# IMPACT OF EMOTIONS AND SOCIAL SUPPORT ON POSITIVE CONSUMER BEHAVIOURAL INTENTIONS IN HEALTH CARE SYSTEMS

A Thesis submitted to Goa University for the award of the Degree of

## DOCTOR OF PHILOSOPHY

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## **MANAGEMENT**

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Research Guide

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To my parents, Andrew and Helen Mesquita,

who always encouraged me towards higher academic pursuits.

To my husband, Anthony,

for holding my hand at every step and encouraging me to go further.

To my Children, Yovan and Yulah,

for whom I seek to be a role model for lifelong learning.

**DECLARATION** 

I, Aruna Mesquita e Noronha, do hereby declare that this dissertation entitled

"Impact of Emotions and Social Support on Positive Consumer Behavioural

Intentions in Health Care Systems" is a record of original research work done

by me under the supervision of Prof. Nandakumar Mekoth, Department of

Management Studies, Goa University.

I also declare that this dissertation or any part thereof has not been previously

submitted by me for the award of any Degree, Diploma, Title or Recognition.

Aruna Mesquita e Noronha

Place: Goa University

Date: 30<sup>th</sup> January 2015

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**CERTIFICATE** 

This is to certify that the Ph.D. thesis titled "Impact of Emotions and

Social Support on Positive Consumer Behavioural Intentions in

Health Care Systems" is a record of original research work carried

out by Ms. Aruna Mesquita e Noronha under my guidance, at the

Department of Management Studies, Goa University.

This dissertation or any part thereof has not previously formed the

basis for the award of any Degree, Diploma, Fellowship or similar

other titles.

Prof. Nandakumar Mekoth

Supervisor

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Impact of Emotions and Social Support on Positive Consumer Behavioural Intentions in Health Care Systems

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ABSTRACT

his research focuses on an alternative approach to the study of factors

determining positive consumer behavioural intentions. In-Depth interviews

were conducted in order to identify variables and develop the hypothesized model

of relationships. Measurement scales were developed for the final survey, for

which data were collected from 630 consumers of private and government

managed hospitals from all over the state, who were patients suffering from

chronic diseases.

Analysis of the data revealed that:

(i) Emotional and instrumental social support from health care systems have a

positive relationship with consumer social support satisfaction from health

care systems; with emotional support appearing as the strongest predictor of

overall social support satisfaction.

(ii) Emotional, instrumental and informational social support; do not create an

impact on consumer post-consumption emotions.

(iii) Health care social support satisfaction has a positive relationship with

positive consumer behavioural intentions in health care systems; and

consumer post consumption emotions have a negative relationship with

positive consumer behavioural intentions in health care systems. However,

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social support satisfaction has a greater impact on behavioural intentions in health care systems than post-consumption emotions.

The content of the thesis may be summarised as follows:

- a) Qualitative study using Interpretative Phenomenological Analysis and Content Analysis.
- b) Development of a conceptual model on the impact of variables on consumer behavioural intentions
- Development and validation of scales to measure the impact of social support satisfaction and post consumption emotions on behavioural intentions
- d) Test of hypothesized relationships and model fit using Structural Equations
   Modelling (AMOS 18)

## **KEY WORDS**

Emotion, Social Support, Health care system, Consumer behavioural Intention

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## **ABBREVIATIONS**

**AMOS** Analysis of Moment Structures

**ANS** Autonomic Nervous System

**ASSIS** Arizona Social Support Interview Schedule

**AVE** Average Variance Extracted

**BI** Behavioural Intention

**BSSS** Berlin Social Support Scales

**CCMA** Chinese Circumplex Model of Affect

**CES** Consumption Emotion Set

**CFA** Confirmatory Factor Analysis

**CFI** Comparative Fit Index

**CT** Computed Tomography

**CVI** Content Validity Index

**DES** Differential Emotion Scale

**DU-SOCS** Duke Social Support and Stress

**EEG** Electroencephalography

**EMG** Electromyography

**EPI** Emotion Profile Index

**ESRE** Emotions during Service Encounters

**FACS** Facial Expression Coding System

**fMRI** Functional Magnetic Resonance Imaging

**GFI** Goodness of Fit Index

**GLM** General Linear Model

**I-CVI** Item- Content Validity Index

**IPA** Interpretative Phenomenological Analysis

**ISSB** Inventory of Social Support Behaviors

IV Intra Venous

**LISREL** Linear Structural Relations

MOS Medical Outcomes Study

MRI Magnetic Resonance Imaging

MSPSS Multidimensional Scale of Perceived Social Support

**NSSQ** Nurse-Sibling Social Support Questionnaire

**NUKI EMI** NUKI Emotion Measurement Instrument

**OT** Operation Theatre

**PAD** Pleasure Arousal Dominance

**PET** Positron Emission Tomography

**PrEmo** Product Emotion Measurement Tool

**RMSEA** Root Mean Square Error of Approximation

**SAM** Self Assessment Manikin

**S-CVI/UA** Scale- Content Validity Index/ Universal Agreement

S-CVI-Avg Scale- Content Validity Index/ Average

**SEM** Structural Equation Modelling

**SRS** Social Relationship Scale

**TLI** Tucker Lewis Index

**TPB** Theory of Planned Behaviour

# INTRODUCTION

ealth care services play an important role in the lives of consumers by providing preventive and curative treatment to ensure their well being. Like any service industry, the role of the health care service industry has become competitive among its players and customer focus becomes a key to survival and growth. Service quality has become increasingly significant to service organizations and consequently the service sector has garnered the attention of service managers, academicians and researchers to direct their efforts in comprehending the dynamics involving customer satisfaction and behavioural intentions. This is also true for the health care sector (Murti, Deshpande, & Srivastava, 2013). Service quality dimensions affect customer satisfaction as well as their behavioural intentions (Aliman & Mohamad, 2013).

There is a need for health care marketing activities to be designed to increase customer satisfaction and hospital executives should pay close attention to the service encounter incidents and ensure that the patients realize that the hospital is concerned about their wants (Huang, Li, & Yang, 2011).

It is evident that service quality is of immense significance. However, it may also be pointed out that various other factors may contribute towards enhancing overall customer satisfaction besides service quality (Aliman & Mohamad, 2013) and, customer satisfaction and/or service-quality perceptions positively affects customer behavioural intentions (Zeithaml, Berry, & Parasuraman, 1996).

This research deals with an alternative approach to service quality that may be proved to determine favourable customer behavioural intentions. The focus is on the 'people' involved in providing health care; as a source of emotional, instrumental and informational support to patients.

## 1.1 BACKGROUND AND SIGNIFICANCE

A lot of importance has been given to the relationship between service quality and satisfaction owing to the fact that high service quality results in customers' satisfaction and positive behavioural intentions; which include positive word of mouth, recommendation to others and repeat visits to the service provider (Murti, Deshpande, & Srivastava, 2013). While service quality does impact customer satisfaction and the resulting behavioural intentions, it would be worthwhile to look at social support satisfaction that may be of relevance in the service sector particularly the health care services.

Emotions have received increasing attention in various disciplines, as the primary shaper of decisions in everyday life and, important factors in consumption and consumer decision-making (Sorensen, 2008; Anderson, 2009). Scientists are interested in the means of emotional influence that impacts consumer behaviour at the subconscious level (Banytė, Jokšaitė, & Virvilaitė, 2007). Emotional judgements and subjective feelings are now deemed as important for the understanding of consumption (Mudie, Cottam, & Raeside, 2003). The importance of including emotional aspects in consumer research is even greater than was earlier recognized.

Availing health services is often an emotionally charged experience (Dube & Menon, 1998). When an individual is confronted with a health concern/illness, there is bound to be a certain degree of stress caused by the pain or discomfort in relation to the symptoms experienced. Pain causes high levels of stress on the body and mind of the individual (Corey, Haase, Azzouz, & Monahan, 2008). The emotions experienced during such situations of stress would be negative in nature.

While the individuals may resort to different forms of coping during stressful situations, one form of coping that is believed to stand out during times of illness, is that of 'Social Support'. Stressful conditions triggered at the onset of an illness, usually result in negative emotions for the individual and during such situations, the individual may expect to gain some strength or ability to cope through support from within his or her social system (Mesquita e Noronha & Mekoth, 2013). Lanza & Revenson (1993), refer to social support as "the processes by which interpersonal relationships promote well-being and protect people from health declines, particularly when they are facing stressful life circumstances". Social support reduces the effects of stress and helps to adjust to life's changes faced during situations of health concerns (Halushka, Jessee, & Nagy, 2002).

As evident, social support requires the involvement of 'people' who help the individual through an act of 'caring'. Therefore, it would also include coping resources provided by people involved in providing health care services. Also, people who lack social support from their personal sources may feel an increase in need for support from health care (professional) sources (Zink, Gadomski, O'Connel, & Nizzi-Herzog, 1992).

The customer of a health care service provider, unlike other industries, gets a chance to interact with a number of people involved in providing the service, such as the receptionist, admission staff, doctors, nurses, technicians, ambulance, administrative, and other support staff (Murti, Deshpande, & Srivastava, 2013). Patients perceive benefits from the emotional, instrumental and informational social support they receive from the staff with whom they interact regularly and; since satisfaction is related to word-of-mouth, consumption and compliance behaviours, the positive impact of monitoring patient emotions in the delivery of health care service is certain (Dube, Belanger, & Trudeau, 1996). This 'monitoring of patient emotion' can be done through health care social support so as to decrease the intensity of the negative emotions experienced due to the illness and thus create a favourable customer attitude that would possibly lead to positive behavioural intentions. Maute & Dube (1999), state that consumers are more likely to remain calm if service employees are perceived to be patient, understanding and competent and if the firm's efforts to remedy a problem are perceived as customer centred. This customer centred approach refers to the different types of social support that may be provided to consumers.

The role of social support from health care systems in response to negative consumer emotions; to create customer social support satisfaction, positive emotions or reduced intensity of negative emotional experiences; and ultimately positive consumer behavioural intentions, thus assumes significance.

The extant literature on customer satisfaction could benefit from paying explicit attention to the possibility that customer behavioural intentions in health care

services could be influenced by health care social support satisfaction and positive post consumption emotions.

#### 1.2 SCOPE OF THE RESEARCH

The aim of this study is to expand the understanding of health care services/systems and consumer behavioural intentions by complementing the central aspects of services marketing with key concepts from theories based in psychology, sociology and health studies (emotions, social systems, social support and behavioural health). The study develops and describes a new framework for understanding how the concepts of loyalty, recommendation and cooperation are affected by social support satisfaction and post-consumption emotions. The study contends that consumer behavioural intentions in health care services should be understood from the social support perspective as an alternative to the service quality perspective.

The study takes into consideration emotional, instrumental and informational social support, perceived to have been received by patients of chronic ailments; from the health care systems within the state of Goa, where treatment was availed of. Patients suffering from acute ailments have not formed a part of the quantitative study. Patient satisfaction with the three types of social support has also been studied. Post-consumption emotions have been included in this study, with an understanding that these emotions are the result of the influence of health care based social support on pre-consumption negative emotions which are not a part of this thesis. This thesis focuses on consumer behavioural intentions as the outcome of social support satisfaction and post consumption emotions. However,

only the positive/ favourable consumer behavioural intentions of recommendation (of the service), loyalty (repeat visits) and cooperation (with follow-up treatment) have formed a part of the outcome variable.

The impact of social support satisfaction on consumer behavioural intentions is believed to generate interest among service providers, particularly in the health care sector as an alternative approach to the impact of service quality satisfaction on consumer behavioural intentions. This research also recognizes patient negative emotions experienced during illness that may change due to perceived social support. Health care systems, comprising a highly 'people' intensive sector, can attempt to provide social support to their patients, thus aiming at social support satisfaction and positive emotion change. This in turn would spell out customer cooperation, customer loyalty and customer recommendation of the service to others.

## 1.3 RESEARCH PROBLEM

The purpose of this research was to determine the influence of change in health care social support satisfaction and consumer emotions, on consumer behavioural intentions of loyalty, recommendation and cooperation (with treatment procedures); brought about by social support from health care systems.

Specifically, the study seeks answers to the following questions:

- 1) What is the impact of social support on social support satisfaction?
- 2) What is the impact of social support on consumer emotions?
- 3) What is the role of social support satisfaction in determining consumer behavioural intentions?

4) What is the role of consumer emotions in determining consumer behavioural intentions?

Based on the research questions, the following objectives have been framed:

- a) To study the role of emotional, instrumental and informational social support from healthcare systems, in determining consumer social support satisfaction.
- b) To determine the impact of health care based social support satisfaction on consumer behavioural intentions of recommendation, loyalty and cooperation.
- c) To determine the extent to which emotional, instrumental and informational support from heath care systems influence consumer post-consumption emotions.
- d) To study the role of consumer post-consumption emotions in influencing consumer behavioural intentions of recommendation, loyalty and cooperation.

Recent research suggests that emotions have not appeared a critical factor in furthering our understanding of services consumption (Mudie, Cottam, & Raeside, 2003) and, there are a variety of emotions that are related to many different aspects of the decision making process (Zeelenberg, Nelissen, Breugelmans, & Pieters, 2008). Decision making comes into play not only during consumption but also for repeat visits, cooperation during customer involvement and recommendation to others.

With regard to health services, one motivating factor for individuals to seek health treatment is the presence of physical symptoms (Salovey, Rothman, Detweiler, & Steward, 2000). Symptoms of an illness may trigger negative emotions. The negative emotional states may result in greater concern among people who are experiencing physical distress, which may in turn facilitate contact with a medical

professional with the purpose of seeking care for the same (Salovey, Rothman, Detweiler, & Steward, 2000). Moreover, different types of emotions peak at different times during a hospital stay (Dube & Menon, 1998). It therefore becomes necessary for service providers to empathize more on customers' emotional feelings than on their cognitive judgement (Huang, Li, & Yang, 2011).

Despite the significance of consumer emotions in marketing, it appears that the understanding of consumer research has been affected due to the lack of clarity in understanding emotions (Sorensen, 2008). Although several studies have been made in consumer research that include measuring of emotions, this is still linked to severe problems and the focus on emotions in scholarly contributions have been limited despite the role that emotions play in all aspects of life and also in consumer behaviour.

Another important factor for consideration in the study of patients in health care service is the strategy of coping with the illness and the resultant negative emotional experiences. Understanding patient emotions is critical to the success of the outcome of health care (Dube, Belanger, & Trudeau, 1996). Physician-patient interactions have been consistently lacking in improvement due to the failure in recognizing and addressing patients' individual needs and emotions (Blazevska, Vladickiene, & Xinxo, 2004). The individual needs here points out to the social support needs of a patient to cope with the illness.

It is evident that social support assumes prominence in studies on health behaviour. The study of social support assumes relevance in the context of coping as it serves as a protection buffer for individuals during stressful situations (Lai &

Salili, 1997). A patient interacts with health care service providers during various stages of treatment. Medical Intervention, through the provision of social support can reduce the degree of negative emotions/alter the negative emotional experiences of the patients. With the satisfaction of social support from the health care service, it is believed that the patients will have favourable/positive behavioural intentions such as cooperation, recommendation and loyalty.

Existing research on consumption emotions has probed various aspects linked to behaviour as well as various service or product specific influences (Westbrook & Oliver, 1991; Mudie, Cottam, & Raeside, 2003; Dube, Belanger, & Trudeau, 1996). Research on emotions in health care appears to deal with emotions in relation to satisfaction (Dube, Belanger, & Trudeau, 1996; Dube & Menon, 1998; Blazevska, Vladickiene, & Xinxo, 2004).

Literature on social support is also replete with the studies on social support and health relationship; social support transactions in different cultures; social support at the workplace and other stressful situations; and the like. However, the influence of different types of social support on social support satisfaction and post consumption emotion and; the resulting impact on consumer behavioural intentions especially in the health care service sector, have not received required attention in previous research. This study attempts to address this gap.

#### 1.4 RESEARCH PLAN

This research began with an extensive review of literature on emotions, coping, personality types and related studies in health care and services marketing.

The second stage of the research moved into a qualitative, exploratory study in the form of in-depth interviews of customers/patients of health care services in order to gain first-hand knowledge of patient emotions, changes in the emotions and prominent coping mechanisms. The exploratory study using 'Interpretative Phenomenological Analysis' (IPA) and content analysis, were conducted in two phases, with the second phase assuming a more focused approach of understanding social support as a means of coping (as arrived at from the first set of interviews) and the role of health care services in providing the same. Along with the primary data obtained through qualitative methods, secondary data was obtained through electronic sources, journals and other text which, helped to form the required base of knowledge for further research.

The third stage of research began with a study of existing measurement scales used to measure consumer emotions, social support and behavioural intentions. Consequently steps were taken to develop new measurement scales due to the unsuitability of the existing ones to the study in question. The same was also done to ensure compatibility with the use of quantitative analysis using 'AMOS-Structural Equations Modelling' which, was found to be suitable for the study of multiple relationships and fit of the proposed model. The newly constructed scales were tested for validity and reliability. A pilot survey was also conducted.

The fourth stage progressed with a quantitative survey of patients from health care service providers (hospitals) from all over the state. Respondents selected for the purpose consisted of patients suffering from chronic ailments since the nature of their disease requires long-term (life-long) treatment and their interaction with health care service involves the possibility of follow-up treatment and repeat visit.

This was followed by quantitative analysis and test of model fit using the software AMOS 18.

The choice of health care service sector as an area of study was deliberate as, on the one hand, the consumption of services in this sector is usually pre-loaded with emotions (for the consumer) and consumers would tend to avail of health care services during unexpected or un-invited situations; on the other hand social support which is usually associated with personal relationships is also linked to health behaviour and since health professionals are involved in maintaining and restoring their patients' health, the researcher wanted to concentrate on this sector which has the required degree of customers' freedom in the choice of a service provider.

#### 1.5 ORGANIZATION OF CHAPTERS

The thesis is structured into five chapters.

Chapter 1 highlights the relevance of the study along with the research problem and the existing research gap. The logic behind the choice of variables under consideration, and the need for study of the same in the health care service sector, has also been explained. The scope of the study and, the objectives guiding the research has been specified in addition to the research plan adopted.

Chapter 2 defines concepts drawn for existing theories in social support, social systems and emotion. It highlights existing research on the variables being studied. The researcher draws from a wide spectrum of past research findings

from various disciplines to find support for the postulations and propositions made in present research.

**Chapter 3** explains the logic behind the choice of research paradigm, research design and research tools used for capturing relevant data and for analyzing the same. It presents the qualitative survey leading to the formulation of hypotheses, development of measurement scales and quantitative survey.

Chapter 4 consists of details regarding methods of analysis adopted for drawing insights from the exploratory study, as well as an elaborate explanation on data analysis and output of the quantitative survey conducted on patients of health care services. 'Structural Equations Modelling' using the AMOS 18 software was employed to test the relationships between constructs and find the goodness-of-fit of the proposed model.

Chapter 5 presents the interpretations and discussions on the analysis of the data, in addition to the conclusions drawn. This chapter also includes the limitations of the study, with implications for academicians and health care service providers. Suggestions for future research work in the specified area have also been provided.

# REVIEW OF LITERATURE

This chapter will review existing literature pertaining to the concepts relevant to the study undertaken. The review that follows will provide existing definitions and characteristics of the concepts taken for the study and their relationships; explanations to the source of the problem being studied and what is already known about the problem.

This thesis has culminated from research undertaken in the disciplines of psychology, sociology and health studies. Existing theories in the specified areas have been probed for the purpose of gaining a better understanding and placing the same into the existing literature on consumer behaviour and services marketing.

Studies on marketing and consumer behaviour have probed the determinants of customer satisfaction and repeat visitation and; service quality has often been a subject of discussion in this regard. However, this thesis takes a very different approach in that we identify social support as an alternative to service quality (specifically in the health care service sector), that determines customer satisfaction and ultimately determines customer behavioural intentions such as loyalty, recommendation and cooperation.

## 2.1 EMOTIONS

#### 2.1.1 Definitions

Several scholars have attempted to understand and define the term 'Emotion'. While the concept of Emotions is an oft researched subject in different disciplines of the social and behavioural sciences, there appears to be no consensus and a lot of inconsistency exists in providing an accurate definition (Buck & Georgson, 1997; Liljander & Bergenwall, 1999; Bagozzi, Gopinath, & Nyer, 1999; Plutchik, 2001; Scherer, 2005; Rademacher & Koschel, 2006; Izard, 2007; Zeelenberg, Nelissen, Breugelmans, & Pieters, 2008; Izard, 2010; Mora & Moscarola, 2010). Some of the scholarly definitions may provide an understanding on the term, as researchers should provide their own definition for the term, or at least specify what they mean by the term (Izard, 2010).

The expression of emotion is part of everyday life as a human being (Graham, Huang, Clark, & Helgeson, 2008; Kemp & Kopp, 2011). Emotions constitute closely related affective, cognitive, behavioural, and physiological processes (Anderson, 2004), and perform adaptive functions in dealing with basic biological needs and external challenges (Jarymowicz, 2012). Emotions can energize and direct behaviour (Brehm, Miron, & Miller, 2009). Clearly, emotion is viewed as an integral part of human nature that adapts with one's environment and determines future behaviour.

Emotion refers to a mental state of readiness that arises from cognitive appraisals of events or thoughts; is accompanied by physiological processes; is often expressed in gestures, posture, facial features; and may lead to specific actions to

cope with the emotion, depending on its nature and meaning for the person experiencing it (Bagozzi, Gopinath, & Nyer, 1999).

Emotions are episodic, relatively short-term, biologically based patterns of perception, experience, physiology, action, and communication that occur in response to specific physical and social challenges and opportunities (Keltner & Gross, 1999). A basic emotion may also be referred to a set of neural, bodily/expressive, and motivational components generated rapidly, automatically and non-consciously when ongoing affective-cognitive processes interact with the sensing of an ecologically valid stimulus to activate evolutionarily adapted neurobiological and mental processes (Izard, 2007). These definitions attempt to describe the antecedents to emotions followed by the psychological and physical manifestations.

A specific emotion is said to be experienced when the reason for feeling that emotion is more important than any other reason for feeling an opposite emotion (Brehm, Miron, & Miller, 2009). This throws light on the situation that triggers a certain kinds of emotions.

Emotions may be understood as either states or as processes. When understood as a state (being angry or afraid), an emotion is a type of mental state that interacts with other mental states and causes certain behaviour. As a process, it is divided into two parts. The early part of the emotion process is the interval between the perception of the stimulus and the triggering of the bodily response. The later part of the emotion process is a bodily response, that may cause changes in heart rate, skin conductance, and facial expression (Johnson, 2009).

The term has invariably been described as something more than a state of feeling caused by stimulus events which affects every person differently (Izard, 1977; Parrott, 2001; Plutchik, 2001). Emotions may be states of feelings experienced during different points of time depending on the stimulus that triggers those feelings, which are often expressed using various terms that describe the degree of the feelings experienced (Mesquita e Noronha & Mekoth, 2013). The 'stimulus factor' has been highlighted as the key antecedent to feeling/ experiencing an emotion.

Emotions may be caused by the perception of stimulus events (Johnson, 2009; Moors, 2009). While these events may be either internal or external, the former may be considered as emotion causing events (Scherer, 2005). Emotions arise when an event or outcome is evaluated as relevant for one's concerns or preferences (Zeelenberg, Nelissen, Breugelmans, & Pieters, 2008). Emotions may result from the impact of events on one's needs (Dizen, Berenbaum, & Kerns, 2005) and, typically occur in social settings and during interpersonal transactions. Many emotions are believed to be caused by other people and social relationships (Johnson, 2009).

