understand why I need health screening				
48	I find out about activities that are good for my mental well being				
49	I understand advice on from family members				
50	I understand information in the media on how to get healthier				
51	I judge when every behavior is related to my health				

Source: Health literacy in Italy: a cross-sectional study protocol to assess the health literacy level in a population-based sample, and to validate health literacy measures in the Italian language.

Cultural competence

(Strongly Dis Agree=1, Dis Agree=2, Agree=3, Strongly Agree=4)

No	Statement	1	2	3	4
52	Patients reject treatment due to folk taboo				
53	Patients mind homophobic				
54	Patient believe that folk treatment is better than medical treatment				
55	Misunderstanding between doctor and patient is due to language barrier				
56	Conflict in treatment is due to differences of beliefs				
57	Building nurse patient relationship can reduce medical misunderstanding				

58	Focusing cultural differences in medical care can reduce health miseries			
59	Stress, caused by unfamiliar environment can enhance health miseries			
60	Noticing patient's religious rituals or living habits can enhance patient's adherence to medical treatment			
61	Patients prefer doctors and nurses of their culture and religion			

Source: Developing and validating the Nursing Cultural Competence Scale in Taiwan Health behavior

(Strongly Dis Agree=1, Dis Agree=2, Agree=3, Strongly Agree=4)

No	Statement	1	2	3	4
62	I have at least 3 meals a day				
63	I have breakfast early in the morning				
64	I have vegetable at least one in a week				
65	I have reduced the amount of salt in meal				
66	I have limited amount of consumed sugar				
67	I try to avoid snacking between meals				
68	I try to exercise or physical activity at least 30 minutes a day				
69	I do strength building exercise				
70	I increase physical activity or exercise every day				
71	I limit the time spent in watching television				
72	I get enough sleep every day				
73	I go to bed at regular hours				
74	I brush teeth at regular basis				
75	I have regular health checkup schedule				
76	I prefer vaccination for every viral disease				
77	I avoid people who are using drugs in any form				

Source: Validation of the Positive Health Behaviors Scale: A Nationwide Survey of Nurses in Poland

Media Advocacy

(Strongly Dis Agree=1, Dis Agree=2, Agree=3, Strongly Agree=4)

No	Statement	1	2	3	4
78	I am generally attentive to health information from T.V, radio or other means				
79	I often found enough health information from media				
80	Media is actively involved in health campaign				
81	Media information about health is easily understandable				
82	I often prefer health information on social media				
83	Social media information about hepatitis made me conscious about				

	my disease			
84	Both electronic and print media help out in health awareness			
85	I came to know about hepatitis control program through electronic media			
86	I often fined public health messages through mainstream media			
87	Public health messages in media are often in local languages			

Health practices

(Strongly Dis Agree=1, Dis Agree=2, Agree=3, Strongly Agree=4)

No	Statement	1	2	3	4
88	I believe that herbal medicine can cure chronic diseases				
89	I believe that cultural medicine can cure hepatitis				
90	I believe that consultation with religious healer can cure diseases				
91	I trust that cold constructed food can cure liver diseases				
92	I trust that organic food can cure liver diseases				
93	I trust that bitter foods can detoxify liver diseases				
94	I trust on faith healers in health remedy				
95	I believe that spiritual meditation can cure chronic diseases				
96	I believe that repentance on bad deeds can reduce health problems				

Patient Reported Health Outcomes

(Strongly Dis Agree=1, Dis Agree=2, Agree=3, Strongly Agree=4)

No	Statements	1	2	3	4
97	I am able to work properly				
98	I am able to climb stairs without any trouble				
99	I do not have sleep disturbance				
100	I do not have feeling of worthlessness				
101	I do not have trouble to participate in social activities				
102	I properly perform my social responsibilities				
103	I properly participate in discretionary activities				
104	I am satisfied with my social activities				
105	I have no body ache or limitations due to body ache				
106	I evaluate personal health as excellent				
107	I feel peaceful, happy and calm all the time				
108	I feel energetic all the time				

APPENDIX-II

Interview Guide

1. What are the existing communication barriers between physicians and patients?
2. How do individual factors (stigma, anxiety) are compromising health outcomes?
3. How organizational factors (health literacy, media advocacy) are affecting health outcomes?
4. How do societal factors (cultural competence, health behavior and health practices) of communication affect health outcomes?
5. What are the processes of health communication in health care system in Balochistan?