Emotion is one type of affect, other types being mood, temperament, attitudes, evaluations, preferences and sensations like pain (Zeelenberg, Nelissen, Breugelmans, & Pieters, 2008; Johnson, 2009). Affect may be considered a general category for mental feeling processes, rather than a specific psychological process (Bagozzi, Gopinath, & Nyer, 1999).

Emotions can occur instantly in response to a situational change (Brehm, 1999) which can happen before one is aware that they have begun. Quick onset is central to the adaptive value of emotions, enabling us quickly to respond to important events (Ekman, 1999).

The different approaches to the description of the term 'Emotion' is thus evident in the above references made to the existing literature on the subject. The varied definitions of emotion brought out in this thesis, have emanated from studies conducted in the areas of psychology, consumer behaviour, decision making, marketing and philosophy; which have invariably described the term to include responses to environmental changes, feelings, triggers for specific behaviour, among others. While there appears to be some consensus in the description of the term, there also exist differences of thought that do not allow for a universal definition. Presumably, this could be due to the different contexts within which the term is being studied and the discipline in which it is applied.

#### 2.1.2 Types/Components/Characteristics

Most psychologists agree that emotions regulate, influence and organize our behaviour. Even if we are not conscious of our emotions, they influence our attitudes and decision-making processes (Rademacher & Koschel, 2006). Any emotion leaves long-lasting cognitive and social consequences in the case of important life events, traumatic emotional experiences, and also for current life emotions such as joy, anger, fear, sadness or shame (Rime, 2009).

Examining specific emotions has generated an interest among consumer researchers (Kemp & Kopp, 2011). Although emotion theorists have different

definitions of emotion and, are thus likely to disagree about the characteristics of emotion (Moors, 2009), some of the widely accepted basic characteristics of emotion are - Emotions are specific states of a certain duration; they go along with a specific experience of quality of feelings; they correspond with physiological processes (e.g., brain activity in certain areas, increased heart rate); they are expressed through facial expressions and; a certain set of fundamental emotions are expressed in a characteristic manner- regardless of the terms used to describe emotions in the actual language or culture (Rademacher & Koschel, 2006).

Emotions are different from Moods, although there appears to be some ambiguity in the usage of both terms in everyday parlance. Emotions are considered more intense and stimulus specific than moods. Consumers who have experienced a happy event in their lives may be in a good mood for many days. The good mood may make them experience a service as better than they normally would have, or they may tolerate poorer service without it being reflected in their satisfaction scores (Liljander & Bergenwall, 1999).

As with the definition of emotions, variations also exist in the number of emotions considered by scholars to be evolutionarily universal (Smith & Schneider, 2009; Scherer, 2005). Emotions have been grouped into different categories namely; basic or primary, secondary, tertiary, which include anger, contempt, disgust, distress, fear, guilt, interest, joy, shame, surprise, acceptance, anticipation, sadness, and love (Izard, 1977; Parrott, 2001; Plutchik, 2001; Izard, 2007). These emotions could be broadly categorized under Positive and Negative emotions. A negative affective state would include the related feelings of anger, fear and disgust (Dallimore, Sparks, & Butcher, 2007).

An emotion has both, quantity as well as quality aspects. The quantity aspect refers to the intensity of an emotion and varies from no intensity (no emotion) to very high intensity. The quality aspect, in a broad sense, refers to the valence (positive/negative) of an emotion, and, in a narrow sense, to specific emotions such as anger, fear, sadness, and joy (Moors, 2009).

Human beings are continuously engaged in goal-oriented behaviour. Negative emotions occur when circumstances interfere with such behaviour. A negative emotional state fuels cognitive work and also stimulates social exchange (Rime, 2009). Negative emotional states may be associated with unhealthy patterns of physiological functioning and they tend to shift people's attention toward themselves and away from their external environment (Salovey, Rothman, Detweiler, & Steward, 2000).

Positive emotions result from circumstances which facilitate goal-oriented behaviour. As is the case for past negative episodes, re-accessing past positive episodes revives related feelings and sensations (Rime, 2009). If the offering is perceived to meet or exceed expectations, then the customer responds with positive emotions (Meirovich & Bahnan, 2008), which help to build psychological resources that are essential in coping effectively with traumatic circumstances (Anderson, 2004). Positive emotions are evoked only at the moment of gratification (Jarymowicz, 2012).

While literature provides description on the various types of emotions; positive, negative and others, this thesis provides details on the negative emotions as they

form a part of this study. The most prominent negative emotions are described below:

- a) **Fear** Martin G. L., describes fear as a person's reaction to an environmental threat that is focused on a certain object, individual or situation; and the term is generally used to describe frightened feelings toward a clear danger or threat. This emotion is also described by Nelson (2007), as one that is strongly distressing which may be aroused by impending danger or pain; the threat that is foreseen here, may be either real or imagined. Ganem (2010), opines that fear is a perception that one's survival is threatened, and that the emotion exists due to a belief that there is an unavoidable impending threat. She also states that a person experiencing fear may be inclined to correct the situation that has caused the negative affect.
- b) Worry According to Barahmand (2010), although worry is a universal experience, a clear understanding of this phenomenon is lacking. However, he also states that worry is negatively reinforced and it is likely to inhibit emotional processing required for reducing anxiety. Martin G. L., states that the emotion is similar to fear in that it is a less intense reaction to specific dangers or about specific future events. Nelson (2007) clearly identifies the emotion as one that involves dwelling on difficulties; anxiety about a situation or a person; extreme concern over potential problems; concern about a loved one in possible distress.
- c) **Anxiety** Martin G. L., defines another negative emotion of 'Anxiety', as a frightened response to a source that is not easily identifiable. And, anxiety may a perceived threat of a past or future unforeseen event.

- d) **Disgust** Nelson (2007), defines disgust as a strong aversion or a feeling of loathing, when good taste or moral sense is offended.
- e) Anger Dallimore, Sparks, & Butcher (2007) categorize 'Anger' as a negatively valenced, high arousal affective state. Paulus, Fiedler, Leckband, & Quinlan, describe Anger as an affective experience, which can range from mild annoyance to fury and outrage. They also elaborate that anger can be elicited by specific events, behaviours of others, one's own behaviour, a combination of external events, or by thoughts and feelings that are associated with memories or anticipation of anger. Nelson (2007) describes anger as a strong displeasure or wrath aroused by a real or supposed wrong, which may be used as a form of denial for emotions of hurt or fear. Ganem (2010) is of the view that anger is the most potent and active emotion which may be intentional and unjustified and, may be influenced by personality factors.
- f) **Sadness** This emotion reflects that a person is unhappy, sorrowful, mournful, or affected by grief (Nelson, 2007).

The negative emotions described above were found to be suitable to this study as they appeared to be experienced by individuals during illness. Among the various types of emotions classified by theorists, the specific types taken up in this thesis include the negative emotions of fear, disgust, anger and sadness. This decision was taken after a thorough scrutiny and elimination process involved during scale development.

#### 2.1.3 Measurement of emotions

Three overall approaches to the measurement of emotions in consumer research have been identified: Self report (most commonly used), autonomic measures and brain imaging. Verbal Self Report and fMRI are assessed to be the most important methods. The fact that emotions are often unconscious makes the measurement extremely complex.

Various studies on emotions have used measures suitable to the type and purpose of study. Some of the measures used for emotions are - Pleasure Arousal Dominance (PAD) developed by Mehrabian & Russel, 1974; Differential Emotion Scale (DES) developed by Izard, C., 1977; Emotion Profile Index (EPI) developed by Plutchik & Kellerman, 1974; The Plutchik Measure developed by Plutchik, 1980; The Self-Assessment Manikin (SAM) developed by Lang, P., 1980; 'Warmth Monitor' developed by Aaker et al, 1986; 'Feelings Monitor' developed by Baumgartner et al, 1997; Facial Expression Coding System (FACS) developed by Ekman & Friesen, 1975, 1978; Basic Emotion Approach developed by Ekman, P., 1992; The Consumption Emotions Set (CES) developed by Richins (1997); The Product Emotion Measurement Tool (PrEmo) developed by Desmet. P., 2002; NUKI Emotion Measurement developed by Vanhamme & Chiu (2008); The Emotions during Service Recovery Encounters (ESRE) scale developed by Schoefer & Diamantopoulos (2008); The Chinese Circumplex Model of Affect (CCMA) developed by Yik (2009). A detailed description of the scales has been provided in Chapter 3.

## 2.2 SOCIAL SUPPORT

#### 2.2.1 Definitions

Since the 1970's there has been a dramatic increase of research interest in the concept of social support as it affects health and well-being through social relationships (Cohen & Syme, 1985; House, Landis, & Umberson, 1988). There are many definitions of social support found in literature and little agreement among the authors about the theoretical & operational definitions of the concept (Lai & Salili, 1997). These definitions tend to be vague and rarely specify types of relationships, interactions between the provider and recipient, or the actual needs of the recipient for support (Hupcey, 1998). The highly complex nature of social support contributes to a lack of conceptual clarity in many studies (Gallant, 2003; Bradley & Cartwright, 2002; Woodgate, 1999). However, despite the different terminology used, many of the definitions possess common characteristics (Hupcey, 1998).

Social support has been defined in terms of the resources provided by other people that would have either positive or negative influences on health. It may lead a person to believe that he or she is loved, valued and belongs to a network of communication and mutual obligation (Cohen & Syme, 1985; Cobb, 1976). Social support is also defined to include both the structure of an individual's social life such as group memberships and existence of familial ties and; the more explicit functions they may serve such as the types of support provided (Uchino, 2006).

Social support is a dynamic process that involves the interaction between the provider and recipient, and varies by recipient & provider (Hupcey, 1998). It also

points towards a social network's provision of psychological and material resources intended to benefit an individual's ability to cope with stress (Cohen, 2004). Williams, Barclay, & Schmied (2004), stress on the existence of social relationship (having variations in structure, strength and type) for social support interactions. They highlight that the supportive nature of social relationships depends on reciprocity, accessibility, reliability, and an individual's use of the social relationship which can provide resources that are emotional, instrumental, informational, validation, inclusion, intimate, material, time and cognitive.

According to Frey (1989), despite definitional diversity in the concept of social support, it is clear that social support is conceptualized as a component of social interaction with family, friends, neighbours, and others with whom an individual has personal contact.

A suitable definition for this study would be that of social support being the resources provided by a person(s) to an individual, to help the latter endure or cope with the negative emotions or stress caused due to the prevailing heath concern. This kind of support may be expected from family members, relatives, friends, social groups, work groups, the doctor(s) and/or the hospital, or even people who have experienced/are experiencing similar health issues (Mesquita e Noronha & Mekoth, 2013).

'Social support' has also been placed in 'Attachment theory', wherein supportseeking behaviour has been linked to attachment behavioural system which governs the selection, activation, and termination of social support from attachment figures (Mikulincer & Shaver, 2009). The social support considered in this study is one that has to be perceived as helpful by the recipient (Frick, et al., 2006).

The definitions brought out through various studies, clearly point out that social support thrives with and, revolves around human relationships; the highlight here being the personal touch. Humans by nature are social beings and this aspect is clearly evident through the concept of social support.

## 2.2.2 Types of social support

## a) Social support provision:

Many researchers are said to focus on the emotional aspect of social support, without distinguishing it with other types of social support provision (Devoldre, Davis, Verhofstadt, & Buysse, 2010; Malecki & Demaray, 2002). Trobst, Collins, & Embree (1994), argue that from the perspective of providers' concern on their support provision, it can be inferred that social support is in effect an act of caring; which would imply that all types of support are considered to be emotional. However, their study also recognizes that social support does not just include the concept of 'caring' but other large number of supportive actions as well. This provides insight and direction for further research.

This study has considered three basic forms of social support namely; emotional, informational and instrumental, as sources of coping strength to individuals experiencing negative emotions during illness, as described by House (1981); Cohen (2004); and Anderson (2007).

- Emotional support is usually provided by family and close friends and is the most commonly recognized form. It includes empathy, concern, caring, reassurance, love, and trust.
- Instrumental support is a tangible form of social support, which covers help in the
  form of money, time, material assistance or assistance with tangible needs, help
  with daily tasks and other explicit interventions on the person's behalf.
- Informational support includes advice, guidance, suggestions, or directives that enable the person to respond to personal or situational demands

The stated three types of support have invariably been recognized by a number of social support researchers over the years (Pilisuk & Parks, 1980; Frey, 1989; Dunkel-Schetter & Skokan, 1990; Lyons, 2002; Malecki & Demaray, 2002; Segrin, 2003; Cheng, 2004; Durden, Hill, & Angel, 2007; Devoldre, Davis, Verhofstadt, & Buysse, 2010; Takagishi, Sakata, Ueda, & Kitamura, 2011; Gage, 2012; Tay, Tan, Diener, & Gonzalez, 2012), and included as part of social support definitions.

There are also further classifications of social support, on the basis of which various studies have been done. These classifications may be exclusive to the context of the discipline in which the study has been conducted.

## b) Positive versus Negative Social Support:

Devoldre, Davis, Verhofstadt, & Buysse (2010), bring out the importance of distinguishing between positive and negative types of support and state that previous research does not distinguish between the two.

## c) Perceived versus Received/Enacted Social Support:

Lyons (2002); Lakey (2007); Martin, Reece, Lauder, & Mclelland (2011); and Tay, Tan, Diener, & Gonzalez (2012), describe the concept of 'Perceived support' as the perception that one's network is ready to provide aid and assistance, or the perception that these resources are available should they be needed and 'Received support', as the actual transfer of advice, aid, and affect through interpersonal networks, or the instance whereby one person explicitly receives benefits from another. Received support is also referred to as 'Enacted support' (Lakey, 2007). It may be noted here that the 'Perceived Support' referred to above is actually the 'perceived availability' of social support from various sources. This study mainly focuses on Social support perceived to have been received from the health care systems under study, which is referred to as 'Perceived social support' or simply 'Social support'.

This research does not consider the term 'Received support' or 'Enacted support' suitable since it is believed that the type or intensity of social support that is actually provided by the source (in the case of this study, the health care system) may not necessarily be perceived in the same manner by the recipient (in the case of this study, the patient/ consumer). Social support in the context of this thesis, would thus refer to the concepts of 'Expected social support' (a person's judgement of the social support he/she expects to receive in a situation of illness), and 'Perceived social support' (a person's judgement of the social support he/she has actually received).

## 2.2.3 Sources of Social Support

Literature identifies the different sources of social support as support from family, support from friends, or support from colleagues (Tay, Tan, Diener, & Gonzalez, 2012). Social support being an act of caring can be obtained from people close to the recipient and, is one of the most positive by-products of involvement in close relationships (Segrin, 2003). Social support is an individual's perceptions of general support or specific supportive behaviour (available or enacted upon) from people in their social network, which enhances their functioning and/or may buffer them from adverse outcomes (Malecki & Demaray, 2002).

## 2.2.4 Measurement of Social Support

Researchers have used various instruments to measure social support to assess the various aspects in relation to their studies. Social support measures have been categorized into structural and functional measures, as Martin, Reece, Lauder, & Mclelland (2011) explain that structural measures assess the degree to which an individual is integrated into a social network and, they evaluate social ties in terms of the closeness with family and size of the social network; while functional support measures the functions such as emotional, instrumental and informational support provided by social relationships.

Some of the existing social support instruments and measures that have been developed over the years are: The RAND Social Health Battery (1978) given by McDowell (2006); The Inventory of Social Support Behaviors (ISSB) developed by Barerra, Sandler, & Ramsay (1981); The Arizona Social Support Interview Schedule (ASSIS) developed by Barrera (1981); Social Relationship Scale (SRS)

developed by McFarlane, Neale, Norman, & Streiner (1981); Social Support Vignettes developed by Turner (1981) described by Tardy (1985); Social Support Network Interview developed by Claude Fischer (1982) described by Tardy (1985); The Social Support Questionnaire was developed by Sarason, Levine, Basham, & Sarason (1983); Perceived Social Support from Family and Friends developed by Procidano & Heller (1983) described by Tardy (1985); The Multidimensional Scale of Perceived Social Support (MSPSS) developed by Zimet, Dahlem, Zimet, & Farley (1988); The Duke Social Support and Stress (DU-SOCS) developed by George R. Parkerson (1989) provided by McDowell, (2006); Medical Outcomes Study: Social Support Survey (MOS) developed by Sherbourne & Stewart (1991); The Nurse-Sibling Social Support Questionnaire (NSSSQ) developed by Murray (2000); The Berlin Social Support Scales (BSSS) developed by Schwarzer & Schulz (2000). A detailed description of the scales has been provided in Chapter 3.

This thesis measures perceived functional social support, as McDowell (2006), justifies on the basis of the comparison made on the quality of social health measurements, that functional support appears the most important for social support measurement. Larose & Boivin (1997), note that there are differences in the evaluation of social support that depend on the specific relationships and contexts in which support is assessed. Lakey (2007), also points out that the selection of a social support measure that is most appropriate for predicting the specific outcome of interest, is crucial.

## 2.3 SOCIAL SYSTEMS

A system is a complex whole comprised of components that work together in an orderly way, over an extended period of time, toward the achievement of a common goal. When this concept is applied to a system or group in society, it is termed as social system. A human being is social by nature and possesses an important characteristic of belonging to groups (Haslam, Jetten, Postmes, & Haslam, 2009); the members of which may share common concerns (Narayan & Sharma, 1993). Each of these social groups constitutes a social system which, refers to a person or group of persons who function interdependently to accomplish common goals over an extended period of time (Lesser & Pope, 2011). People belong to several social systems simultaneously, such as a nuclear family, extended family, neighbourhood, friendship, school and cultural systems (Buttle, 1998).

The Rules theory in consumer behaviour argues that people are an integral part of multiple systems, wherein each system socially constructs its own rules of meaning and action (Buttle, 1998). Each social system has its own unique social identity (Haslam, Jetten, Postmes, & Haslam, 2009); that is different from the identities of its individual members (Lesser & Pope, 2011). Haslam, Jetten, Postmes, & Haslam (2009) explain that groups that provide us with a sense of belonging and purpose have psychological benefits as they add meaning and a sense of worth to our lives.

Social systems may also be invariably called as social networks, social relationships and the like, which include smaller units in society such as the

nuclear family, friend-circle, work-groups, cultural systems, religious groups and significant others. Each of the social systems would have a considerable influence on its members, the impact of which may also differ in various cultural contexts. The benefits of receiving social support from one's social system are proved to be more in case of persons with highly supportive social systems or those who are more socially embedded (Gottlieb, 1985). The people we know determine the types of social resources that are available to us to influence and improve our lives (Pinkster & Volker, 2009).

The concept of social systems is also related to social connectedness, social integration, and the like. Social connectedness would refer to the extent to which people in a group are socially close or share resources with other people (see (Pescosolido, 2011); Social integration refers to the range of social relations in society as in marriage, siblings, religious groups, among others (Lakey, 2007). It is thus evident that a social system encompasses all meaningful relationships at various levels of society such as the family, social organization and professional organization. These groups, being considered as a part of the members lives create a sense of social identity. Such group belongingness is believed to buffer threatened health situations (Haslam, Jetten, Postmes, & Haslam, 2009). Similarity may also be drawn to the study of social networks, which shows a positive impact on health (Savage & Russell, 2005).

## 2.4 HEALTH CARE SYSTEMS

In the context of this thesis pertaining to consumer emotions and social support during the period of illness, it becomes relevant to study the role of health care service providers since the health care service industry plays a pivotal role in the treatment and cure of its patients.

Vassilev, et al. (2011), state that symptom management for most people with chronic illness is usually a part of everyday life which also involves some degree of interaction with formal health care services, making the treatment a shared activity between patients and professionals. During such interactions, resources are shared by the 'people' in the health care service profession, with the patients.

Thus, it is clear that illness management necessarily involves the health professionals, which could also mean that while people look for social support from their social systems during stressful times (illness), they could also expect and receive the same from the health care service provider.

A "service system" is found to have many similarities with the "social systems" (Edvardsson, Tronvoll, & Gruber, 2011). Mesquita e Noronha & Mekoth (2013) refer to health care service providers as 'health care systems', as these service providers are equipped with the required knowledge, expertise and facilities; comprising of a group of professionals who function interdependently to accomplish the common goals of providing appropriate services for the purpose of treating illness, or maintaining good health of their patients/customers. Thus, the concept of a health care system is borrowed from that of a social system due to the 'human element' aspect present in both.

The role of the health care provider is crucial to social support research relating to health, as it can nurture the existing social support system that a patient may have at the time of diagnosis and, it is also able to provide an opportunity for the

patient to discuss health issues (Ritchie, 2001). By increasing the sources of social support to patients, health care systems will be able to improve positive patient outcomes (Corey, Haase, Azzouz, & Monahan, 2008). Considering that social support seeking behaviour arises out of the need to cope with the illness, affected person's would first seek such support from their personal sources and later from their health care systems.

Health care systems may provide social support based on the type of illness and symptoms experienced by the patient, as Hupcey (1998) states that the provision of social support may depend upon the type of event that has occurred. In the case of psychiatric illness, poor social support has been considered as a risk factor (Taylor, et al., 2008). Vassilev, et al. (2011) explain that health care is also related to the patients' ability to understand and apply the advice of health professionals to their lives and their ability to explain the circumstances of their illness within the context of consultation.

## 2.5 BEHAVIOURAL INTENTIONS

Behavioural intention is a plan to perform an action and, it reflects the individual's likelihood of engaging in the behaviour of interest (Kumar, 2000). Lee, Petrick, & Crompton (2007), in their study on tourism observe that behavioural intentions include desirable behaviours that visitors anticipate they will exhibit in the future. The findings of their study reveal that perceived service value has the strongest significant relationship to visitors' behavioural intentions. Maibom (2007), states that behaviour can be systematized in terms of goals or in terms of the actor's role in a social structure or relationship. Hensel, Leshner, &

Logan, refer to the definition of the Committee on Communication for Behaviour Change in the 21st Century, 2002, p. 31; which states that "Behavioural intention (BI) is as a person's perceived likelihood or subjective probability that he or she will engage in a given behaviour."

Consumer behavioural intentions as the most proximate predictor of behaviour finds a place in the Theory of Planned Behaviour (Ajzen, 1991), which states that if the intention to engage in a behaviour is strong then its performance is more likely. TPB also states that the behaviour may be expressed only if the concerned person can decide at will whether to perform the behaviour or not. Ajzen (1991) also argued that BI reflects how hard a person is willing to try, and how motivated he or she is, to perform the behaviour.

A study on behavioural consequences of service quality by Zeithaml, Berry, & Parasuraman (1996), posits that when service quality assessments by customers are high, their behavioural intentions are favourable, which is likely to strengthen customer-service provider relationship. Conversely, when customer service quality assessments are low, their behavioural intentions are unfavourable and the relationship is more likely to be weakened. They also argue that behavioural intentions indicate whether customers will remain with or defect from the company. The same study makes a mention of customer behavioural intentions such as that of positive word-of-mouth, expressing loyalty, increasing the volume of purchase; which indicates behavioural bonding with the company. The importance of strategies to steer positive behavioural intentions is also highlighted in their study.

Behavioural intentions would therefore justify as the outcome variable of this study, providing a direction towards further action for creating favourable/positive consumers/patient intentions of recommendation, loyalty and cooperation.

In an investigation on the relationship between service quality and behavioural intentions, Kuruuzum & Koksal (2010) found that service quality has a strong effect on the behavioural intention of hotel customers (i.e. loyalty, switch, pay more, external response and internal response) and, that positive consumer experience is directly related to customer behavioural intentions.

Hospitality/ hotel services are availed of by choice; however, when a person faces a health concern, he is compelled to avail of health care services. In such situations, it would be right to investigate whether service quality alone determines favourable behavioural intentions.

## 2.5.1 Classification of Behavioural Intentions

#### *a) Positive Behavioural Intentions:*

In a study on patient satisfaction in health care, Aliman & Mohamad (2013) explain that if patients are satisfied with the quality of the service received, they will have high intentions to go again to the service provider in the future. Repurchase intentions, willingness to recommend, paying a premium price, remaining loyal to the company are the behavioural intentions categorized as favourable behavioural intentions (Zeithaml, Berry, & Parasuraman, 1996). The favourable behavioural intentions are referred to as positive behavioural intentions in this thesis as they related to the consumer behavioural intentions that are desirable from the point of view of the service provider. The positive behavioural

intentions taken for study in this thesis are loyalty, recommendation of the service and cooperation with follow-up treatment.

#### b) Negative Behavioural Intentions:

Zeithaml, Berry, & Parasuraman (1996) discussed unfavourable behavioural intentions such as complaining and switching to competitors. While consumer behavioural intentions may be positive/ favourable or negative/ unfavourable, from the point of view of the service provider; this thesis focuses on positive consumer behavioural intentions (loyalty, recommendation and cooperation with follow-up treatment) as the outcome/ dependent variable.

#### 2.5.2 Measurement of consumer behavioural intentions

A study by Armitage & Conner (2001) provides evidence supporting the use of the 'Theory of Planned Behaviour' for predicting intention and behaviour, adding that the prediction of self-reported behaviour is superior to observed behaviour. Zeithaml, Berry & Parasuraman (1996) developed the 'Behaviour Intentions Battery' to study behavioural consequences relevant to the service industry.

# 2.6 RESEARCH ON EMOTIONS, SOCIAL SUPPORT AND CONSUMER BEHAVIOURAL INTENTIONS

#### 2.6.1 Consumer emotions

Consumer affect as an area of research has been aimed at furthering the understanding of consumer behaviour (Bowes, 2002; Grundy, 2006; Banytė, Jokšaitė, & Virvilaitė, 2007).

There is a growing interest on research in emotions (Brehm, Miron, & Miller, 2009). Attempts have been made in the areas of consumer psychology and behavioural economics to probe consumer emotions from various angles. Various studies conducted have distinguished between the various types of emotions, attempted at measuring the emotions in various contexts, and developed various models for probing the area (Edwardson, 1998; Bowes, 2002; Grundy, 2006). The importance of research in emotions has also been highlighted by Sorensen (2008) who states that the diversity of understandings of emotions has affected consumer research where such understanding is still unclear.

The significance of the study of consumer emotions in various disciplines is brought out here, as it can help to understand a number of factors relevant to the study of consumers.

#### 2.6.2 Consumer emotions and behaviour

The uniqueness of health care services in creating an impact on patient emotions is evident in a study by Liljander & Bergenwall (1999), who opine that services may differ in the type and strength of emotions that they evoke in consumers.

Bagozzi, Gopinath, & Nyer (1999), find that emotions play an important role in marketing as they influence information processing, mediate responses to persuasive appeals, measure the effects of marketing stimuli, initiate goal setting, enact goal-directed behaviour and measure consumer welfare.

Bowes (2002) developed a simplified model of Environment-Emotion-Behaviour Relationship relation to shopping behaviour, wherein the environment stimuli such as interaction with others, influenced emotional states like pleasure arousal, which in turn resulted in approach/avoidance behaviour.

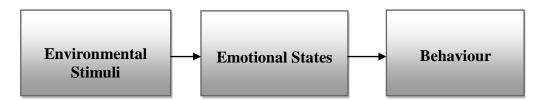


Figure 2.1 Environment-Emotion-Behaviour Relationship

Source: Bowes (2002)

In their study on impulsive buying behaviour, Kacen & Lee (2002) have pointed out that impulsiveness is linked to emotional arousal and, that their finding concerning the relationship between age and impulsiveness is consistent with studies of emotions and emotional control.

A study by Han (2005), emphasizes on the importance of studying the role of emotions to gain a better understanding of customer post-purchase behaviour.

Anderson C. J. (2009), further elaborates that decisions may not take place in the absence of emotions and that decisions are shaped and created by emotions.

Zeelenberg, Nelissen, Breugelmans, & Pieters (2008), state that a diverse set of emotions are related to different aspects of the decision-making process. They also highlight that decision making itself is an emotional process and that emotions are present even after we have decided.

Kelly & Rupert (2009), explain that persuasion research identifies affect (emotion) and the person's values as very strong influences of behaviour.

Tracy & Randles (2011), note that recent emotion research focuses on the type of stimuli required to evoke emotions in addition to the specific sensory cues that trigger distinct emotions and, that the significant role of emotions in health research is also given due recognition especially in the fields of affective science and health psychology. They recognize the impact of emotions on consumer behaviour and state that basic emotions should have direct causal impact on a person's behaviour.

Vanpariya (2010), explains the importance of understanding the role of emotion in service encounters. The study propounds that positive emotions are linked to a person's decision to stay and continue involvement, while opposite is the case of the consumers negative emotions. Emotions are also believed to play a significant role in the interaction between a customer and contact employee, and a customer experiencing pre-consumption negative emotions would go through emotional upliftment if positive emotions are triggered by the service provider. The study finds that emotional satisfaction is positively associated with both customer loyalty and relationship quality. This clearly points out to the impact of emotions on consumer behavioural intentions.

Palmer & Koenig-Lewis (2011), reveal that studies of emotions, satisfaction and buyer behaviour have not distinguished between emotions experienced before and the emotions felt during or after service consumption. They argued that when an individual experienced positive emotions with thoughts about the forthcoming service encounter, he/she would be likely to experience positive post-consumption emotions. Their study found that positive post-consumption emotions had a direct effect on behavioural intentions, with no effect on satisfaction while, negative

post-consumption emotions had an effect on satisfaction but no direct effect on behavioural intentions. This reveals that a positive change in negative consumer emotions can directly influence a consumer to have positive behavioural intentions, while negative emotions would not have the same effect.

Previous research thus, clearly propagates that the understanding of consumer emotions is necessary for deeper insights into consumer decision- making, consumer behaviour and marketing strategies; which would undoubtedly create an impact on consumer behavioural intentions.

## 2.6.3 Negative emotions

A study showing the impact of negative affect on health by Mayne (1999) found that negative emotions leads to illness, whereas positive emotions promote health. The article is based on the premise that "negative" emotions regulate physiology and behaviour in ways that can preserve and promote health. The study has also revealed that the vast majority of studies find that negative emotions predict or correlate with disease.

A study on emotion and reason by Chaudhuri (2001), states that there is a positive relationship between negative emotions and perceived risk.

Negative emotions as a cause for ill health and behaviour regulation has thus been made evident in the above studies.

#### 2.6.4 Interventions on emotions

Sirois & Burg (2003), have reviewed the impact of negative emotions on patients suffering from coronary heart disease and, found that treatment targeting

emotional factors associated with risk for these patients can lead to beneficial outcomes on the factors targeted. Medical interventions may thus be considered as a significant influencing factor in creating desirable outcomes or behaviour.

Grundy's (2006), study on values-emotions-motives set in consumer behaviour revealed that the consumer is a moody and emotional creature, swinging between rationality and emotional behaviour. The study thus emphasizes on the lack of stability in consumer emotions. This thesis considers this aspect and recognizes that consumer emotions may differ in type and intensity from the preconsumption stage to the post-consumption stage.

## 2.6.5 Negative emotions and health care services

A Study in emotions and health was also conducted by Chapman & Coups (2006), where the role of worry, regret, and perceived risk in preventive health decisions were explored with regard to influenza vaccination among university employees.

Rieffe, Terwogt, & Bosh (2007), investigated on how emotional functioning can be linked to health problems in children. According to them, an inability to differentiate between, and cope with, negative emotions might be an influencing factor in children's health problems. They also state that negative affect may be brought about by the experience of physical discomfort.

The interest in the study of negative emotions within the realm of health care, thus points out to the relevance of consumer negative emotions in the consumptions of health care services.

## 2.6.6 Influence of service providers on consumer emotions

Dube, Belanger, & Trudeau (1996), propound that understanding patient emotions is a critical success factor in the outcome of health care, as the hospitalization experience is a highly emotional event for most people. Their study on patients of a specialized acute care hospital, has observed a direct relationship between positive emotions and satisfaction with health care services. They also revealed that positive emotions are the most powerful and consistent predictors of patient satisfaction, whereas negative emotions attributed to others induced lower levels of satisfaction with medical care. They conclude that health care providers can pick up cues on patients' emotional states, adapt their interventions accordingly and thus, increase patient satisfaction.

A study by Wang (2009), shows that positive emotions of service providers have been proved to result in positive consumer emotions, thereafter resulting in positive consumer behavioural intentions.

The influence of service providers on the emotions of their customers has clearly been stressed upon. Thus, interventions aimed at managing patient emotions may influence desirable health-related outcomes such as recommendation of the service, cooperation with follow-up treatment and repeat visit to the health care service provider.

#### 2.6.7 Stress/Negative emotions and social support

For a social system or service provider to help the affected person to cope with the stress during illness, they need to be aware of the emotions experienced. Influencing consumer emotions may be possible due to social sharing of emotions

which as Curci & Rime (2008) suggest, starts soon after an episode happens and is often shared with a variety of persons selected by the person experiencing the emotions.

Schwarzer & Leppin (1991), consider social support to be a stress protective factor that can prompt desirable health behaviour such as adherence to medical regimes.

Bansal, Monnier, Hobfoll, & Stone (2000), have recognized that a vast majority of research attention has been directed towards the directional sequence that places stress first, social support, and other resources as moderators, and emotions as outcomes.

This provides the logic behind the study of social support and emotions.

Salovey, Rothman, Detweiler, & Steward (2000), find that social relationships allow individuals to feel secure with the knowledge that help will be provided whenever necessary and, social support would lead the individual to experience a lesser degree of stress in the face of a challenging situation. They also agree that the provision of social support influences one's emotional state.

People's perceptions of security within specific current relationships have received an increasing attention in recent years (Diamond & Hicks, 2005). A review on diabetes management by Fisher, Thorpe, DeVellis, & DeVellis (2007), suggested a range of interventions for healthy coping with diabetes and associated negative emotions, which include social support among other interventions.

Creasey (2009), states that when individuals face distress or pain, they would first attempt to cope with their pain and later use select individuals in their social

system as a second opinion. The importance of social support as a coping mechanism during negative emotional experiences is thus evident.

Literature thus suggests that during times of stress/ illness social relationships play an important role in reducing the stress levels, by providing encouragement and reassurance to the affected persons. Social support is therefore a coping mechanism in times of illness and pain.

## 2.6.8 Health care systems as social support providers

Gottlieb (1985), explains that when people are lacking in, or perceive poor quality of social support, outside interventions can compensate for social support deficiencies. This could mean that health care professionals have a big role to play when patients are entrusted in their care, for they would have to understand patient needs and provide necessary social support to them when required.

In a study on arthritis related stress, Lanza & Revenson (1993) maintain that social support can emanate from natural as well as more formal helping systems. They consider natural helping systems to be a network of family and friends and, formal helping systems to be medical professionals and organized social groups. The type of support is also believed to be determined by the source of support such as intimate ties may be suitable for emotional support while formal relationships would offer better informational and tangible support. The stage of illness and medical treatment is also a consideration for the nature of social support to be provided to the patients. The study also brings out the importance of the health care provider especially for chronic patients, for whom the support and

knowledge of health care professionals may be more preferred in comparison to that from the natural/social system.

A study by O'Brien (1993), posits the role of health care providers as a significant one especially for patients suffering from chronic diseases. He also notes that nurses have frequent contact with patients and families and they can thus use such opportunities and their expertise to mobilize social support through patient social networks. Although the health care system is not viewed as a direct provider of social support here; the role of health care service is nonetheless significant in terms of making social support available to patients.

Trobst, Collins, & Embree (1994), have noted that all types of social support offered by people are due to the concern felt for the recipient. However, they also state that professionals may offer social support more due to a contractual role played by them rather than concern for the recipient.

Zink (1994), opines that people with strong social support systems would be able to cope with stressful life events better than those with a weak social support system. The study also states that an individual is part of a social support system comprising multiple networks and a lack in one system could lead to an increase in need for support from another.

The role of the health care service in providing social support to its consumers has also been brought out by Bradley & Cartwright (2002), whose research reveals that nurses play an important role in providing support to patients who may be experiencing stress. They also find evidence in previous research which shows

that social support provided by nurses' have a major impact on customer perception towards service quality.

A study on adolescents by Corey, Haase, Azzouz, & Monahan (2008), suggests that if the adolescent lacks or has an ineffective social support system, the health care system may temporarily provide social support.

Mikulincer & Shaver (2009), state that when a person can depend on supportive figures in times of need, it would lead to effective stress management and restoration of emotional balance and, being confident of available social support, the person can be confident of taking calculated risks and accept important challenges.

According to Thoits (2011), while social support would typically refer to functions performed by primary significant persons, the support functions can also be performed by secondary group members. She refers to primary groups as those that are small sized, informal, intimate and enduring such as family, relatives and friends while secondary groups are larger, more formal, less personal and, may involve voluntary and time-bound associations.

Through their study on breast cancer, Junghyun, Han, Shaw, McTavish, & Gustafson (2010) propagate that even though good medical treatment is essential for the cure of the disease, social support plays a crucial role in augmenting the effect of medical treatment by helping people maintain a positive attitude about themselves and their condition.

Minkler (1981), recognizes that social support through social contacts could play a major role in influencing individual attitude and behaviour change. Here, the impact of social support on consumer behaviour has been highlighted.

Cheng (2004), opines that it is not adequate to study global social support and the assessment should include sources and types of social support as well. The need for studying the three types of social support in this thesis may thus be justified.

According to Mattila (2000), managers would be able to manipulate consumer post satisfaction levels and future purchase behaviour by using the right cues in the pre consumption physical environment.

Agarwal, Menon, & Aaker (2007), in their study on emotions and health, examined the effectiveness of health messages that present consequences for an individual or his/her family, focusing on the dual role of emotions in serving these stakes as a provider of resources and information.

Thus, research shows that health care service providers can provide resources necessary to influence desirable consumer behavioural intentions. In this thesis, social support resources are being considered as influencers.

#### 2.6.9 Consumer satisfaction and behavioural intentions

In their study on patients' satisfaction with health care services, Blazevska, Vladickiene, & Xinxo (2004) revealed that most patients who were satisfied with the health care provided, displayed a high willingness to recommend the provider to family and friends, especially pertaining to factors such as staff behaviour,

communication, information, patient's participation in decision-making, waiting time, care and hospital environment.

Huang, Li, & Yang (2011), argue that the effects of service quality on behavioural intentions may be not equal across satisfied and unsatisfied customers, and that an unsatisfied patient would feel that a hospital is less responsive to his requirements than a satisfied one even if the hospital provides the same level of service quality to both. The study claims that although both assurance and satisfaction have positive influences on purchase intentions, a part of the influence of assurance on purchase intentions must go through satisfaction.

Miller, Luce, Kahn, & Conant (2009), in their study on mammography for breast cancer screening and diagnostic tests, found that the positive relationship between quality and satisfaction propounded in services literature may not hold for negative service events such as disease treatment in health care services. They therefore suggest that service providers should recognize the stressors in the service environment and provide suitable coping mechanisms, which can improve customer experiences. The study also emphasizes that since health care has become more of a consumer - driven service where patients are more informed and involved in medical decision-making, service providers should attempt at understanding consumer reactions and provide support to mitigate any stress experienced.

Murti, Deshpande, & Srivastava (2013), recognize the relationship between dimensions of service quality, patient satisfaction and behavioural intentions within health care services and propose further research to investigate the relationship between the three constructs. They argue that it is necessary to understand how customers perceive service quality and the impact of service quality on customer satisfaction levels and intentions. Their study also highlights that satisfaction creates an emotional bond with the hospital in the mind of the patient, not just rational preference, as a result of which there is high patient loyalty, which is what every hospital is looking at, to cut the competition.

A study on perceived quality, product involvement and behavioural intentions by Tsiotsou (2005), revealed that when consumers perceive low product quality, they are less involved and satisfied and report negative behavioural intentions.

Anic & Radas (2006), in their study on the importance of satisfaction in building loyalty found that gains in customer satisfaction will translate into higher loyalty intention and also result in recommendation of the store.

In their analysis of automobile services, Yieh, Chiao, & Chiu (2007) found that customer satisfaction was one of the important antecedents of customer loyalty and that perceived service quality was one of the factors having significant indirect influences on customer loyalty, through customer satisfaction.

The studies above clearly point to the importance of service quality as being a significant factor determining customer satisfaction, leading to positive behavioural intentions. This thesis attempts to place 'social support' related satisfaction as an alternative to service quality related satisfaction; as a key influencer of consumer behavioural intentions. The rationale is that patients would seek social support from health care systems to cope with their negative emotions during illness and, social support satisfaction would result from the ability of the

health care service to meet or exceed the social support expectations of their patients.

Wang & Liu (2009), posit cognitive and affective attitude as positive influences on behavioural intentions. Palmer (2012), argues that in the case of a competitive market, customer satisfaction is the most important reason for positive behavioural intentions such as repeat purchase and recommendation.

Smyczek & Matysiewicz (2012), describe customer loyalty in services as a definite attitude and relation developed by the consumer towards the service provider, which may be achieved through marketing activities. They state that consumer loyalty to an organization depends on the ability of the service to instil positive emotions in the consumer.

According to Francis, et al. (2004), behavioural intention can be used as a proximal measure of actual behaviour.

Bendall & Powers (1995), believe that loyalty results from service satisfaction which is closely related to perceived quality of care. They also justify that satisfied patients resort to word-of-mouth referrals. Behavioural intentions of patients are recognized in their study as predictors of future patient behaviour

In their study on health services, Dagger & Sweeney (2006) find that patient perceptions of service quality and patient satisfaction with the service have a significant influence on their behavioural intentions

The extant literature on emotions, social support and its systems, and consumer behavioural intentions shows evidence of a relationship between them. While a number of studies have been carried out to understand the stated concepts and their relationships with other variables in the various disciplines; it appears that a comprehensive study, taking into consideration all the constructs and their relationships, have not been examined so far. The study of social support, social support satisfaction, and consumer emotions; and their impact on consumer behavioural intentions thus appears to be a ripe area of study.

## 2.7 THE INDIAN CONTEXT

Literature on health care service in India has brought to light the differences in health care delivery systems for the rural and urban consumer. Differences are also evident in the services of public and private players.

Rajashekhar & Acharyulu (2007) conducted a study on service quality in corporate hospitals in the private sector, using the SERVQUAL scale. They opine that Indian hospitals need to concentrate on the service quality dimensions of Reliability and Responsiveness, and allocate resources to provide better service to customers. Their study revealed that the Indian health centre is still only a "cure centre" and not a "care centre". Thus, their study brings out the lack of human/personal touch that patients presumably require.

Varman & Vikas (2007) conducted a qualitative study to understand the role of markets in the consumption of health care by subaltern consumers (consumers at the lower end of the market), who are forced to rely on the cheapest and, often the lowest quality health care service providers. Their study, which emphasizes on 'Quality of Life' marketing, states that the high level of dissatisfaction with the state of health care for subaltern consumers leads to a constant concern about their

state of well-being. As such, this highlights the unethical business practices of private hospitals, physicians, and pharmaceutical firms. Their study's findings reveal that a heavy price is being paid by subaltern consumers for the profits enjoyed by the triad of private hospitals, physicians, and pharmaceutical firms.

Brahmbhatt, Baser, & Joshi (2011) used Parasuraman et al's modified SERVQUAL model to study patient satisfaction with service quality in Indian the health care service sector. Their paper explains that service quality in health care is very complex in comparison to other services and that knowledge about patients' perception towards health care quality is one of the most important steps towards introducing reforms in the health care sector. The results of their study revealed that the customers' perceptions did not exceed their expectations, as they were dissatisfied with the level of healthcare services rendered by both public and private sector hospitals. They suggest that hospital administrations need to gather systematic feedback from their patients in order to address patients' complaints effectively and efficiently.

Aitken (2013), in a nation-wide study on health care access in India defines health care access in terms of physical accessibility of required healthcare facilities for a patient; availability/capacity of the resources required for patient treatment; quality/functionality of the resources providing care; affordability of the complete treatment to the patient; and states that each of the components should be present for an appropriate health care service. The study revealed that - (a) The urban consumer has easy access to private and public facilities in contrast to the rural consumer; (b) An increasing proportion of the population is using private healthcare facilities for medical treatment, as the public centres suffer from long

waiting periods, absence of diagnostic facilities, poor availability of doctors and, lack of quality of care. However, patients would readily switch to public healthcare centres if these issues were addressed; (c) The cost of treatment at a public healthcare facility is much more affordable than at a private centre, but patients are forced to use more expensive private facilities, leading to affordability challenges; (d) Despite the small improvements, significant healthcare access challenges were found to exist in the country, especially in rural areas. The study recommends that health care strategy should include the greatest healthcare access benefit to the Indian population, as well as sustainable policy solutions to healthcare financing, infrastructure, and human resource. The importance of the health care access and 'quality of care' is clearly highlighted in the study.

Chakraborty & Majumdar (2011) describes health care as one of India's largest sectors, in terms of revenue and employment, which is rapidly expanding. With the fast growing purchasing power, Indian patients were found willing to pay more to avail health care services of international standard. The study explains that delivery of quality service is imperative for Indian healthcare providers to satisfy their patients; thus making it essential to be aware of health care quality standards from the point of view of patients and patient parties. It was also revealed that the popularly used SERVQUAL approach to measure service quality perceptions of consumers, suffers from limitations. The applicability of the SERVQUAL model was therefore questioned in the context of the health care service sector, particularly in India.

Wennerholm & Scheutz (2013) also describe health care industry as one of India's largest service sectors. The huge challenges faced include the need to reduce

mortality rates, improve physical infrastructure, necessity to provide health insurance, ensuring availability of trained medical personnel, among others. Other challenges include the reduced public accessibility due to shortages of hospital beds and trained medical staff such as doctors and nurses; and rural-urban imbalance. The paper also described the health needs of the country as enormous which, the financial resources and managerial capacity are unable to meet. The focus on improvement of health care quality has been directed towards improvement of infrastructure. This proves that the need for personalised care and support to patients is not being addressed due to other issues that have been given more priority.

Bhardwaj & Chawla (2013), in their study explain that the modern day Indian health care industry needs to meet the expectations of global and elite Indian patients, as well as cater to the needs of a huge lower-middle class patients. The study that has focused on the private as well as public sector, gauged the service quality in selected multi-specialty hospitals of India through patient expectations and perceptions. The findings of the study reveal that although both hospitals have done well on the competence, customization and ambience fronts; there is a difference between public and private hospitals where various dimensions of service quality is concerned.

Umath, Marwah, & Soni (2015) in their study, state that the Indian health care industry has been growing rapidly, being driven by the country's growing middle class that spends a lot on health care. In this light of this, they explain that patient quality initiatives demand different measurement techniques and, the service

quality of health care is poor, as also the health outcome being far from satisfactory.

Studies on health care services in the Indian context appear to focus on basic infrastructure, manpower, equipment and the like. Research on service quality in the same sector also appears to be focused on the popular SERVQUAL model, which is presumed to be somewhat lacking in the area of consumption of health care services, that involves stressful health conditions of the consumers. This thesis is therefore justified in looking at a different dimension, that of social support satisfaction and reduction of negative emotions in determining positive behavioural intentions.

### RESEARCH METHODOLOGY

#### 3.1 DATA AND MEASURES

#### 3.1.1 Research Design

To test the proposed relationships and influence of social support on consumer behavioural intentions, a quantitative research design was adopted. However, in order to gain a deeper understanding of the context; a qualitative study through semi-structured, in-depth interviews were initially conducted with consumers of health care services. This was done in two phases, with the second phase being more focused in nature. These interviews brought to the fore, the specific coping strategies of patients during an illness and the impact on their emotional experiences. The exploratory study also brought out the importance of the health care service as a source of social support to patients.

Pilot testing of the quantitative survey was then done on 200 patients of various clinics in Goa, in order to fine tune the measurement scales and get deeper insights into the mental attitude and level of understanding of patients (considering their ailments).

For the final quantitative study; doctors, nurses and hospital managers were approached to seek permission and guidance on data collection. Though the initial intention was to approach all hospitals in Goa and obtain data of recent patients so as to contact them personally, this was found to be infeasible since permissions from private-run (including national chains) hospitals involved a lot of hassles and

time consumption. Questionnaires were administered to patients directly in the hospitals after a short briefing. Considering the mental state of an ill person and in order to ensure that there were no missing values, the investigator was within the reach of the respondent as he/she filled up the questionnaire. The questionnaires were browsed through for missing answers and any of these were brought to the notice of the respondents with a request to respond, along with further explanation if required. Patients, who faced difficulty in understanding due to issues such as language and literacy, were requested to answer orally with each question being explained by the investigator. Required data were obtained from government as well as private-run hospitals from North as well as South Goa. The quantitative survey yielded a total of 630 filled in questionnaires over a period of two and a half months.

#### 3.1.2 Unit of Analysis

The unit of analysis for this thesis is the consumer of a health care service provider (i.e., a hospital patient). This study has attempted to understand social support, emotions and social support satisfaction as factors influencing consumer behavioural intentions in the health care service industry. To obtain a deeper understanding of the same, it was found necessary to examine the perceptions and emotions of consumers of health care services. Health care services today have become a part of a competitive industry, and a number of studies have been carried out to understand the relationship between service quality and consumer satisfaction. The consumer has usually been the focal point in consumer satisfaction and loyalty studies. However, consumer perception of social support and post - consumption emotions as a determinant of consumer behavioural

intentions requires a deeper understanding from the consumer's perspective, more so within the purview of the health care service sector.

#### **3.1.3** Selection of Sample

The study is aimed at understanding the impact of social support and consumer emotions on consumer behavioural intentions in the health care service sector. To gain a first-hand understanding on 'real- life' situations, it became necessary to speak to people who went through a 'health care treatment procedure' for any ailment. It was realized that the interviews would require respondents to open-up about their feelings without reservation, confiding in the researcher about their inner-most emotional experiences. Respondents would then have to comprise of people known to/comfortable with the researcher or those recommended by known persons. The purpose of the study thus required that the sample be drawn from the population under study on a convenience sampling basis. For the qualitative study, aimed at gaining an insight into the emotional experiences and coping strategies of patients of health care services, 14 persons were first interviewed from a sample drawn on a convenience sampling basis. This was followed by another 10 respondents interviewed from a sample drawn using a combination of convenience and judgement sampling technique. Respondents of the qualitative study comprised persons of different age groups, gender, employment status, marital status and illness type, who had been through hospital treatment during the recent past (not more than a year ago).

For the quantitative study, respondents were chosen from various hospitals across the state. It was decided to interview only those patients who were suffering from (and treated for) a chronic illness. Persons suffering from/treated for acute ailments were not considered since such patients may not usually require follow-up treatment and/or may not be faced with the same ailment for which they would require treatment from the same hospital. As such, questions relating to loyalty and cooperation may not be valid for such patients. It was found difficult to obtain data of recent patients from hospitals (particularly the private-run hospitals). Also, the requirement of a large sample size to suit the requirements of SEM left the researcher with limited choice on the sampling method. Thus, a convenience based sampling method was found to be the most appropriate.

The sample size required for quantitative data processing depends on the statistical method used (Royer & Zarlowski, 2001). A total of 630 chronic patients from various hospitals were interviewed in the quantitative survey, since the use of 'Structural Equations Modelling' required that the samples size should be large. While literature on structural equations modelling lays down that 'N' should preferably not be <400 and, may also be decided on the basis of the number of observed/manifest variables; in this study the sample size is well within the recommended range ( sample size for this study N > no. of observed variables x 20). Informed consent was taken from the patients before eliciting relevant information. The nature and purpose of the study was explained.

#### 3.1.4 Data Collection Tools

The initial depth interviews were conducted using semi-structured interviews, driven by the research in context. For the quantitative survey a newly developed set of scales was administered, each measuring a construct under consideration.

The constructs measured were 'Perceived Emotional Social Support from health care systems'; 'Perceived Instrumental Social Support from health care systems'; 'Perceived Informational Social Support from health care systems'; 'Health care social support satisfaction'; 'Consumer post-consumption emotions' and 'Consumer behavioural intentions'. Each of the scales formed a part of the questionnaire and was measured using 5-point rating scale. The measurement instruments are attached in the appendix.

#### 3.1.5 Data collection procedure

For the qualitative survey, the researcher personally approached consumers of health care services on obtaining prior appointment for the purpose. The depth interviews were conducted in an environment where the respondents were comfortable (in most cases it took place at the residence of the respondent). Respondents were probed for elaboration without too many questions from the researcher. All such interviews were informal conversations with the respondents opening up with their experiences and the researcher mainly being a listener. Where the respondent was willing, interviews were recorded and others were noted down by the researcher. All interviews were transcribed to maintain authenticity and enable further analysis.

For the quantitative survey questionnaires were personally administered to the respondents while they were awaiting treatment or, during the treatment/hospitalisation period. Although it was not always possible to obtain willing patients, when the investigator showed concern towards patients and listened to their 'tale of woes' relating to their illness, greater comfort levels were

experienced and this encouraged willing responses. Some patients were happy to be able to contribute to a study which showed interest in their emotions and the much required support. Prior permissions were obtained from the hospital management or ward nurses through personal sources. Patients were also contacted in the waiting rooms of the hospital reception areas. After each questionnaire was filled in, it was checked to ensure that there were no missing responses. Missing responses were brought to the notice of the respondent who was coaxed into filling them up. Some respondents preferred to answer the questionnaire orally (due to practical/language difficulties), which was filled in by the investigator. Efforts were made to ensure that the investigator did not initiate the answer for the respondent in such cases.

#### 3.1.6 Data Analysis Techniques

To arrive at constructs required for model development, content analysis was done on the transcribed interviews. The narrations were used to understand the underlying emotions and coping methods during an illness.

For testing the validity of the newly developed scales, the instrument was presented before researchers and subsequently content validity and face validity were done. Content validity index at the item level as well as scale level, was calculated for each item and for the overall instrument. To test the reliability of the instrument, internal consistency - cronbach's  $\alpha$  of the pilot tested questionnaire was calculated. The measurement model was tested for convergent validity and reliability.

Finally, to test the hypothesized relationships and measure the impact of the variables under study on the dependent and outcome variables, Structural Equations Modelling using Amos18 was used.

### 3.2 QUALITATIVE STUDY

While the initial research idea was to understand the consumer emotional experiences during an illness, it was necessary to learn about the actual 'lived-in' experiences of patients so as to gain a deeper understanding on existing literature pertaining to consumer emotions and coping mechanisms in service consumption. It was therefore decided to undertake a qualitative research study through depth interviews. This approach was supported by Ibert, Baumard, Donada, & Xuereb, (2001), who opine that detailed interviews are a good way to obtain a better picture of the phenomenon under study, and they enable the researcher to define coherent items that will be understood by the population being studied. In-depth interviews were also found to be appropriate for eliciting individual experiences, opinions and feelings regarding sensitive health issues as recommended by Mack, Woodsong, MacQueen, Guest, & Namey (2005), who also stress on paying attention to the causal explanations participants provide for what they have experienced and believe and, actively probe them about the connections and relationships they see between particular events, phenomena, and beliefs.

The specific research paradigm used for the qualitative research is the Interpretative Phenomenological Analysis (IPA), which is suitable for research in healthcare (Biggerstaff & Thompson, 2008). In fact IPA is popularly used in health, social as well as clinical psychology studies (Reid, Flowers, & Larkin,

2005). This approach was necessary in order to understand the 'lived experiences' of individuals who have faced health issues, the emotional influences and the prominent coping mechanisms during illness. The researcher worked with the respondents using a one-to-one interview method, to identify and interpret relevant meanings so as to make sense of the research issue. Such in-depth interviews and personal discussion led to development of rapport with the respondent and; allowed the participant to think, speak and be heard, as advocated by Reid, Flowers, & Larkin (2005). Accordingly, the research developed insights from themes drawn from narratives, as a preliminary study for the purpose of further research and analysis.

The qualitative/ exploratory study was conducted in two phases. The first phase adopted a broader approach while the second phase was more focused. All interviews were conducted and transcribed in order to preserve the validity and reliability of the data collected. Personal stories of the patients were recorded in verbatim as advised by Reid, Flowers, & Larkin (2005). The transcribed text was subject to IPA and, broad themes were drawn from the stories, which later led to formation of specific themes and identification of variables. There were no predetermined hypotheses, the aim was to identify themes related to coping, emotions experienced during illness, coping mechanisms during illness and patient behaviour. Relevant excerpts from the narrations have been used to arrive at themes and relationships which have led to findings that would have implications for health care service providers in strategy formulations.

#### 3.2.1 Phase 1:

#### 3.2.1(A) Sample and Method

Fourteen customers of health care services were interviewed in-depth, regarding their illness. The objectives of the interviews were:

- a) To understand the kind of emotions experienced throughout their illness.
- b) To learn about the experiences of people with regard to health concerns/ treatment.
- c) To identify methods adopted by the patient to cope with the situation faced.
- d) To learn about the direct/indirect influences on emotions felt during the experience.

In an attempt to obtain varied emotional experiences of patients, participants included both males as well as females, employed and retired, married and single. The study being exploratory in nature, for the purpose of identifying variables and constructs rather than drawing conclusions, convenience sampling was used as recommended by Royer & Zarlowski (2001).

All respondents were consenting adults belonging to age groups ranging between 20 to 80 years, selected through convenience sampling technique. Each of the respondents had suffered from an illness requiring surgery or prolonged medical treatment. The duration of each interview had been 45 minutes to 1 hour, where the respondents were engaged in a conversation and asked to recall feelings and experiences relating to their illness, and the meanings they attach to those experiences, as Elliott (2005), states that when participants are encouraged to talk about what they feel is most important and frame this in whatever ways seemed

most appropriate to them, this enhances validity by allowing participants to pattern the timing, sequence and context of topics discussed. Moreover, in order to provide the details of life experiences in the form of a story, individuals are forced to reflect on those experiences, to select the salient aspects, and to order them into a coherent whole.

The depth interviews were semi-structured, where broad areas of investigation were formulated. Respondents were interviewed at a location of their choice to ensure a suitable atmosphere, and the interviews took the form of informal discussions, to ensure that the participants freely opened up their feelings and share personal experiences. Also, the respondents were probed for elaboration in order to obtain meaningful responses and uncover hidden issues. The direction of the interview was determined by the respondents' replies, as recommended by Chawla & Sondhi (2011). Broad questions were posed to guide the direction of the interview (e.g., "What can you tell me about your ailment?" "How did you feel when you realised that you could be facing a health problem?" "Who helped you to cope with the situation?" "What did you expect from the doctor/hospital?").

#### 3.2.1 (B) Data Analysis

All interviews were conducted and transcribed by the researcher in order to preserve the reliability and validity of the data collected. Transcribed text was subject to a thematic analysis, in which emergent themes grounded in the data were indentified. There were no predetermined hypotheses.

IPA was followed with the aim of arriving obtaining rich descriptions through the interviews, as suggested by Finlay (2009). Data analysis through the IPA approach followed the procedure explained by Smith & Osborn (2007); and Biggerstaff & Thompson (2008); given below:

- (i) The interviews were transcribed with accuracy, indicating pauses and speech dynamics wherever they were found remarkable. These transcripts were analyzed in conjunction with the original interview themes.
- (ii) The text was read over and over and, notes were made on thoughts and observations during the process.
- (iii) During the process of re- reading, themes were identified to capture the essential qualities of the interviews. The themes were first identified into broad themes and later into specific themes. The aim here was to arrive at a group of themes and identify categories.
- (iv) The list of themes was developed into a table describing the phenomenon.
- (v) The themes were then used to identify variables that were used to frame hypotheses for further study.

This thesis also employed a summative approach to qualitative content analysis as described by Hsieh & Shannon (2005), with the purpose of understanding the used of words in relation to the phenomenon being studied. Occurences of words used to describe the coping methods and feelings/ emotions experienced, were identified. This led to the identification of social support as a major source of

coping, besides the identification of different types of emotions experienced by the respondents.

Content analysis and Interpretative phenomenological analysis of the stories obtained, revealed themes and variables which have been listed out in table 3.1

Specifically, phase 1 of the exploratory study brought out:

- a) Patient emotions before and after medical intervention.
- b) 'Social support' as a major source of coping for the patient.

The dominant emergent theme, *Social Support as a source of coping* strongly reflected the impact of social support as a means of coping during illness. This theme included discussions on social support received from family, friends and health care providers.

Table 3.1
Themes and variables derived from in-depth interviews

<b>Broad Themes</b>	<b>Specific Themes</b>	Observed Variables		
• Emotional	<ul> <li>Social support</li> </ul>	Social system based		
experiences	impact and	social support		
during illness	expectation	Health care based		
• Coping	<ul> <li>Social support and</li> </ul>	social support		
mechanisms	pre consumption	Pre consumption		
during illness	emotions	emotions		
• Emotions during	• Emotions and speed	Consumption emotions		
medical treatment	of consultation	Speed of consultation		
	• Influencers of	Health consciousness		
	consumption	• Intensity of negative		
	emotions	symptoms		
		Presence of dependents		
		• Trust in the doctor		
		Uncertainty of outcome		
		Continuance		
		commitment		

Source: Mesquita e Noronha & Mekoth (2015)

#### 3.2.2 Phase 2:

### 3.2.2 (A) Sample and Method

The exploratory research design for phase 2 of the depth interviews was then chosen to include contexts where different sources of social support, patient emotions, and consumer social support expectations might exist for different types of illness.

10 patients were interviewed in-depth through the snowball technique. The duration of each interview had been 1- 2 hours where the respondents were engaged in conversation through a semi-structured interview and probed for further elaboration. The respondents comprised of both male and female consenting adults. In order to gain a rich understanding from fresh emotional experiences, only persons who had been through surgery for around 1 to 6 months earlier were interviewed.

#### 3.2.2 (B) Data Analysis

The stories obtained through the interviews were once again analysed using content analysis and interpretative phenomenological analysis and specific attention was paid to the themes underlined in phase 1. Samples of narratives were identified in keeping with the research objectives being investigated. The interpretation of narratives represents the researchers' understanding of the phenomenon under study. This procedure was consistent with Zhang & Wildemuth's (2009) call for qualitative content analysis.

Phase 2 of the interviews supplemented the information gathered during phase 1.

The additional variables that emerged are:

- a) Specific types of social support from social systems and health care systems.
- b) Social support expectations from health care systems.
- c) Social support satisfaction from health care systems.
- d) Behavioural intentions of patients/ consumers of health care systems

The exploratory study of consumers of healthcare services provided input for arriving at hypotheses, for developing a conceptual model of customer social support from health care systems, through an analysis of the narrations.

The qualitative/ exploratory study revealed a categorization of variables as provided in table 3.2

Table 3.2 Constituents of constructs

NegativeSymptoms	Negative Emotions	Social Support	Social Systems	Healthcare Systems
•Pain •Discomfort •Abnormal growth • Prolonged bleeding •Fever •Boils •Prolonged hoarseness of voice •Ear discharge •Blurred vision	•Fear •Anxiety •Worry •Disgust •Frustration	•Emotional •Informational •Instrumental	•Spouse •Children/Grandchildren •Brothers/Sisters •Other blood relatives •Relatives by Marriage •Friends •Co-workers •Neighbours •Community	•Doctor •Nurse •Hospital attendants •Receptionist •Technician

Source: Mesquita e Noronha & Mekoth (2013)

#### 3.3 DEVELOPMENT OF HYPOTHESES

The formulation of hypotheses followed the depth interviews which, along with the existing literature helped to form the basis for more focused approach to the research problem and, provided a direction for a quantitative study and further analysis.

This study places social support (Emotional, Instrumental and Informational) as the predictor of behavioural intentions (outcome variable). The significance of social support as a means of coping during stressful situations ('Illness' in the case of this study) has been described in the chapter 2 on literature review.

Pearson (1986), describes social support as a key situational moderator or buffer to the effects of psychosocial stressors and, also explains that patients can improve their coping skills by identifying and using social support and, establishing networks of helpful relationships that facilitate the coping process. As an extension to social support theory and satisfaction studies, this study posits that individuals undergoing medical intervention identify the 'persons' in health care systems as providers of social support and a network of helpful relationships that would help them cope with their ailment, irrespective of whether the ailment is cured. It is believed that social support satisfaction is what determines positive behavioural intentions and an attempt is made to prove the specified hypotheses relevant to the proposed theory.

The narratives obtained through the depth interviews provided knowledge about emotional experiences of patients and the need for social support as a major form of coping during illness. Social support provision is a distinctive factor of the 'human' element in an inter-dependent society made up of social systems. Individuals coping with illness and undergoing treatment find this human element in health care service providers as well, in the form of doctors and hospital staff. Social support was thus expected and also perceived to have been received from 'health care systems' during the treatment process. This striking aspect of the narrations form the essence of the hypotheses framed.

# 3.3.1 Relationship between perceived social support and social support satisfaction

The following excerpts were found to point towards a relationship between perceived social support from healthcare systems and consumer social support satisfaction from healthcare systems:

a) "I worried about myself and the uncertainty that lay ahead. The hospital, especially the doctors caused more worry as they prescribed MRI, CT scan and x-ray. It worried me more since the MRI was taken first." - (female, age- around 40 years, chronic illness)

The respondent experienced negative emotions of worry and fear. The doctor did not provide the required (and satisfactory) emotional and informational support to reduce the negative emotions.

b) "My doctor has also been a personal support (emotional support) with whom I share a high comfort level. The quality of hospital service helped me cope with the situation."- (male, age- around 30 years, chronic illness)

The emotional support provided by the health care system leads to social support satisfaction.

c) "The doctor irritated me with his questions. Although he diagnosed the problem, he seemed unsure of the treatment. However, the initial treatment was effective. I felt that the doctor wasted time, first in meeting me and then with his questions." - (female, age- around 20 years, chronic illness)

The respondent expected the doctor to attend to her promptly (instrumental support), show some concern towards her (emotional support) and provide some information regarding her condition (informational support). Unable to experience the necessary support, the respondent was left dissatisfied with the kind of support provided to her, despite effectiveness of the treatment.

d) "The private hospital I went to was very supportive (emotional and instrumental support). The hospital had a tie-up with the company that I worked for. They gave me personal attention.... (emotional support) The hospital gave me the best treatment. The best surgeon operated upon me (instrumental support). I was very happy. I did not realise when the surgery began and ended."- (male, age-around 35 years, chronic illness)

The respondent was satisfied with the emotional and instrumental support provided by the hospital.

e) "The doctor was well known to me so I was very comfortable with him." - (male, age- around 70, chronic illness)

The comfort level experienced by the respondent with the doctor shows that the support satisfaction was high.

f) "The doctor gave me a special doctor's room. Except for the 2<sup>nd</sup> knee experience where there was carelessness shown (lack of instrumental support),

the nurses gave me good treatment. Sometimes the interns make fun which is hurtful (lack of emotional support), for instance, at the time of surgery when my dentures had to be removed, the intern asked me who ate my teeth."- (female, age- around 65, chronic illness)

There is a clear indication of emotional and instrumental social support dissatisfaction with the health care system.

- g) "They gave me local anaesthesia at the back against my wishes. I told my family doctor not to leave the OT since I was afraid of the other doctor... I went to sleep for an hour after the surgery. My doctor visited me and reassured me (instrumental and emotional support)."- (female, age- around 20, acute illness)

  The presence of the doctor assured the patient that the treatment was done properly and the reassurance provided comfort to this respondent. This clearly shows customer satisfaction with the emotional and instrumental support perceived to have been received by the respondent from her doctor.
- h) "I was very nervous so the doctor sent me to an in-house counsellor."- (female, age- around 60, chronic illness)

The respondent describes the concern of the doctor (emotional support) and the arrangements made by him (instrumental support) to make her feel comfortable.

i) "Different medicines were given to me, even the doctor was tensed. I took medicines every hour as prescribed."- (male, age- around 30, chronic illness)

The respondent was touched by the fact that the doctor showed concern (emotional support) about his ailment.

- j) "The hospital staff was also polite and kind (emotional support) probably since my brother in- law was also from the medical profession and had spoken to the doctor performing my surgery. Besides 3 other doctors, our family friends had also spoken to the doctor and this helped me to be more confident that the doctor would do his best (because of the influence used)-(instrumental support). This gave me psychological satisfaction."- (female, age- around 35 years, acute illness) The respondent expresses satisfaction with the emotional and instrumental support provided by the health care system.
- k) "I went back to the surgeon who prescribed an ointment which seemed inappropriate to me (lack of instrumental support), since the problem was internal. I did not have faith in the doctor or the nurses/hospital due to the previous experience. I felt that the doctor and his hospital were just running a business for profit."- (female, age- around 30 years, acute illness)

The respondent felt that there was lack of proper treatment (instrumental support) by the health care system and was thus dissatisfied.

1) "I had full faith in the doctors in Goa."- (male, age- around 75 years, acute illness)

This faith in the doctors was due to satisfaction (personal experience) with past treatment (instrumental support).

m) "My experience at the hospital was good. I had full faith in the doctor and nurses due to past experience with surgeries in the family (instrumental support). The treatment and follow-up was very satisfactory."- (female, age- around 40 years, acute illness)

The respondent was satisfied with the instrumental support provided by the health care system.

n) "The physiotherapist at the hospital is very good but does not give personal attention at all (lack of emotional support). They do not bother whether the exercises are done properly at all (lack of instrumental support)." - (female, agearound 65 years, chronic illness)

This is an expression of dissatisfaction with the emotional and instrumental support provided by the health care system.

o) "I was admitted at the hospital one day prior to the surgery and prepared for the same. At the operation theatre the next day I was kept waiting for half a day since there are many OT's and one had to wait for his/her turn. Meanwhile my family was told by a nurse that the surgery was done and that I was on the way to recovery. They were busy praying the whole time for the successful surgery. While I was tired and hungry from the long wait for my turn, a nurse tells me that the surgery could not be performed since the anaesthetist was unavailable."- (male, age- around 35 years, chronic illness)

The respondent was highly dissatisfied with the lack of concern (emotional support), improper arrangements (instrumental support), and lack of proper information (informational support) from the health care system.

p) "The next surgery was scheduled for the following week. After going through the same preparatory procedure, the surgery was finally performed but I had severe, terrible pain. They gave me only one pain killer after the surgery and despite having informed the nurses about my condition, no pain killer was given to me (lack of instrumental support). I had no sleep the whole night. The drips/I.V. area was swollen and I was poked again brutally...... I was in agony (lack of emotional support). When the staff on the next shift took over the next day, I was given a pain killer after requesting for it and then I slept." - (male, age- around 35 years, chronic illness)

There was a lot of dissatisfaction with the health care system with regard to the lack of emotional and instrumental support provided.

q) "The doctor is very gifted and a God-fearing man. Drops were given for healing and 'betadine' drops were given for infection. The next day I was called for a follow-up. Follow-up was regularly done." - (female, age- around 60 years, chronic illness)

The respondent describes her satisfaction with the instrumental support experienced.

r) "I felt bad for the doctor who was annoyed that she could not do anything for me (emotional support). Both the doctors were upset at not being able to help me and they were confident with the medication." - (male, age- around 30 years, chronic illness)

The respondent describes the concern shown (emotional support) and, efforts put in (instrumental support) by the doctors to help cure his ailment.

s) "Proper explanation was given by the  $3^{rd}$  doctor (informational support). The treatment, a 3-stage process, had been recently introduced (2 years earlier). This created some doubt in my mind since the success rate was not known. So the

decision was taken to go through only one of the stages (1<sup>st</sup> stage only)." - (female, age- around 40 years, chronic illness)

Satisfaction with the information provided by the doctor prompted the respondent to go ahead with the treatment.

t) "Medical advice (informational support) ....the role of my doctor (instrumental support), helped me cope" - (female, age- around 35 years, acute illness)

The respondent expressed her ability to cope with the illness due to the informational and instrumental support provided by the doctor.

u) "An abnormal sensation prompted me to visit the doctor. I felt a little worried.

The doctor made me comfortable (emotional support) and made me realise that I was going through a common problem (informational support)." - (male, agearound 35 years, chronic illness)

The respondent was satisfied with the emotional and informational support provided by the doctor.

Using the above narratives and the issues identified through them, we arrive at the following hypotheses:

H1: There is a positive relationship between emotional support from healthcare systems and consumer social support satisfaction from healthcare systems.

H2: There is a positive relationship between instrumental support from healthcare systems and consumer social support satisfaction from healthcare systems.

H3: There is a positive relationship between informational support from healthcare systems and consumer social support satisfaction from healthcare systems.

This implies that if the social support (emotional, instrumental and informational) perceived to have been received from the health care system, has met the social support needs and expectations of the consumer, it would result in patient/consumer social support satisfaction. Conversely, perceived lack of emotional, instrumental and informational social support from the health care system would result in social support dissatisfaction.

The stated hypotheses above may be consistent with the findings of Bell & Evans (2003), whose study throws light on the importance of having supportive relationships during stressful times. Their findings reveal that people are satisfied with their health outcomes to the extent that they are satisfied with the perceived social support.

# 3.3.2 Relationship between perceived social support and post-consumption emotions

Understanding consumer emotions and its determinants is important for any marketer. In the context of health care studies, consumer emotions assume relevance as illness and its symptoms bring about varied emotions that may influence consumer behaviour. Positive emotions provide coping resources against aversive information whereas negative emotions can deplete one's coping resources (Agarwal, Menon, & Aaker, 2007), influencing a number of judgements in different ways (Lerner & Keltner, 2000).

Social support can tend to influence people to experience positive emotions during situations of negative emotional experiences, as Salovey, Rothman, Detweiler, & Steward (2000) state that social support may help an individual to experience a lesser degree of stress when faced with a challenging situation.

The following excerpts direct our attention towards the relationship between perceived social support from health care systems and the emotions that consumers experience post-consumption of the health care service:

- a) "I felt that the problem would pass off but since it persisted, I got scared and then visited the gynaecologist." (female, age- around 40 years, chronic illness)

  The respondent's negative emotions drove her to seek medical intervention for cure as well as reducing the intensity of the negative emotions/ to experience positive emotions.
- b) "I sometimes expected more of the doctor's time which, I did not always receive but, it was not his normal/usual behaviour. The doctor and the hospital played a role in controlling my emotions." (male, age- around 30 years, chronic illness)

The respondent mentions that only social support from the health care system was able to help him experience positive emotions.

c) "My experience with the mammogram was a horrible experience. The technician was stern and un-co-operative (lack of emotional support). I felt scared and worried." - (female, age- around 45 years, chronic illness)

The respondent clearly narrates how the hospital staff member's lack of concern /emotional support, led to negative emotional experiences.

d) "I was all alone, without my family but I did not have to worry as I was taken care of very well." - (male, age- around 35 years, chronic illness)

The respondent describes how the health care service providers were just like his family members, making him feel better by providing emotional, instrumental and informational support.

e) "When I felt sick, I underwent mixed feelings of anxiety, pain, and anticipation....The doctors made me feel at ease (emotional support) and once the entire process of laparoscopy was explained (informational support), I was more comfortable undergoing the surgery. I was glad I was in capable hands (instrumental support). Surprisingly enough I was not scared at this point." - (female, age- around 30 years, chronic illness)

The respondent describes how the doctors and hospital staff were able to transform her negative emotions to positive emotions through emotional, instrumental and informational support.

f) "The doctor, who was an intern, seemed worried and what she said was not very comforting (lack of emotional support). She said that I was suffering from the most fatal type of malaria, called 'falciparum' and that most people don't survive this kind of malaria. Then she said "anyway let us see what will happen". I was worried since I might not have been cured." - (male, age- around 70 years, acute illness)

The doctor increased the intensity of the negative emotions through lack of concern (emotional support) and improper information (informational support).

g) "When I experienced the pain, I was crying, I had no strength and felt helpless. I had fear. Until I visited the doctor, I did not feel relieved (emotional and informational support). After sonography, surprisingly I had no pain (it was the very next day) - (instrumental support)." - (male, age- around 25 years, chronic illness)

The respondent felt well only after visiting the doctor, implying that perceived emotional, instrumental and informational support helped to change negative into positive emotions.

- h) "Many people discouraged me from availing of treatment at the concerned hospital due to the high cost involved but my doctor reassured me and said that the facilities required for the surgery were better there (informational and emotional support). The hospital was ISO certified so the service was very good." (male, age- around 40 years, chronic illness)
- The doctor's reassurance (emotional support) and information about the hospital (instrumental support); helped to reduce the fear of the respondent.
- i) "Repeated visits to the doctor and scans were done. I was not willing to go according to the doctor's advice for surgery on the uterus, during the prime time of my life. I took a 2<sup>nd</sup> opinion which again prescribed surgery. I was then too afraid to visit doctors." (female, age- around 40 years, chronic illness)

The respondent's negative emotions increased due to the perceived lack of informational support provided by the doctor.

j) ".....however the manner in which this  $2^{nd}$  doctor examined me felt a little awkward and improper (lack of instrumental support) but, I went along with what

he said and did since I had heard only good reports about his skills. I was hopeful that the exercises recommended would help me. Every visit to the hospital however seemed like a waste of time since the waiting period was very long, going up to even 5 hours at times, since the doctor would leave for surgery on many occasions." - (female, age- around 35 years, acute illness)

The respondent was unhappy with the perceived lack of instrumental support provided by the health care system. Also, the long patient waiting hours made the patient feel that the doctor did not give her enough of attention, thus creating a perception of lack of emotional support.

k) "After some medication through drips, the bag was removed and a big clamp was attached....that night I slept on the other side to avoid any leakage. Suddenly, everything was soaked in blood; my dressing gown, the bed sheets, everything. Then a nurse changed the plaster but I was still in blood soaked clothes and had to sleep with it (lack of emotional and instrumental support). When my wife and brother-in-law visited the next morning, they were shocked to see me in that state." - (male, age- around 35 years, chronic illness)

The respondent felt that the health care system did not provide the best care (instrumental support), or show concern towards him (lack of emotional support); and therefore experienced negative emotions due to the unsatisfactory treatment.

l) "I believe in the doctor. Whatever the doctors give is the best." - (female, agearound 40 years, chronic illness)

The respondent has had a good experience with the doctor's instrumental support, and is therefore expressing her faith in the doctor's skills.

m) "The wait at the doctor's clinic was horrible as the appointment would be at 5 p.m. and I would actually get to meet the doctor by 8.30p.m, due to deliveries to be performed. This would bring bitter feeling of anger, irritation and annoyance." - (female, age- around 35 years, acute illness)

The lack of concern for the waiting patient (lack of emotional support) and, improper scheduling of appointments (lack of instrumental support) by the doctor led to a build up of negative emotions in the respondent.

n) "The diagnosis seemed accurate (informational support). It did not increase my fear." - (female, age- around 40 years, chronic illness)

The respondent felt that the doctor was able to provide satisfactory answers regarding the ailment (informational support) and this led to decease in intensity of the negative emotions.

o) "The doctor advised me to get an X-ray done and later on suggested that I go in for surgery. I felt scared as it was not expected and I was not sure of the success of the surgery." - (male, age- around 30 years, chronic illness)

The doctor's advice (informational support) appeared to have created negative emotions in the respondent.

p) "The 2<sup>nd</sup> doctor advised me to undergo physiotherapy. My fear decreased considerably and I followed the doctor's advice. After treatment, I felt relieved." - (male, age- around 30 years, chronic illness)

The doctor's advice (informational support) had the effect of replacing the respondent's negative emotions with positive ones.

- q) "I was more worried than before, and even began inquiring about the issue with the scan technician. More inquiries followed with the doctor and finally I relaxed after consultation with the doctor (informational support). (male, agearound 30 years, chronic illness)
- r) "After consultation with the doctor, I felt some relief since the doctor said that it was just a harmless growth called lipoma (informational support)." (male, age- around 35 years, chronic illness)

Consultation with the doctor helped to reduce negative emotions in both the above respondents.

s) "After consulting the doctor in Goa, I realised the magnitude of the ailment and felt a little worried......the doctor's advice proved to be very helpful (informational support). I was told that the surgery would not hurt but I felt a slight anxiety." - (female, age- around 40 years, acute illness)

The impact of the doctor's advice (informational support) is quite evident.

t) "....later, when a specialist examined me, he seemed to be unsure and advised me to get rid of the growth.....that night was the worst. I thought about my dependent children, my job, my leave, my survival.....I was scared to death since the same specialist ruled out the problem in my sister's case." - (female, agearound 45 years, chronic illness)

It appears that the emotional and informational support had an impact on the emotions of the respondent.

u) "I felt my life was over. No doctor could give me a proper answer (informational support), the doctors kept changing." - (male, age- around 35 years, chronic illness)

The information provided by the doctors appeared to be inadequate, unacceptable and frustrating; this increased the negative emotions of the respondent.

v) "I felt the worst when the stent was inserted and then again after it was removed. I was worried about the stent (as it was a foreign body) and the anaesthesia. I thought something bad was going to happen." - (male, age- around 35 years, chronic illness)

The health care system did not provide satisfactory information (informational support) about the medical procedure which led to negative emotions for the respondent, who was also unsure of the treatment procedure (lack of instrumental support) followed by the health care system.

The narratives listed above lead to the following hypotheses:

H4: There is a negative relationship between emotional support from healthcare systems and consumer post-consumption emotions.

H5: There is a negative relationship between instrumental support from healthcare systems and consumer post-consumption emotions.

H6: There is a negative relationship between informational support from healthcare systems and consumer post-consumption emotions.

This implies that perceived social support (emotional, instrumental and informational) from health care systems has an impact on the negative emotional

experiences of consumers during illness and medical treatment; in a way that transforms existing negative emotions of consumers into positive emotions or reduces the intensity of the negative emotions, post consumption of the service.

Rademacher & Koschel (2006), describe the human brain as a store of summary/memory units where every memory unit is tagged with emotions and when it comes to decision-making, our brain automatically combines an emotional evaluation with our memory units. In the light of this, social support perceived to have been received from the health care system would also be part of the memory attached with emotions (negative or positive).

This study considers social support as coping mechanism for patients, reducing the intensity of negative emotions or changing negative emotions to positive emotions post consumption of the service. As Lyons (2002), explains social support decreases negative emotions in reaction to strain and each type of social support may provide aid to an individual in coping with strain and negative emotions.

# 3.3.3 Relationship between social support satisfaction and behavioural intentions

Research on service quality has found a positive relationship between service quality and emotional satisfaction which in turn has a positive relationship with relationship quality as well as customer loyalty (Wong, 2004). Since the consumption of health care service involves emotional experiences, this research takes a look at customer satisfaction with social support as a determinant of consumer behavioural intentions.

The following excerpts focus on the relationship between consumer social support satisfaction and its impact on consumer behavioural intentions of recommendation, loyalty and cooperation:

a) "I was informed about dire consequences in case proper treatment was not undertaken. I sought treatment elsewhere." - (female, age- around 40 years, chronic illness)

The information provided by the health care system did not satisfy the respondent who then sought treatment elsewhere. The lack of social support satisfaction here led to negative behavioural intentions for this respondent.

b) "I was satisfied with the treatment. Normal activities resumed after a week.

The hospital was a private one and the service was good." - (female, age- around 20 years, acute illness)

The respondent experienced social support satisfaction and speaks well about the health care system. Positive behavioural intentions are evident.

c) "My doctor met all my expectations. I was very free with the doctor. He remembered me even after 4 years of my previous treatment. I have recommended the same doctor to people I know." - (female, age- around 60 years, chronic illness)

The respondent showed her loyalty to the health care system due to previously experienced social support satisfaction.

The inferences have led to following hypothesis:

H7: There is a positive relationship between consumer social support satisfaction from healthcare systems and consumer behavioural intentions of recommendation, loyalty and cooperation.

This implies that consumer satisfaction with the perceived social support during service consumption, leads to positive behavioural intentions of recommendation, loyalty and cooperation. Conversely, consumer dissatisfaction with the perceived social support during service consumption, would not lead to positive behavioural intentions.

While literature on marketing and consumer behaviour has highlighted the impact of product/ service satisfaction on consumer loyalty and recommendation; this hypothesis posits *social support satisfaction* as a determinant of such behavioural intentions.

### 3.3.4 Relationship between post-consumption emotions and behavioural intentions

Plutchik (2001), has found that emotional distress impels people to seek help. In the case of an illness, individuals would experience distress due to the symptoms or simply the state of illness itself. This would prompt them to seek medical intervention for the purpose of cure and reducing the intensity of the negative emotions experienced. This study propounds that positive emotions/ reduced intensity of negative emotions would result in positive behavioural intentions of recommendation, loyalty and cooperation with the treatment procedure.

The excerpts below provide evidence of a relationship between consumer emotions post-consumption of the health care service and consumer behavioural intentions of recommendation, loyalty and cooperation:

- a) "I can't continue with a single doctor for long since I am not confident with the advice and consultation. I also have the fear that the medication may lead to other problems. Every time a doctor suggests some treatment, fear stops me from visiting the same doctor again. Now, I have decided not to visit any doctor but just to wait and watch....I am fed up and disgusted. I have reached a stage where I have decided that I will adopt a healthy lifestyle by eating fruits and vegetables." (female, age- around 40 years, chronic illness)
- Negative emotions experienced after consultations with the doctor have led to negative behavioural intentions.
- b) "Post treatment I have felt huge satisfaction since the disease could have been serious. I was relieved." (male, age- around 30 years, chronic illness)

Positive consumer emotions experienced after treatment could lead to positive behavioural intentions since consumer satisfaction is expressed.

c) "I was so disgusted with the doctor since I somehow felt that he did not perform the C-section properly and he was responsible for my pain and swelling (current ailment). Every time I pass by that hospital, I seem to feel a slight shiver through my body." - (female, age- around 35 years, acute illness)

Negative post- consumption emotions appear to have led to negative behavioural intentions.

d) "After the surgery I felt relieved but later I realised that the doctor did not inform me about important aspects regarding the surgery. He did not inform me that he would be using internal staples. After the entire treatment, I felt that the doctor was not very professional but just business-oriented. The hospital was also very mechanical. There was no personal touch during any stage of my treatment or follow-up, the same as in the case of my previous doctor and hospital. I would not recommend that doctor or hospital to anyone and will not visit that place again. I felt angry and disgusted with the hospital and doctor. I regret having visited that hospital." (The 2<sup>nd</sup> hospital). - (female, age- around 35 years, acute illness)

Negative post consumption emotions have led to negative intentions of loyalty and recommendation.

e) "Now I realise what it is to be in pain and undergo hospital treatment. When I see anyone on drips or treatment I also feel their pain." - (female, age- around 30 years, chronic illness)

The respondent describes negative post-consumption emotions, which could lead to negative behavioural intentions.

The above narratives would help to hypothesize that;

H8: There is a negative relationship between consumer post-consumption emotions and consumer behavioural intentions of recommendation, loyalty and cooperation.

This implies that the reduced intensity of negative post-consumption emotions would result in the likelihood that consumers would have positive behavioural

intentions. The emotions experienced by consumers of health care services post consumption of the service, will determine whether the consumers will display positive/ negative behavioural intentions of recommendation, loyalty and cooperation.

This hypothesis assumes relevance, as emotions have a motivational character with behavioural implications (Brehm, Miron, & Miller, 2009). The study of emotions assumes great significance in the context of marketing and communication success due to their influence on thoughts, responses and actions that follow (Rademacher & Koschel, 2006).

The hypothesised model is depicted in figure 3.1

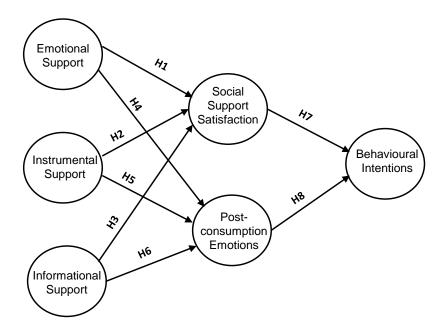


Figure 3.1

Model depicting hypothesized relationships

## 3.4 SCALE DEVELOPMENT

Scale development was done in phases. First, existing literature was reviewed to indentify concepts relevant to the study. This was followed by an exploratory study using in-depth interviews, to understand the lived-in experiences of patients and the constructs were then operationalized. Relevant scales for construct measurement were studied; an item pool was then generated. New measurement scales were then developed and scrutinized by researchers. Finally, Content Validity and Inter-rater reliability tests were performed and a pilot test was conducted.

# 3.4.1 Conceptualization

In order to conceptualize constructs and specify domains, it is imperative to search existing literature in the areas relevant to the study. On an extensive review of literature and the subsequent exploratory study on the phenomenon being studied, six constructs emerged. Efforts were made to depict the most accurate representation of each domain and develop conceptual definitions for each of the constructs being studied within the realm of health care services sector.

The purpose of the instrument was to measure: Health care social support (separately for emotional social support, instrumental social support and informational social support), perceived to have been received by patients of a health care system; Health care social support satisfaction; Post-consumption patient emotions; and Consumer behavioural intentions of loyalty, recommendation and cooperation.

The constructs designed to be measured are as follows:

### a) Emotional social support (from health care systems)

Taking into consideration the social support classification provided by House (1981); Cohen (2004); Anderson (2007), along with the concept of health care systems explained by Edvardsson, Tronvoll, & Gruber (2011); and Mesquita e Noronha & Mekoth (2013), this construct would refer to the 'emotional social support' perceived to have been provided by health care service providers such as doctors, nurses, attendants, technicians, and other support staff in health care systems. Perceived emotional social support from health care systems includes making the patient calm, allowing the patient to talk freely about his/her problems, listening to the patient's problems, comforting the patient, concern towards the patient, making the patient feel important and valued, providing reassurance, patience and understanding. Measuring health care emotional support is important to determine whether the construct is a relevant categorization of social support in the context of health care. It is also aimed at determining the relation with consumer behavioural intentions in the health care sector.

# b) Instrumental social support (from health care systems)

Instrumental social support explained by House (1981); Cohen (2004); Anderson (2007), in addition to the concept of health care systems explained by Edvardsson, Tronvoll, & Gruber (2011); and Mesquita e Noronha & Mekoth (2013), helps to describe perceived instrumental support from the health care systems as tangible assistance provided by persons involved in providing health care. Thus, within the health care service, instrumental support would specifically refer to the efforts

made to cure the patient; providing required treatment necessary for illness cure; providing necessary technical assistance, medical equipment, or making arrangement for such facilities; providing disease-specific care to the patient such as timely medications, patient hygiene, keeping a regular check on patient requirements; and other such physical assistance. Measuring health care instrumental support is important to determine whether the construct is a relevant categorization of social support in the context of health care. It is also aimed at determining the relation with consumer behavioural intentions in the health care sector.

## c) Informational social support (from health care systems)

Similar to the previous construct definitions, and referring to House (1981); Cohen (2004); Anderson (2007), and Edvardsson, Tronvoll, & Gruber (2011); Mesquita e Noronha & Mekoth (2013); this construct would refer to the perceived informational support from health care systems such as medical advice, assistance with decision-making on treatment, necessary guidance pertaining to illness treatment and cure. Measuring health care informational support is important to determine whether the construct is a relevant categorization of social support in the context of health care. It is also aimed at determining the relation with consumer behavioural intentions in the health care sector.

### d) Health care social support satisfaction

This construct refers to patient evaluation of social support perceived to have been received from the health care service provider. Patient satisfaction is the patient's

positive evaluation of the health care he/she has experienced, and satisfaction is likely to occur if the patient care provided was perceived to equal to or more than patient expectations (Desai, 2011). This construct aims at measuring the extent to which patients are satisfied with the perceived emotional, instrumental and informational health care social support. It measures the overall support satisfaction of a patient with the social support perceived to have been received from the health care system. Measuring health care social support satisfaction will provide insights into the extent to which patients may be satisfied with the social support in question. It may also determine whether social support needs of the patient were met and the extent to which it becomes an influencing factor for future behavioural intentions of the consumer.

### e) Post-consumption emotions

Medical intervention would spell out more consumer emotions which may either be the same as/different from/ intensified pre-consumption and consumption emotions. As Locke (1996), explains that the emotions individuals feel may be influenced by their interpretations of circumstances faced. Bagozzi, Gopinath, & Nyer (1999), also feel that emotions arise in response to appraisals made by individuals for something of relevance. This construct aims at measuring the emotions of fear, disgust, anger and sadness; experienced post-consumption of the health care service, which are recognized as basic emotions (Izard, 1977; Parrott, 2001; Plutchik, 2001; Izard, 2007). These emotions are the negative emotions associated with illness. Understanding post-consumption emotions is crucial to learn about the change in consumer emotions caused by health care social support

and, the extent to which these post-consumption emotions determine consumer behavioural intentions.

### f) Behavioural Intentions

Hanzee, Bigdeli, Khanzadeh, & Javanbakht (2012), explain that customers frequently develop an attitude toward purchasing based on a prior service experience and, word-of-mouth communication is one of the strongest predictors of consumer behavioural intentions, apart from customer loyalty which is a strong bond between a customer and a specific service provider. While Behavioural Intentions has been placed in the TPB by Ajzen (1991); it has also been defined within the context of consumer behaviour (Kumar, 2000); (Lee, Petrick, & Crompton, 2007). This construct aims at measuring favourable/ positive consumer/patient behavioural intentions (Zeithaml, Berry, & Parasuraman, 1996) of recommendation, loyalty and, patient cooperation with health care system's treatment and follow-up procedures/advice. Measuring consumer intentions is important to understand the factors determining the consumer's/patient's intentions to patronize, recommend and cooperate with the health care system. It is aimed at providing a focused understanding of the impact of social support satisfaction and post-consumption emotions on positive consumer behavioural intentions.

The proposed model depicted in figure 3.2, represents the hypothesized relationships between the constructs defined. The three types of social support (namely; emotional, instrumental and informational), which are independent variables are shown to determine overall health care social support satisfaction.

Emotional, instrumental and informational support are also proposed as determinants of consumer post-consumption emotions. Behavioural intentions, the dependent variable in the model; is hypothesized to be determined by health care social support satisfaction as well as post-consumption emotions.

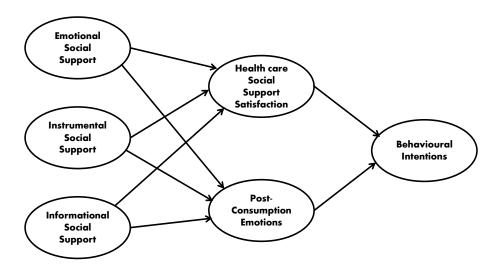


Figure 3.2 *Proposed model* 

## 3.4.2 Existing Scales

The next step involved a review of existing measurement scales used to measure the domains of interest. This step was necessary to find out the suitability of existing scales for the purpose of the research undertaken and, if necessary develop new scales that would be customized to the present study.

### (i) Social Support

Social Support scales and Social Health Measurements were studied for their appropriateness to this study.

- a) The RAND Social Health Battery (1978) is an 11- item scale which covers social support resources such as home and family, friendships, and social and community life; for the purpose of general population surveys (McDowell, 2006).
- b) The Inventory of Social Support Behaviors (ISSB) was developed by Barerra, Sandler, & Ramsay (1981), consists of 40 items measuring perceived (enacted) social support on a 5-point rating scale.
- c) The Arizona Social Support Interview Schedule (ASSIS) developed by Barrera (1981), is a 27-item scale used to measure social support need, availability and satisfaction.
- d) Social Relationship Scale (SRS) developed by McFarlane, Neale, Norman, & Streiner (1981), was designed to summarize the qualitative and quantitative aspects of a person's network of relationships. It describes and evaluates the availability of social support.
- e) Social Support Vignettes developed by Turner (1981).
- f) Social Support Network Interview developed by Claude Fischer (1982).
- Basham, & Sarason (1983). It consists of 27 items that measures the availability and satisfaction of social support, using a 6 point scale to measure satisfaction.

- h) Perceived Social Support from Family and Friends developed by Procidano & Heller (1983).
- i) The Multidimensional Scale of Perceived Social Support (MSPSS) developed by Zimet, Dahlem, Zimet, & Farley (1988), is a 12- item scale that measures perceived social support from family, friends and significant others on a 7-point scale of agreement.
- j) The Duke Social Support and Stress (DU-SOCS) developed by George R. Parkerson (1989) measures the extent of social support and stress provided by family, non-family and significant others; using12-item scales to measure support as well as stress (McDowell, 2006).
- k) Medical Outcomes Study: Social Support Survey (MOS) was developed by Sherbourne & Stewart (1991). It is intended for use in surveys for research on people with chronic illness and, is measured on a 5-point rating scale.
- 1) The Nurse-Sibling Social Support Questionnaire (NSSSQ) developed by Murray (2000), is a 30-item instrument developed to assess siblings' perceptions of those nursing interventions that are helpful in sibling adjustment to the childhood cancer experience and to determine how frequently these interventions are made available to them by nurses.
- m) The Berlin Social Support Scales (BSSS) developed by Schwarzer & Schulz (2000), consists of 6 subscales that measure both cognitive and behavioural aspects of social support. The scale was developed for an adult population of cancer patients and their partners and is meant for use across different clinical and healthy adult populations.

A description of the existing social support scales have been provided in table 3.3

Table 3.3
Social support measurement scales

Scale	Direction (expected/perceived)	Type  (emotional  /instrumental  /informational	Support System profile	Description /Evaluation
		/appraisal)		
The RAND Social Health Battery (1978)	Perceived	Not measured	Family, friends, community	Description
Inventory of Socially Supportive Behaviors (Barrera M., 1981)	Perceived	Multiple	Not measured	Description
Arizona Social Support Interview Schedule	Perceived	Multiple	Multiple (described by respondent)	Description & Evaluation

(Barrera M., 1981)				
Social Relationship Scale (McFarlane et al, 1981)	Perceived	Multiple	Multiple (described by respondent)	Description & evaluation
Social Support Vignettes (Turner R., 1981)	Perceived	Not measured	Not measured	Description
Social Support Network Interview (Fischer C., 1982)	Perceived	Multiple	Multiple (described by respondent)	Description
Social Support Questionnaire (Sarason et al., 1983)	Perceived	Mostly emotional	Multiple (described by respondent)	Description & evaluation

Perceived Social Support from Family and Friends (Procidano & Heller, 1983)	Mostly perceived	Mostly emotional	Family & friends	Description
Multidimensio nal Scale of Perceived Social Support (Cheng & Chan, 2004)	Perceived	Multiple	Family, friends & significant other	Description
The Duke Social Support and Stress scale (Parkerson, 1989)	Perceived	Not measured	Multiple	Description
MOS Social Support Survey (Sherbourne & Stewart, 1991)	Expected	Multiple	Multiple	Description

The Nurse-	Perceived	Multiple	Nurses and	Description
Sibling Social			parents	
Support				
Questionnaire				
(NSSSQ)				
(Murray,				
2000)				
Berlin Social	Expected & perceived	Multiple	Multiple	Description
Support Scales				&
(Schwarzer &				evaluation
Schulz, 2000)				

Source: Tardy (1985) -modified version; McDowell (2006)

For the purpose of this research, social support (emotional, informational and instrumental) was intended to be measured within the context of experiences during illness and health care service consumption. While the existing scales like BSSS, MOS Social Support Survey, ISSB, MSPSS were found to represent social support situations to a certain extent, none of them could be taken either entirely or partially as they required re-phrasing for an accurate measure, in addition to new item generation. Social support descriptors and evaluators were thus required to be generated taking the existing scales as well as narratives from the qualitative study into consideration; so as to develop a valid and reliable scale.

# (ii) Emotions

The measurement of emotions has seen the adoption of a number of methods and techniques that have aimed at achieving the most reliable information. Specific scales found relevant to this area of research were the Emotion measurement scales.

The table below provides a glimpse of the various methods used to capture emotions in research as described by Poels & Dewitte (2006); Mauss & Robinson, (2009).

Table 3.4 Emotion measurement scales

Measure	Description	Existing scales
Self- reports		
Verbal	Respondents mention	a) Pleasure Arousal
	their subjective	Dominance (PAD) -
	feelings through a	Mehrabian & Russel,
	process of	1974.
	introspection and	b) Emotion Profile
	retrospection.	Index (EPI) - Plutchik
		& Kellerman, 1974.
		c) The Plutchik
		Measure- Plutchik,
		1980.

Approach- Ekman, P., 1992. e) Differential Emotion Scale (DES) - Izard, C., 1977. f) Consumption Emotion Set (CES)- (Richins, 1997) g) Emotions during Service Recovery (ESRE) - (Schoefer & Diamantopoulos, 2008). h) The Chinese Circumplex Model of Affect (CCMA) - (Yik, 2009).  Non-verbal/Visual  It involves selection of pictorial representations of (SAM) - Lang, P., one's emotions.  1980. b) The Product Emotion			d) Basic Emotion
e) Differential Emotion Scale (DES) - Izard, C., 1977. f) Consumption Emotion Set (CES)- (Richins, 1997) g) Emotions during Service Recovery (ESRE) - (Schoefer & Diamantopoulos, 2008). h) The Chinese Circumplex Model of Affect (CCMA) - (Yik, 2009).  Non-verbal/Visual It involves selection of pictorial representations of of pictorial representations of one's emotions.  e) Differential Emotion Scale (DES) - Izard, C., 1977. f) Consumption Emotion Set (CES)- (Richins, 1997) g) Emotions during Service Recovery (ESRE) - (Schoefer & Diamantopoulos, 2008). h) The Chinese Circumplex Model of Affect (CCMA) - (Yik, 2009).			Approach- Ekman, P.,
Emotion Scale (DES) - Izard, C., 1977. f) Consumption Emotion Set (CES)- (Richins, 1997) g) Emotions during Service Recovery (ESRE) - (Schoefer & Diamantopoulos, 2008). h) The Chinese Circumplex Model of Affect (CCMA) - (Yik, 2009).  Non-verbal/Visual  It involves selection of pictorial representations of one's emotions.  Emotion Scale (DES) - Izard, C., 1977. f) Consumption Emotion Set (CES)- (Richins, 1997) g) Emotions during Service Recovery (ESRE) - (Schoefer & Diamantopoulos, 2008). h) The Chinese Circumplex Model of Affect (CCMA) - (Yik, 2009).			1992.
- Izard, C., 1977. f) Consumption Emotion Set (CES)- (Richins, 1997) g) Emotions during Service Recovery (ESRE) - (Schoefer & Diamantopoulos, 2008). h) The Chinese Circumplex Model of Affect (CCMA) - (Yik, 2009).  Non-verbal/Visual It involves selection of pictorial representations of (SAM) - Lang, P., one's emotions. b) The Product			e) Differential
f) Consumption Emotion Set (CES)- (Richins, 1997) g) Emotions during Service Recovery (ESRE) - (Schoefer & Diamantopoulos, 2008). h) The Chinese Circumplex Model of Affect (CCMA) - (Yik, 2009).  Non-verbal/Visual It involves selection of pictorial Assessment Manikin representations of (SAM) - Lang, P., one's emotions. b) The Product			Emotion Scale (DES)
Emotion Set (CES)- (Richins, 1997) g) Emotions during Service Recovery (ESRE) - (Schoefer & Diamantopoulos, 2008). h) The Chinese Circumplex Model of Affect (CCMA) - (Yik, 2009).  Non-verbal/Visual  It involves selection of pictorial representations of (SAM) - Lang, P., one's emotions.  1980. b) The Product			- Izard, C., 1977.
(Richins, 1997) g) Emotions during Service Recovery (ESRE) - (Schoefer & Diamantopoulos, 2008). h) The Chinese Circumplex Model of Affect (CCMA) - (Yik, 2009).  Non-verbal/Visual It involves selection of pictorial representations of (SAM) - Lang, P., one's emotions. b) The Product			f) Consumption
g) Emotions during Service Recovery (ESRE) - (Schoefer & Diamantopoulos, 2008). h) The Chinese Circumplex Model of Affect (CCMA) - (Yik, 2009).  Non-verbal/Visual It involves selection of pictorial representations of (SAM) - Lang, P., one's emotions. b) The Product			Emotion Set (CES)-
Service Recovery (ESRE) - (Schoefer & Diamantopoulos, 2008). h) The Chinese Circumplex Model of Affect (CCMA) - (Yik, 2009).  Non-verbal/Visual  It involves selection of pictorial representations of (SAM) - Lang, P., one's emotions.  1980. b) The Product			(Richins, 1997)
(ESRE) - (Schoefer & Diamantopoulos, 2008).  h) The Chinese Circumplex Model of Affect (CCMA) - (Yik, 2009).  Non-verbal/Visual  It involves selection of pictorial Assessment Manikin representations of (SAM) - Lang, P., one's emotions.  1980. b) The Product			g) Emotions during
Diamantopoulos, 2008).  h) The Chinese Circumplex Model of Affect (CCMA) - (Yik, 2009).  Non-verbal/Visual  It involves selection of pictorial representations of (SAM) - Lang, P., one's emotions.  1980. b) The Product			Service Recovery
2008).  h) The Chinese Circumplex Model of Affect (CCMA) - (Yik, 2009).  Non-verbal/Visual  It involves selection of pictorial representations of (SAM) - Lang, P., one's emotions.  1980. b) The Product			(ESRE) - (Schoefer &
h) The Chinese Circumplex Model of Affect (CCMA) - (Yik, 2009).  Non-verbal/Visual It involves selection of pictorial representations of (SAM) - Lang, P., one's emotions.  1980. b) The Product			Diamantopoulos,
Circumplex Model of Affect (CCMA) - (Yik, 2009).  Non-verbal/Visual  It involves selection of pictorial representations of (SAM) - Lang, P., one's emotions.  1980. b) The Product			2008).
Affect (CCMA) - (Yik, 2009).  Non-verbal/Visual  It involves selection of pictorial representations of (SAM) - Lang, P., one's emotions.  1980. b) The Product			h) The Chinese
Non-verbal/Visual  It involves selection  of pictorial  representations of  one's emotions.  (Yik, 2009).  Assessment Manikin  (SAM) - Lang, P.,  one's emotions.  b) The Product			Circumplex Model of
Non-verbal/Visual  It involves selection  of pictorial  representations of  one's emotions.  It involves selection  a) The Self-  Assessment Manikin  (SAM) - Lang, P.,  b) The Product			Affect (CCMA) -
of pictorial representations of (SAM) - Lang, P., one's emotions.  1980. b) The Product			(Yik, 2009).
representations of (SAM) - Lang, P., one's emotions. 1980. b) The Product	Non-verbal/Visual	It involves selection	a) The Self-
one's emotions.  1980.  b) The Product		of pictorial	Assessment Manikin
b) The Product		representations of	(SAM) - Lang, P.,
		one's emotions.	1980.
Emotion			b) The Product
Linotion			Emotion

		Measurement Tool
		(PrEmo) - Desmet.
		P., 2002
		c) Moment-to-
		Moment Ratings:
		- 'Warmth Monitor',
		Aaker et al, 1986.
		- 'Feelings Monitor',
		Baumgartner et al,
		1997.
		d) NUKI Emotion
		Measurement
		Instrument (NUKI-
		EMI) (Vanhamme &
		Chiu, 2008)
Autonomic Nervous		
System (ANS)/ Autonomic		
Measures		
Facial expression	Observer ratings of	Facial Expression
(Observer ratings,	facial behaviour; use	Coding System
Electromyography)	of facial EMG, which	(FACS), Ekman &
Dicciromyography)	involves measuring	Friesen, 1975, 1978.
	electrical potential	11100011, 1773, 1770.
	from facial muscles.	
	HOIII facial muscles.	

Skin conductance	Example: skin	-
	conductance level,	
	skin conductance	
	responses	
	Tesponses	
H	E	
Heart rate	Example: heart rate,	-
	blood pressure	
Startle Response	Inducing a 'Startle' in	-
Magnitude	response to a sudden,	
	intense stimulus.	
Brain States		
Electroencephalography	Alpha power (8–13	-
(EEG)	Hz band)	
Functional Magnetic	Neuro imaging	-
Resonance Imaging (fMRI)		
Positron Emission	Neuro imaging	-
Tomography (PET)		
Behaviour		
Vocal characteristics	Decomposing the	-
	acoustic waveform of	
	speech associated	
	with specific	
	emotional states	

Whole body behaviour	Study of body posture	-
	and other such	
	aspects	

Measures such as EPI, the Plutchik measure, DES, PAD scale and CES, which are all verbal measures, are widely used in research. However these measures were found inappropriate for this thesis, because they do not adequately represent the emotional aspects of health care consumer behaviour. While basic emotional experiences are universal, the type and intensity would be situation-specific. Also, many emotion descriptors in existing measures are unlikely to be experienced in health care consumption due to the extremes of intensity. Therefore it was apparent that a reliable and valid emotion scale was required to measure the range of emotions experienced by health care consumers.

## (iii) Behavioural Intentions

There was no specific measurement scale found that would be suitable for this study on behavioural intentions of patients as an outcome of social support and post consumption emotions, although a number of studies exist on the impact of customer satisfaction on loyalty and recommendation intentions. One such scale is the Behaviour-Intentions Battery, which measures intentions of 'word-of-mouth', 'purchase intentions', 'price sensitivity' and 'complaining behaviour' in a service industry (Zeithaml, Berry, & Parasuraman, 1996). Hensel, Leshner, & Logan, make a reference to Armitage & Conner's (2001) study which states that Behavioural Intention is behaviour-specific and operationalized by direct

questions such as "I intend to [behaviour]," with likert scale response choices to measure relative strength of intention. Intention has been represented in measurement by other synonyms such as "I plan to [behaviour]") and is distinct from similar concepts such as desire and self-prediction.

Francis, et al. (2004), recommend that the methods used to measure intentions should be guided by researchers' judgements about which types of questions seem to make sense for the behaviour and sample under investigation. As Ryu's (2005) study on behavioural intentions of restaurant customers includes items appropriate to the sample and sector under investigation with statements such as, "I would like to come back to this restaurant in the future" (loyalty/repeat visit); "I would recommend this restaurant to my friends or others" (recommendation); "I am willing to spend more than I planned at this restaurant" (willingness to pay more).

Thus, it appears that behavioural intention measurements may be done using statements or questions depicting intention of the respondent, specific to the type of study in question.

#### 3.4.3 Item Pool Generation

Despite its importance in customer satisfaction and health care services marketing, little research has been done on how customers perceive social support from health care service providers and its impact on customer emotions. None of the existing scales seemed appropriate to measure consumer emotions, social support, social support satisfaction, and behavioural intentions; within the purview of health care services. Thus, it was necessary to develop and validate an instrument to measure the same.

In the context of social support measurement, Lakey & Cohen (2000) explain that no given type of social support measure is most appropriate. Thus, there was a need to construct new measurement scales. Ibert, Baumard, Donada, & Xuereb (2001), state that if appropriate scales cannot be found, researchers have to construct their own measuring instruments, which should be subject to an initial pre-test phase, to refine the list of questions and to validate the scale.

To generate a pool of items for the measurement scales required, items from existing scales were first short-listed for the appropriateness to the measurement of the variable in question. This was then fine tuned, with the inputs obtained through the narratives from the depth interviews and, the hypotheses framed.

# a) Health care social support scale

The table 3.5 depicts the items from existing social support scales considered for incorporation into the new scales.

Table 3.5

Items considered from existing scales

Scale	Items considered
Berlin Social Support	- This person was there when I needed him/her.
Scale	(instrumental support)
	- This person comforted me when I was feeling
	bad. (emotional support)
	- This person took care of many things for me.
	(instrumental support)

	- This person made me feel valued & important.
	(emotional support)
	- This person expressed concern about my
	condition. (emotional support)
Medical Outcomes	- Someone to give you information to help you
Study (MOS) Social	understand a situation. (emotional/informational
Support Survey	support)
	- Someone to give you good advice about a
	crisis. (emotional/informational support)
	- Someone to confide in or talk to about yourself
	or your problems. (emotional/informational
	support)
Inventory of Socially	- Gave you information on how to do
Supportive Behaviors	something. (informational support)
	- Suggested some action that you should take.
	(informational support)
	- Expressed and concern in your well-being.
	(emotional support)
Multidimensional Scale	- I can talk about my problems with my friends.
of Perceived Social	(emotional support)
Support	

- I have a special person who is a real source of comfort to me. (emotional support)

## b) Post-consumption emotion scale

Despite the variety of measures designed for research on emotions in psychology and marketing disciplines, no single measure may appear suitable for the understanding of emotions particularly in the study of consumer emotions in health care services. Mauss & Robinson (2009), state that there is no 'gold standard' measure of emotional responding. Han, Back, & Barrett (2010), in their study on consumer behaviour in a restaurant setting explain that the existing measures of emotion are not suitable in studies of customer behaviour due to the unique characteristics of the restaurant as restaurant customers' emotional experiences may not be properly measured when using existing scales in psychology and marketing fields, as customer emotional responses in restaurant services tend to be directly linked to post-purchase processes. Similarly, the consumption of health care service would involve emotional experiences that differ from other service experiences; based on illness and coping mechanisms. This may especially hold true, since consumers are already loaded with preconsumption emotions, usually caused by the symptoms experienced. These emotions may also vary in type and intensity. The existing measurement scales and the associated emotion descriptors are inadequate for this research purpose as they may not properly represent a patient's emotional states.

Due to the above reasons, attempts were made to customize the existing measures for the purpose of the study by incorporating relevant aspects that were unique to consumer emotional experiences in health care services. While the depth interviews involved observations of vocal characteristics and facial behaviour, in addition to the reported emotions, the verbal self-report method, customized for this study, appeared to be appropriate for the purpose of measuring post-consumption emotions of patients in the quantitative study. Other available measures required complex instruments and were also not feasible for a study involving a survey of a large number of patients. Poels & Dewitte (2006), explain that the verbal self-report method is very popularly used and, is also simple, cheap and quick for the investigation of large scale emotional responses.

The depth interviews provided a list of emotions (relevant to pre-consumption, consumption and post-consumption processes), that were matched to the basic emotions generated by renowned emotion researchers (for example Plutchik 1980; Izard 1977). The list of emotions thus obtained was then condensed on the basis of similarity evident right from the pre-consumption stage to the post-consumption stage. This was done to avoid the risk of information overload or confusion in choosing from a large number of emotions.

# c) Behavioural intentions scale

While this study attempts to understand 'behavioural intentions' as the outcome variable caused by the influence of health care social support and post-consumption emotions, a 6-item scale was designed to incorporate the dimensions of 'loyalty', 'recommendation' and 'patient cooperation'. These items were

designed separately for doctor based social support and hospital staff based social support, to be later combined for the overall analysis.

The items generated included the three types of support namely; emotional, informational and instrumental social support from health care systems; satisfaction with each type of social support from health care systems; post-consumption emotions and; behavioural intentions of consumers/ patients.

For a good approximation of a 'magnitude' scale, Rossiter (2002) recommends intensity-free wordings of item stems (the question part of an item) in a multiple-item scale and minimum to maximum intensity item leaves (the answer alternatives), in addition to a clearly defined psychological zero category or a "don't know" option where it is a legitimate response.

All the items in this research were designed to be measured on a 5-point scale, as follows:

The item response options for the measurement of health care social support (emotional, informational and instrumental) scale were designed as: '1- None of the time', '2- A little of the time', '3- Some of the time', '4- Most of the time', '5- All of the time'. The response options for the social support satisfaction scale were designed as: '5- Strongly agree', '4- Agree', '3-Undecided', '2- Disagree', '1- Strongly disagree'. The item leaves for measurement of post- consumption emotions were designed as: '1-None', '2- Mild'; '3- Moderate'; '4- High'; '5- Highest imaginable'.

The nomenclature of the rating scales were designed in accordance with the 'Likert type' scales commonly used in social science research and their suitability to the study in question.

### 3.4.4 Inter Rater Reliability

Kimberlin & Winterstein (2008), are of the opinion that the key indicators of the quality of a measuring instrument are the reliability and validity of the measures and, that 'Inter-rater reliability' establishes the equivalence of ratings obtained with an instrument when used by different observers. Wang (2009), refers to Inter-rater reliability as the degree of similarity between different examiners, without influencing one another.

To begin with, the measurement instrument was presented at a weekly departmental, student research forum. The recommendations with respect to item clarity and specificity were then incorporated. To further ensure reliability in the researcher's classification of items, specifically in the social support scales, 6 expert raters were asked to categorize each of the items into the stated support types, namely; 'E'- for Emotional support; 'IF' for Informational support and; 'IN' for Instrumental support. This method was also used by Rossiter (2002), in the C-OAR-SE scale development procedure to make final selection of constituents, from ratings by a sample of raters, and to rate content saturation of items for an eliciting attribute. The number of similar ratings for each of the items was then scrutinized. Those items which appeared to lack clarity were then revised to fit into a specific category of social support.

The ratings given for each of the items in the questionnaire has been provided in table 3.6

Table 3.6
Inter rater reliability of scales

ITEM	ITEM RATING
The doctor helped me remain calm	E-6
The doctor gave me good medical advice	IF-6
The doctor allowed me to talk freely about my problems	E-5
The doctor helped me to decide on a suitable medical treatment	IF-4
The doctor listened to me patiently with understanding	E-5
The doctor was really concerned about me and my condition	E-6
The doctor ensured that I was taken good care of when I was under his/ her treatment	IN-2
The doctor was a real source of comfort to me	E-6
The doctor did his best to cure me of my illness	IN-5
The doctor has been very reliable	IN-4
The doctor made me feel important & valued	E-5
The doctor gave me reassurance whenever I needed it	E-3
The hospital staff provided me with the necessary treatment	IN-4
The hospital staff took good care of me during medical treatment	IN-4
The hospital staff arranged for necessary technical assistance required for my treatment	IN-6
The hospital staff gave me proper guidance for necessary treatment of my illness	IF-4

The hospital staff provided me with necessary facilities in the waiting room	IN-5
The hospital staff listened to my feelings patiently with understanding	E-6
The hospital staff gave me reassurance when I needed it	E-5
The hospital staff helped me to calm down when I was worried	E-6
I am satisfied with the emotional support given to me by the doctor	E-6
I am satisfied with the concern shown towards me by the hospital staff	E-5
I am satisfied with the knowledge that was provided to me by the doctor	IF-6
I am satisfied with the advice that was given to me by the hospital staff	IF-6
I am satisfied with the timely assistance that was provided to me by the doctor	IN-5
I am satisfied with the assistance that was given to me by the hospital staff	IN-5

E= Emotional support;

*IN= Instrumental support;* 

*IF= Informational support* 

# 3.4.5 Content Validity

Rossiter (2002), states that content validity is the a priori evidence obtained from expert judges, that the items are a good representation of the construct. It represents the degree to which a sample of items, taken together, constitute an adequate operational definition of a construct (Polit & Beck, 2006) and, since there is no statistical test to determine whether a measure adequately covers a content area or adequately represents a construct, content validity usually depends on the judgment of experts in the field (Kimberlin & Winterstein, 2008).

The instrument was presented at a departmental researcher's forum to ensure that each item in the questionnaire was relevant to the study and, that there was clarity in understanding. Subsequently, experts from the field of psychology and consumer behaviour were recruited to assess different aspects of the content of the tool, which included the respondent instructions as well as the end matter with basic queries on illness type and demographics.

The entire instrument was judged and rated on a scale ranging from 1 to 4 for 'Relevance' of each item (1-not relevant, 2- item needs some revision, 3- relevant but needs minor revision, 4- very relevant); 'Clarity' of each item (1-not clear, 2- item needs some revision, 3- clear but needs minor revision, 4- very clear) and; 'Simplicity' of each of the item (1-not simple, 2- item needs some revision, 3- simple but needs minor revision, 4- very simple). This method of content validity assessment is the 'Standards for Educational and Psychological Testing (the Standards)', also used by Squires, Estabrooks, Newburn-Cook, & Gierl (2011), where a content validity survey was developed, using a 4-point 'Likert' type scale with: 1 'not relevant'; 2 'item needs some revision'; 3 'relevant but needs minor revision'; and 4 'very relevant', as a modified version of Davis' scale, which has been used in past studies examining item to content relevance (content validity). Similarity may also be drawn from the content validity measurement criteria adopted by Yaghmaie (2003) which is shown in table 3.7.

Table 3.7

Content validity criteria

# **Criteria for Measuring Content Validity**

#### I. Relevance

- 1 = not relevant
- 2 = item need some revision
- 3 = relevant but need minor revision
- 4 = very relevant

### II. Clarity

- 1 =not clear
- 2 = item need some revision
- 3 = clear but need minor revision
- 4 = very clear

## III. Simplicity

- 1 = not simple
- 2 = item need some revision
- 3 =simple but need minor revision
- 4 = very simple

# IV. Ambiguity

- 1 = doubtful
- 2 = item need some revision
- 3 = no doubt but need minor revision
- 4 = meaning is clear

Source: Yaghmaie (2003)

On completion of the expert ratings associated with content validity of the instrument, 'Content Validity Index' (CVI) a measure which indicates the proportion of members who endorsed an element as content valid, was determined. CVI allows for item level assessments in addition to scale level assessments and are more easily interpreted and understood than other methods of agreement (Polit & Beck, 2006). It was calculated at item (I-CVI) and tool-level (S-CVI) as followed by Claeys, Tulkens, Neve, & Spinewine.

The calculations of CVI followed the recommendations of Polit & Beck (2006). First, for each item in the questionnaire, CVI scores (referred to as I-CVI) were calculated. The I-CVI was calculated as the number of experts giving a rating of either 3 or 4 (relevant) divided by the total number of experts scoring the item, where the accepted standard for an I-CVI is 0.78 for six or more judges, as in the case of this thesis. Second, for the full scale the CVI score (referred to as S-CVI), was calculated using two methods: (a) universal agreement (referred to as S-CVI/UA); and, (b) average or mean expert proportion (referred to as S-CVI/Avg). The S-CVI/UA was calculated as the number of items that the experts gave a rating of either 3 or 4 (relevant) divided by the total number of item ratings provided by the experts. An S-CVI rating of 0.80 is considered acceptable. Because the S-CVI/UA tends to decrease when greater than 2 experts are used, the mean expert proportion (S-CVI/Avg) was also calculated. The mean expert proportion refers to the average proportion of items rated as relevant across the experts, and was calculated by taking the mean of the proportion of items that were rated either 3 or 4 (relevant) across the six experts. A value of 0.80 or higher is considered acceptable.

CVI calculations were done only for 'Relevance' of the items and the scale (as is the normal practice). For 'Clarity' and 'Simplicity', only item related scores were calculated.

The diagrammatic representation for calculation of CVI, provided by Polit & Beck (2006) is shown in figure 3.3

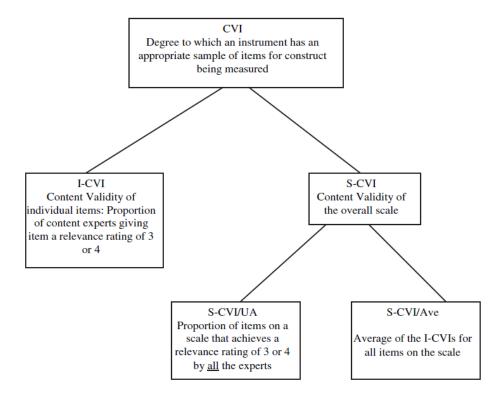


Figure 3.3 *CVI calculation* 

Source: Polit & Beck (2006)

The I-CVI values were used as a guide for revising, deleting, or substituting items as recommended by Polit & Beck (2006), along with the expert ratings on clarity and simplicity of each item. Information on I-CVI and S-CVI (both ways) values obtained in the content validity measurement, along with item clarity and item simplicity ratings, is shown in tables 3.8 (a) - (c); 3.9 (a) - (c).

Table 3.8 (a) Health Care Social Support Scale (HCSSS) - Content Validity (Relevance)

	RELEVANCE (1-4)						т
ITEM							I- CVI 0.78
EXPERT	1	2	3	4	5	6	
Respondent instructions	1	4	4	4	4	4	0.83
The doctor helped me remain calm	4	4	4	4	4	4	1
The doctor gave me good medical advice	4	4	4	4	4	4	1
The doctor allowed me to talk freely about my problems	4	4	4	4	4	4	1
The doctor helped me to decide on a suitable medical treatment	3	4	4	4	4	4	1
The doctor listened to me patiently with understanding	3	1	4	4	4	4	0.83
The doctor was really concerned about me and my condition	4	4	4	4	4	4	1
The doctor ensured that I was taken good care of when I was under his/ her treatment	4	4	2	4	3	2	0.66
The doctor was a real source of comfort to me	4	4	4	4	4	4	1
The doctor did his best to cure me of my illness	4	4	4	1	4	4	0.83
The doctor has been very reliable	4	4	4	4	4	4	1
The doctor made me feel important & valued	3	4	4	1	4	4	0.83
The doctor gave me reassurance whenever I needed it	4	4	4	4	4	4	1

		[					
The hospital staff provided me with the necessary treatment	3	4	4	4	4	4	1
The hospital staff took good care of me during medical treatment	4	4	4	4	4	4	1
The hospital staff arranged for necessary technical assistance							
required for my treatment	4	4	4	4	4	4	1
The hospital staff gave me proper guidance for necessary treatment of my illness	4	3	4	2	4	4	0.83
The hospital staff provided me with necessary facilities in the waiting room	4	1	4	1	4	4	0.66
The hospital staff listened to my feelings patiently with understanding	4	3	4	4	4	4	1
The hospital staff gave me reassurance when I needed it	4	4	4	4	4	4	1
The hospital staff helped me to calm down when I was worried	4	4	4	4	4	4	1
I am satisfied with the emotional support given to me by the doctor	4	4	2	4	3	3	0.83
I am satisfied with the concern shown towards me by the hospital staff	4	1	4	4	4	4	0.83
I am satisfied with the knowledge that was provided to me by the doctor	4	1	4	4	4	4	0.83
I am satisfied with the advice that was given to me by the hospital staff	4	1	4	4	4	4	0.83
I am satisfied with the timely assistance that was provided to me by the doctor	4	4	4	4	4	4	1

I am satisfied with the assistance that was given to me by the hospital staff	2	4	4	4	4	4	0.83
I will recommend the doctor to other people	4	4	4	4	4	4	1
I will recommend the hospital to other people	4	4	4	4	4	4	1
I plan to visit the same hospital if & when it is necessary	4	4	4	4	4	4	1
I will consult the same doctor if I require medical advice & treatment	4	4	4	4	4	4	1
I will follow the advice given by the doctor in case of follow- up treatment	4	4	4	4	4	4	1
I will follow the suggestions given to me by the hospital staff in case of follow-up treatment	4	1	4	4	4	4	0.83
Total relevant/S-CVI/UA 0.80	31	27	31	29	33	32	0.60
S-CVI/Avg 0.80	0.94	0.82	0.94	0.88	1	0.97	0.92

I-CVI calculations result in 2 items with values <0.78.

S-CVI/UA <0.80 which may be justified since the experts are >2, as (Polit & Beck, 2006) are also of the view that the universal agreement is overly stringent when the number of experts exceed 2 and, in such a case the S-CVI/Avg method is preferable for scale level CVI's.

S-CVI/Avg > 0.80

Table 3.8 (b) HCSSS - Clarity rating

ITEM		C	ITEM RATING				
EXPERT	1	2	3	4	5	6	
Respondent instructions	1	4	4	4	4	4	0.83
The doctor helped me remain calm	4	4	4	4	4	4	1
The doctor gave me good medical advice	4	4	4	4	4	4	1
The doctor allowed me to talk freely about my problems	4	4	4	4	4	4	1
The doctor helped me to decide on a suitable medical treatment	3	4	4	4	4	4	1
The doctor listened to me patiently with understanding	3	4	4	4	4	4	1
The doctor was really concerned about me and my condition	4	4	4	4	4	4	1
The doctor ensured that I was taken good care of when I was under his/ her treatment	4	4	2	4	2	2	0.5
The doctor was a real source of comfort to me	4	4	4	4	4	4	1
The doctor did his best to cure me of my illness	4	4	4	1	4	4	0.83
The doctor has been very reliable	4	3	2	4	4	1	0.66
The doctor made me feel important & valued	3	4	4	1	4	4	0.83
The doctor gave me reassurance whenever I needed it	4	4	4	4	4	4	1

The hospital staff provided me with the necessary treatment	3	4	4	4	4	4	1
The hospital staff took good care of me during medical treatment	4	4	4	4	4	4	1
The hospital staff arranged for necessary technical assistance required for my treatment	4	4	4	4	4	4	1
The hospital staff gave me proper guidance for necessary treatment of my illness	4	4	4	2	4	4	0.833
The hospital staff provided me with necessary facilities in the waiting room	4	4	4	1	4	4	0.833
The hospital staff listened to my feelings patiently with understanding	4	4	4	4	4	4	1
The hospital staff gave me reassurance when I needed it	4	4	4	4	4	4	1
The hospital staff helped me to calm down when I was worried	4	4	4	4	4	4	1
I am satisfied with the emotional support given to me by the doctor	4	4	2	4	3	2	0.66
I am satisfied with the concern shown towards me by the hospital staff	4	4	4	2	4	4	0.833
I am satisfied with the knowledge that was provided to me by the doctor	4	4	4	4	4	4	1
I am satisfied with the advice that was given to me by the hospital staff	4	4	4	4	4	4	1

I				1		I	
I am satisfied with the							
timely assistance that was							
provided to me by the							
doctor	4	4	4	4	4	4	1
I am actionical with the							
I am satisfied with the							
assistance that was given to	2	4	4	4	4	4	0.833
me by the hospital staff		4	4	4	4	4	0.033
I will recommend the							
doctor to other people	4	4	4	4	4	4	1
1 1	•	•	•	•	•	•	
I will recommend the			,		4	,	
hospital to other people	4	4	4	4	4	4	1
I plan to visit the same							
hospital if & when it is	4	4	4	4	4	4	1
necessary	4	4	4	4	4	4	1
I will consult the same							
doctor if I require medical advice & treatment	4	4	4	4	4	4	1
advice & treatment	4	4	4	4	4	4	1
I will follow the advice							
given by the doctor in case							
of follow-up treatment	4	4	4	4	4	4	1
I will follow the							
suggestions given to me by							
the hospital staff in case of							
follow-up treatment	4	4	4	4	4	4	1

Table 3.8 (c) HCSSS - Simplicity rating

	Ş	SIM	PLIC	CIT	Y (1-	<b>4</b> )	ITEM
ITEM EXPERT	1	2	3	4	5	6	RATING
Respondent instructions	1	4	3	4	4	3	0.83
The doctor helped me remain calm	4	4	4	4	4	4	1
The doctor gave me good medical							
advice	4	4	4	4	4	4	1
The doctor allowed me to talk freely							
about my problems	4	4	4	4	4	4	1

1	Ī	I	l	<b>l</b> 1	1		i i
The doctor helped me to decide on a suitable medical treatment	3	4	4	4	4	4	1
The doctor listened to me patiently with understanding	3	4	4	4	4	4	1
The doctor was really concerned about me and my condition	4	4	4	4	4	4	1
The doctor ensured that I was taken	4	4	4	4	4	-+	1
good care of when I was under his/ her treatment	4	4	2	4	2	3	0.66
The doctor was a real source of comfort to me	4	4	4	4	4	4	1
The doctor did his best to cure me of my illness	4	4	4	2	4	4	0.83
The doctor has been very reliable	4	4	3	4	4	3	1
The doctor made me feel important & valued	3	4	4	2	4	4	0.83
The doctor gave me reassurance whenever I needed it	4	4	4	4	4	4	1
The hospital staff provided me with the necessary treatment	3	4	4	4	4	4	1
The hospital staff took good care of me during medical treatment	4	4	4	4	4	4	1
The hospital staff arranged for necessary technical assistance							
required for my treatment	4	4	4	4	4	4	1
The hospital staff gave me proper guidance for necessary treatment of my illness	4	4	4	2	4	4	0.83
The hospital staff provided me with	4	4	4		4	4	0.03
necessary facilities in the waiting room	4	4	4	2	4	4	0.83
The hospital staff listened to my feelings patiently with	4	4	4	4	4	4	1
understanding  The beginted staff gave me	4	4	4	4	4	4	1
The hospital staff gave me reassurance when I needed it	4	4	4	4	4	4	1
The hospital staff helped me to calm down when I was worried	4	4	4	4	4	4	1
I am satisfied with the emotional support given to me by the doctor	4	4	4	4	4	4	1
I am satisfied with the concern shown towards me by the hospital	4	4	4	2			0.07
staff I am satisfied with the knowledge	4	4	4	2	4	4	0.83
that was provided to me by the doctor	4	4	4	4	4	4	1

I am satisfied with the advice that was given to me by the hospital staff	4	4	4	4	4	4	1
I am satisfied with the timely assistance that was provided to me							
by the doctor	4	4	4	4	4	4	1
I am satisfied with the assistance							
that was given to me by the hospital							
staff	2	4	4	4	4	4	0.83
I will recommend the doctor to other							
people	4	4	4	4	4	4	1
I will recommend the hospital to							
other people	4	4	4	4	4	4	1
I plan to visit the same hospital if &							
when it is necessary	4	4	4	4	4	4	1
I will consult the same doctor if I							
require medical advice & treatment	4	4	4	4	4	4	1
I will follow the advice given by the							
doctor in case of follow-up							
treatment	4	4	4	4	4	4	1
I will follow the suggestions given							
to me by the hospital staff in case of							
follow-up treatment	4	4	4	4	4	4	1

Table 3.9 (a)
Emotions Scale (ES) - Content validity (Relevance)

ITEM		RELEVANCE (1-4)							
EXPERT	1	2	3	4	5	6	0.78		
Respondent									
instructions	4	4	4	4	4	4	1		
Fear	4	4	4	4	4	4	1		
Disgust	4	3	4	4	4	4	1		
Anger	4	2	4	4	4	4	0.83		
Sadness	4	4	4	4	4	4	1		
Happiness	4	4	4	4	4	4	1		
Total relevant/									
S-CVI/UA									
0.80	6	5	6	6	6	6	0.83		
S-CVI/Avg									
0.80	1	0.83	1	1	1	1	0.97		

I-CVI >0.78 for all items

S-CVI/UA > 0.80

S-CVI/Avg > 0.80

Table 3.9 (b) ES - Clarity rating

ITEM		ITEM					
EXPERT	1	2	3	4	5	6	RATING
Respondent instructions	4	4	4	4	4	4	1

Table 3.9 (c)
ES - Simplicity rating

ITEM	SIMPLICITY (1-4)						
EXPERT	1	2	3	4	5	6	ITEM RATING
Respondent instructions	4	4	4	4	4	4	1

#### **3.4.6 Face Validity**

Face validity is an indication of how well the item reveals the purpose or meaning of the test items or the test itself (Segal & Coolidge, 2004). Face validity tests were conducted with the purpose of determining whether the instrument appeared to assess the desired construct which it is supposed to measure; whether it made common sense and; whether it was persuasive and seemed right to the reader. It

was also sought to determine whether the questions were phrased appropriately and whether the options for responding (item leaves) seemed appropriate. For this purpose, the questionnaire was presented before an audience of researchers and faculty of the department where the research was undertaken, experts in the field of psychology and consumer behaviour, and a sample of potential respondents.

While 'Face Validity and 'Content Validity' may appear to be the same, Burns (1996), explains that while content validity related to what the test actually measures, face validity refers to what the test appears to measure superficially and; the test should 'look valid' to the examinees who take it, to those who administer the test, as well to other technically untrained observers.

#### 3.4.7 Pilot Testing

200 sample questionnaires were distributed to a sample of respondents / patients at 4 different clinics over a period of a week. The purpose of the same was to check for ambiguities, difficulty of questions, duration of time required for filling up the questionnaire, offensive questions and motivation of respondents (using a pilot sample) to answer the questions.

Every respondent was first given an orientation on the purpose of the questionnaire and the manner in which it had to be filled up. Each questionnaire was filled up in the presence of the investigator in order to ensure that there were no missing responses; items were clarified where required and; reactions of the respondents while attempting the questionnaire were observed. The clinics chosen for the survey included those of chronic as well as acute ailments. Respondents comprised of both first-time consultations as well as follow-up patients belonging

to different age groups, gender and work-status. Responses obtained from the survey were tested for reliability and items which appeared ambiguous were revised.

#### 3.4.8 Reliability

The most commonly used reliability index, the cronbach's  $\alpha$  internal consistency was calculated for data obtained through the pilot survey using SPSS 16. The cronbach  $\alpha$  alpha for social support showed a value of .958 which is high while for social support satisfaction  $\alpha$  =.788 signifying a satisfactory reliability value. However, it may be noted that social support satisfaction items were only 6 in number and therefore the reliability value not being very high is understandable.

#### 3.4.9 Item Reduction and Refinement

The measurement scales clearly required further reduction and refinement after being put through rigorous rounds of scrutiny and tests. The research forum presentations suggested simplification of 'Respondent instructions' to enable better understanding of the wide variety of respondents to be encountered. The item - "I have followed the advice & suggestions given by the doctor" was found inappropriate since 'advice' and 'suggestions' do not mean the same thing; and the item - "I have followed the suggestions given to me by the hospital during treatment" was found to have strong 'social desirability bias', therefore requiring re-wording. The list of emotions provided in the 'post-consumption emotion scale', were reduced since there appeared to be some overlapping and ambiguity. This led to removal of the items "worry" and "anxiety" as these would lead to difficulty in choice for the respondents.

doctor ensured that I was taken good care of when I was under his/ her treatment" and "The hospital staff provided me with necessary facilities in the waiting room"; both from the health care social support scale. The items were checked for their clarity and simplicity of wordings and a final decision was taken to delete the items. Re calculation of CVI after item deletion revealed S-CVI/UA as  $\bf 0.645$  and S-CVI/Avg as  $\bf 0.938$  [(0.935 + 0.838 + 0.96 + 0.90 + 1 + 1)  $\div$  6]. Data obtained from the reliability and validity survey indicated that the experts' responses were consistent, and they rated the measurement scales, including its instructions, items and response format, to be a valid measure of health care social support and negative emotions.

The two individual items that fell below the content validity criterion are "The

Feedback from the experts was used to revise the survey, resulting in a reduction of two items and rewording of items which lacked clarity and simplicity, rewording of item leaves/response options, as well as revision of the order of items. The rating scales were refined to ensure clarity. The item leaves/ response options -'2- A little of the time' and '3- Some of the time' for the health care social support scale, were changed to '2- Rarely' and '3- Sometimes'. The options - '1- None', '2- Mild', '3- Moderate', '4- High' and '5- Highest imaginable'; for measurement of post- consumption emotions were changed to '1-Not at all', '2- A little', '3- Moderately', '4- Quite a lot' and '5- Extremely High'.

#### 3.4.10 Final Measurement Scales

The procedure followed for scale development which has been described above, led to necessary changes being incorporated in the newly developed instrument, which was personally administered to the desired sample. The final questionnaire contained items listed in tables 3.10 (a) - (d).

Table 3.10 (a)

Health care social support description

#### **Perceived Social Support from Health care systems**

Emotional Social Support

The doctor helped me remain calm

The doctor allowed to talk freely about my problems

The doctor listened to me patiently with understanding

The doctor was a real source of comfort to me

The doctor was concerned about me and my condition

The doctor made me feel important & valued

The doctor gave me reassurance whenever I needed it

The hospital staff gave me reassurance whenever I needed it

The hospital staff listened to me feelings patiently with

understanding

The hospital staff helped me to calm down when I was worried

Informational Social Support

The doctor gave me good medical advice

The doctor helped me to decide on a suitable medical

treatment

The hospital staff gave me proper guidance for necessary

#### treatment of my illness

Instrumental Social Support

The doctor has been very reliable

The doctor did his/her best to cure me of my illness

The hospital staff provided me with the necessary treatment

The hospital staff arranged for necessary technical assistance

required for my treatment

The hospital staff took good care of me during medical

treatment

Table 3.10 (b)

Health care social support satisfaction

#### **Social Support Satisfaction**

Satisfaction with emotional support

I am satisfied with the emotional support given to me by the doctor

I am satisfied with the concern shown towards me by the hospital staff

Satisfaction with informational support

I am satisfied with the knowledge that was provided to me by the doctor

I am satisfied with the advice that was given to me by the hospital staff

Satisfaction with instrumental support

I am satisfied with the timely assistance that was provided to me by the doctor

I am satisfied with the assistance that was given to me by the hospital staff

Table 3.10 (c)
Patient emotions after treatment

# Post consumption emotions Fear Disgust Anger Sadness Happiness

Table 3.10 (d)

Consumer behavioural intentions

#### **Behavioural Intentions**

Recommendation

I will recommend the doctor to other people

I will recommend the hospital to other people

#### Loyalty

I plan to visit the same hospital if & when necessary

I will consult the same doctor if I require medical advice & treatment

#### Cooperation

I will follow the advice given by the doctor in case of follow-up treatment

I will follow the suggestions of the hospital staff in case of follow-up treatment

#### 3.4.11 Measurement Model

Convergent validity was assessed as suggested by Hair, Black, Babin, Anderson, & Tatham (2006). Convergent validity is achieved if the items that are indicators of a specific construct converge or share a high proportion of variance in common. The evidence of convergent validity was checked in two ways. First, convergent validity was assessed from the measurement model by determining the size of the factor loadings. High loadings on a factor would indicate that they converge on the latent construct. 0.7 is considered as a good rule of thumb for the ideal standardized loading estimates. Second, Average Variance Extracted (AVE) was calculated as an indicator of convergence. An AVE measure was computed for each latent construct in the measurement model. AVE is computed as the total of all squared standardized factor loadings (squared multiple correlations) divided by the number of items. An AVE of 0.5 or higher is considered appropriate for adequate convergence.

Coefficient alpha ( $\alpha$ ) was used as a measure of reliability since it is a commonly applied estimate. The rule of thumb for reliability estimate is 0.7 or higher which suggests good reliability. High construct reliability indicates that internal consistency exists, meaning that the measures consistently represent the same latent construct.

The Confirmatory Factor Analysis (CFA) model for each of the constructs has been provided, along with evidence of convergent validity calculations.

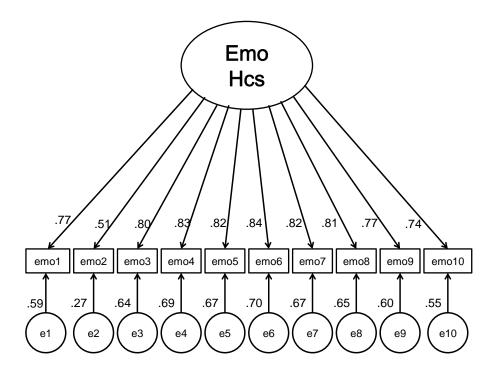


Figure 3.4 (a)
CFA model of 'Emotional Support from Health Care Systems' dimension

The 'Emotional Support from Health Care Systems' dimension, labelled as 'Emo Hcs' depicts the standardized factor loadings of 10 observed/ manifest variables.

The manifest variable 'emo2' (The doctor allowed me to talk freely about my problems) < 0.7 and was therefore removed.

AVE =0.629 (calculated as the total of all remaining 9 squared standardized factor loadings divided by 9).

Coefficient  $\alpha$  for 9 items = 0.940

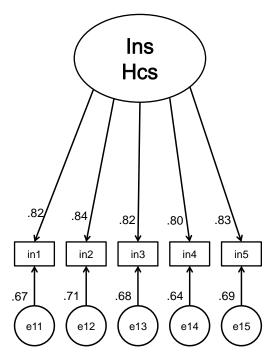


Figure 3.4 (b)
CFA model of 'Instrumental Support from Health Care Systems' dimension

The 'Instrumental Support from Health Care Systems' dimension, labelled as 'Ins Hcs' depicts the standardized factor loadings of 5 observed/ manifest variables.

All variables had factor loadings > 0.7 and, were therefore retained.

AVE = 0.675 (calculated as the total of all 5 squared standardized factor loadings divided by 5).

Coefficient  $\alpha$  for 5 items = 0.912

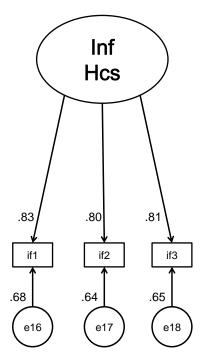


Figure 3.4 (c)
CFA model of 'Informational Support from Health Care Systems' dimension

The 'Informational Support from Health Care Systems' dimension, labelled as 'Inf Hcs' depicts the standardized factor loadings of 3 observed/ manifest variables.

All variables had factor loadings > 0.7 and, were therefore retained.

AVE = 0.661 (calculated as the total of all 3 squared standardized factor loadings divided by 3).

Coefficient  $\alpha$  for 3 items = 0.849

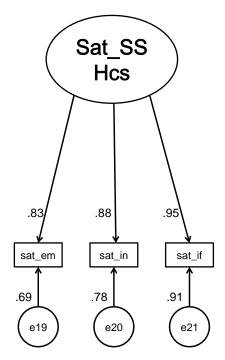


Figure 3.4 (d)
CFA model of 'Social Support Satisfaction from Health Care Systems' dimension

The 'Social support satisfaction from Health Care Systems' dimension, labelled as 'Sat\_SS Hcs' depicts the standardized factor loadings of 3 observed/ manifest variables.

All variables had factor loadings > 0.7 and, were therefore retained.

AVE = 0.788 (calculated as the total of all 3 squared standardized factor loadings divided by 3).

Coefficient  $\alpha$  for 3 items = 0.917

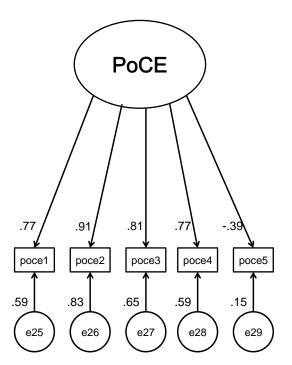


Figure 3.4 (e)
CFA model of 'Consumer Post-consumption Emotions' dimension

The 'Consumer Post-consumption emotions' dimension, labelled as 'PoCE' depicts the standardized factor loadings of 5 observed/ manifest variables. 'poce5' (Happiness) is the only positively valenced emotion while the other variables were negatively valenced, thus it shows a negative value.

The manifest variable 'poce5' (Happiness) < 0.7 and was therefore removed.

All other variables had factor loadings > 0.7 and, were therefore retained.

The 'PoCE' dimension was thus reduced to 4 items

AVE = 0.667 (calculated as the total of 4 squared standardized factor loadings divided by 4).

Cronbach's  $\alpha$  for 4 items = 0.882

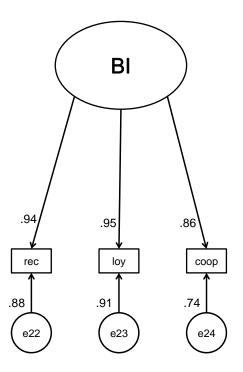


Figure 3.4 (f)
CFA model of 'Behavioural Intentions' dimension

The 'Behavioural Intentions' dimension, labelled as '**BI**' depicts the standardized factor loadings of 3 observed/ manifest variables.

All variables had factor loadings > 0.7 and, were therefore retained.

AVE = 0.841 (calculated as the total of all 3 squared standardized factor loadings divided by 3).

Coefficient  $\alpha$  for 3 items = 0.939

Table 3.11 Validity and Reliability

Constructs	Indicators	Squared	AVE	Reliability
		standardized		(cronbach's
		factor		α)
		loadings		
Emotional	Doctor-calm	0.49	0.629	0.940
social support	Doctor-listened	0.64	_	
	Doctor- comfort	0.688		
	Doctor-	0.672		
	concerned			
	Doctor- valued	0.705		
	Doctor-	0.672		
	reassurance			
	Hospital-	0.656		
	reassurance			
	Hospital- listened	0.592		
	Hospital- calm	0.547		
Instrumental	Doctor- reliable	0.672	0.675	0.912
social support	Doctor- cure	0.705		
	Hospital-	0.672		
	treatment			

	Hospital-	0.64		
	technical			
	Hospital- care	0.688		
Informational	Doctor- advice	0.688	0.661	0.849
social support	Doctor-	0.64		
	treatment			
	Hospital-	0.656		
	guidance			
Social	Emo- satisfaction	0.688	0.788	0.917
support	Inst- satisfaction	0.774		
satisfaction	Inf- satisfaction	0.902		
Post-	Fear	0.592	0.667	0.882
consumption	Disgust	0.828		
emotions	Anger	0.656		
	Sad	0.592		
Behavioural	Recommendation	0.883	0.841	0.939
intentions	Loyalty	0.902		
	cooperation	0.739		

Computation of factor loadings, AVE and internal consistency of each of the dimensions reveal adequate convergence for all constructs.

#### 3.5 QUANTITATIVE STUDY

The newly developed scales were used for data collection for the purpose of a quantitative study on a large sample of respondents, in fulfilment of the research objectives. Hospital administrators, doctors and nurses of various hospitals in the state were approached so as to seek advice and obtain the required permissions necessary for the data collection efforts. While this exercise did not pose too many problems, different strategies were adopted for the purpose of obtaining willing cooperation of the patients. The respondents had to be approached and spoken to with a lot of patience and understanding. The patients that formed a part of the sample belonged to different age groups, social strata, economic backgrounds, gender and marital status and were being treated for various diseases; though only chronic cases were considered for this study.

The reason for selection of only chronic cases for this study was that chronic cases were long-term by nature and, were more suitable to the study of behavioural intentions such as loyalty and cooperation (in the case of follow-up procedures).

The survey was carried out in health care service organizations/ hospitals in Goa during a two and a half month period. In order to obtain the most genuine information on emotions experienced and perceived social support, it was necessary to capture data from individuals who went through the most recent medical treatment procedures. For this purpose, respondents were intercepted at the hospitals (Out-Patient-Departments and Ward rooms) and, sometimes even near the hospital exit after treatment. Patients were approached and requested to participate in the survey and fill in a set of questions relating to the social support

provided by their health care service provider and the emotions experienced by them. Demographic data were also obtained from the respondents.

All the questionnaires were distributed personally and filled up at the place of distribution. Each questionnaire required not more than 15-20 minutes, depending upon the condition of the patient and his/her ability to answer the questionnaire. Respondents belonged to various sections of society and therefore while some respondents were able to fill up the questionnaires after proper explanations were provided, for others the assistance of the investigator was required to properly fill up the questionnaire. However, in such cases care was taken to ensure that the respondents were not influenced in any way and, that the responses were obtained most objectively and professionally. Upon completion of an interview, the interviewer immediately selected the next patient at the hospital. A sample of 630 patients was obtained from all over the state. Respondents comprised of 47.9 per cent females and 52.1 per cent males, with the age ranging between 12 to 88 years.

## ANALYSIS OF DATA AND RESULTS

his chapter focuses on the analysis of the data and the empirical examination of the objectives of this study. The chapter is divided into 2 main sections. While the section-I deals with 'Analysis of data' obtained through the qualitative and quantitative studies, section-II covers 'Interpretation of the results' obtained there from.

#### **SECTION I: ANALYSIS**

The analysis performed for this study comprises 2 parts. At the outset, the depth interviews were analyzed using IPA and content analysis for arriving at basic theme based constructs, which was used for scale development. The analysis of the quantitative survey is addressed in the next section. Structural Equation Modelling (SEM) was employed to test the research hypotheses, regarding relationships between the variables in question, in addition to a test of the model fit.

#### 4.1 ANALYSIS OF QUALITATIVE SURVEY

#### (a) Sample characteristics

The characteristics of the sample (n= 24) used for the qualitative survey are summarised in table 4.1

Table 4.1

Demographic characteristics of sample (qualitative survey)

Demography	Category	Frequency	Percent
Gender	Male	11	45.8
	Female	13	54.2
Age	20-25	2	8.3
1190	25-30	1	4.2
	30-35	4	16.7
	35-40	5	20.8
	40-45	6	25
	45-50	1	4.2
	60-65	1	4.2
	65-70	1	4.2
	70-75	2	8.3
	75-80	1	4.2
Illness	Chronic	16	66.7
	Acute	8	33.3
Marital Status	Single	5	20.8
maini piatus	Married	19	79.2
<b>Employment Status</b>	Employed	16	66.7
	Self employed	1	4.2
	Retired	4	16.7
	Home maker	2	8.3
	Unemployed	1	4.2

#### (b) Analysis for formulation of hypotheses

The narratives obtained from depth interviews were analysed using 'Interpretative Phenomenological Analysis' and 'Content Analysis'. Stories from the interviews were transcribed to retain them in their pure and original form so as to retain their originality. The researcher's observations of respondents' expressions during the interviews were also taken into consideration. The narrations were thoroughly studied by the researcher so as to arrive at common themes which would help in formulation of hypotheses.

#### (c) Analysis for scale development

Themes based on the research context have also been used for the purpose of scale development required for the quantitative survey. These themes led to the development of constructs and variables to be measured. Narratives relating to the kind of social support expected from doctors and hospital staff, as well as the social support perceived to have been provided by them were incorporated, in addition to the emotions experienced by respondents after consumption of the service. The narrations of each interview have been attached in the appendix.

### Themes from qualitative survey/ depth interviews, used for identification of variables:

- ➤ Emotions experienced during illness, during medical treatment and postmedical treatment
- Perceived social support from health care systems
- Future behavioural intentions towards the health care system

#### 4.2 ANALYSIS OF QUANTITATIVE SURVEY

#### (a) Sample characteristics

n = 630

Illness type: chronic

*Diseases covered*: Cardiac ailments, kidney ailments, liver ailments, eye disease, skin disease, haemorrhoids /piles, cancer (breast, throat and lung).

Sector of study: Health care service providers (Government managed hospitals and Private run hospitals).

*Demographics*: Other information obtained includes age, gender, marital status and employment status.

Table 4.2

Demographic characteristics of sample (quantitative survey)

Demography	Category	Frequency	Percent
Gender	Male	328	52.1
	Female	302	47.9
Age	Up to 20	15	2.4
	21-30	64	10.2
	31-40	85	13.5
	41-50	152	24.2
	51-60	162	25.7
	61-70	91	14.4

	71-80	47	7.5
	81 and above	14	2.2
Marital Status	Single	97	15.4
	Married	533	84.6
<b>Employment Status</b>	Employed	240	38.1
	Self employed	98	15.6
	Home maker	149	23.7
	Unemployed	44	7.0
	Others	99	15.7

#### (b) Statistical tool

The hypotheses proposed in the study were tested using a structural equation modelling (SEM) procedure, also known as covariance structure analysis, latent variable analysis, and sometimes known by the name of the specialized software (LISREL or AMOS model). The hypothesized model of relationships proposed in this thesis comprise of multiple relationships, which are suitable for examination by a structural equations modelling programme as no other statistical technique is suitable for testing both dependent as well as independent relationships in one technique (Hair, Black, Babin, Anderson, & Tatham, 2006). SEM is an extension of the general linear model (GLM). The software can test traditional models, but it also permits examination of more complex relationships and models, such as confirmatory factor analysis and time series (Arbuckle & Wothke, 2001).

An elaborate explanation on SEM is given by Hair, Black, Babin, Anderson, & Tatham (2006), who explain that SEM examines the structure of interrelationships expressed in a series of equations, similar to a series of multiple regression equations. These equations depict all of the relationships among constructs (dependent and independent variables) involved in the analysis. Constructs are unobservable or latent factors represented by multiple variables (similar to variables representing a factor in factor analysis). While multivariate techniques have been classified either as an interdependence or dependence technique, SEM can be thought of as a unique combination of both types of techniques because SEM's foundation lies in two familiar multivariate techniques: factor analysis and multiple regression analysis.

SEM models may be tested in different ways. However, the three main distinguishing characteristics of such models highlighted by Hair, Black, Babin, Anderson, & Tatham (2006) are:

- Estimation of multiple and interrelated dependence relationships.
- ➤ An ability to represent unobserved concepts in these relationships and correct for measurement error in the estimation process.
- ➤ Defining a model to explain the entire set of relationships.

The constructs in this study namely: perceived emotional support, perceived instrumental support, perceived informational support; social support satisfaction, post-consumption emotions and behavioural intentions are all unobservable concepts that are dependent on manifest indicators. The structural model specifies causal relationships between the latent variables themselves. It also provides

explicit estimation of measurement error. The SEM model with the latent variables provides evidence of whether each hypothesis was supported and suggests the relative strength of the relationships.

#### (c) Model Development

Based on the proposed model depicted in figure 3.2, an elaborate model comprising latent (unobserved) variables and manifest (observed) variables was developed using Analysis of Moment Structures (AMOS) software [version18]. The manifest variables were imported from the data set obtained during the quantitative survey and, entered into the programme SPSS16.

This study applies Structural Equation Modelling (SEM) as the tool of analysis for maximum likelihood estimation in examining the proposed hypotheses. Confirmatory factor analysis (CFA) of the measurement model was conducted to present the fitness of each latent construct. Subsequently, after 'fixing' the measurement in step one, the structural model was examined further using path analysis to test the research hypotheses empirically.

For the model development and testing of relationships using SEM, the main sources of guidelines followed for the analysis of the quantitative survey of this study, were Hair, Black, Babin, Anderson, & Tatham (2006); Arbuckle & Wothke (2001); Byrne (2010); Gaskin (Confirmatory Factor Analysis, 2012); Gaskin (Intro to SEM Series, 2013); Gaskin (Model fit during a Confirmatory Factor Analysis (CFA) in AMOS, 2011); Gaskin (SEM series Part 7: Building your structural model, 2013); Gaskin (Structural Equation Modeling, 2012); Gaskin, (Tips and Tricks with AMOS, 2013).

For the purpose of this research, a Confirmatory Modelling Strategy was applied, wherein a model was specified to assess its statistical significance (Hair, Black, Babin, Anderson, & Tatham, 2006).

➤ The first stage of SEM performed for this thesis involved defining the individual constructs. This was done by listing the constructs that would comprise the measurement model at the multi-item scale development stage.

#### • Reasonable sample size

To ensure trustworthy results, SEM requires a larger sample relative to other multivariate approaches. The accepted rule of thumb is that the sample size should at least be 400, while some experts advocate 15 cases per measured variable. This study used 27 measured variables which work out to a required sample size of 405. The actual sample size used for this study was 630 cases which, is well above the specified limit.

The second stage adopted was that of determining the measurement model. The items per construct were defined as under:

Emotional social support from health care systems (**Emo Hcs**) = 10 items (emo1 - emo10)

Instrumental social support from health care systems (Ins Hcs) = 5 items (in1 - in5)

Informational social support from health care systems (Inf Hcs) = 3 items (if1 - if3)

Health care systems social support satisfaction (Sat\_SS Hcs) = 3 items (Sat\_em; Sat\_in; Sat\_if)

Post consumption emotions (**PoCE**) = 5items (poce1 - poce5)

Behavioural Intentions (**BI**) = 3 items (*rec*; *loy*; *coop*)

The third stage adopted was that of establishing validity and reliability tests. The following such tests were done:

#### • Face Validity

It is considered as the most important validity test as an understanding of every item's meaning is required to correctly specify a measurement theory. Face validity should be established prior to any theoretical testing. It is the extent to which the content of the items is consistent with the construct definition, based solely on the researcher's judgement. This test was done at the scale development stage of this study.

#### • Convergent Validity

The items that are indicators of a specific construct should ideally share a high proportion of variance in common. With the size of the factor loadings being an important consideration, those items having high loadings on a factor were retained as they indicated that they converge on a common point. Following the rule of thumb, the accepted standardized loading estimates were 0.7 (for each item or the average of all the items in a factor). Those items having low factor loadings were removed. AVE was also computed for each construct.

One indicator each was removed from the 'Emo Hcs' construct (emo2) and 'PoCE' construct (poce5) respectively.

#### • Reliability

Reliability test, being an indicator of convergent validity was also performed. Coefficient alpha was used as a reliability estimate since it is a commonly applied estimate. The rule of thumb for reliability estimate is 0.7 or higher which suggests good reliability. High construct reliability indicates that internal consistency exists, meaning that the measures all consistently represent the same latent construct.

The SEM model specified in this study is over-identified which is the preferred type of identification. It means that the model has more unique variance and covariance terms than parameters to be estimated. It also has positive degrees of freedom and may not fit as well as a just identified model.

Identification refers to the idea that there is at least one unique solution for each parameter estimate in a SEM model. Models having only one possible solution for each parameter estimate are just-identified. While models having an infinite number of possible parameter estimate values are under-identified.

A number of structural models had to be developed until the final one was finally accepted. Although the hypothesized relationships remain intact and model respecification was done only with theoretical support, adjustment and changes had to be incorporated with regard to the manner in which the relationships were portrayed, due to a number of reasons (errors encountered). Some of which are:

#### • Heywood cases

The factor solution began to produce negative error variance for some observed variables. This Heywood case resulted in the SEM programme providing an improper solution. Item parcelling was done where measured variables were combined to create a meaningful variable. For instance, variables that were measured separately for doctors and hospital staff were combined to form single variables relevant to the construct. This helped to solve the issue.

#### • Illogical standardized parameters

This estimation problem resulted in two standardized path coefficients that exceed 1.0. In this case, it was the path between 'Emo Hcs' and 'Poce' and; 'Ins Hcs' and 'Poce'. This issue was corrected by adding an assumption (by fixing a value 'a') that both the affected paths are equal.

#### (d) Model Fit

Byrne (2010), explains that the two types of information that help to detect model misspecification are — Standardized residual and Modification indices. This information which has been available in the output was used to perform necessary changes in order to achieve the most appropriate model fit indices.

During the process of achieving adequate model fit, exceedingly high standardized residuals (>4.0) led to the removal of two offending variables namely 'emo1' and 'emo5', both from the **Emo Hcs** construct. Re computation of convergent validity and reliability was then performed for the affected construct.

**Emo Hcs Construct:** Factor loading estimates > 0.7; AVE: 0.634; cronbach's  $\alpha$  for 7 items= 0.926.

The structural model was accepted after necessary modifications and acceptable model fit was achieved. The model in figure 4.1 shows the following:

The Latent variable- **Emo Hcs** (which has 7 manifest variables namely: *emo3*, *emo4*, *emo6*, *emo7*, *emo8*, *emo9*, *emo10*), has a unidirectional relationship with **Sat\_SS Hcs** as well as with **PoCE**.

The Latent variable- **Ins Hcs** (which has 5 manifest variables namely: *in1*, *in2*, *in3*, *in4*, *in5*), has a unidirectional relationship with **Sat\_SS Hcs** as well as with **PoCE**.

The Latent variable- **Inf Hcs** (which has 3 manifest variables namely: *if1*, *if2*, *if3*), has a unidirectional relationship with **Sat\_SS Hcs** as well as with **PoCE**.

The latent variable **Sat\_Hcs** (which has 3 manifest variables namely; *sat\_em*, *sat\_in*, *sat\_if*), has a unidirectional relationship with **BI**.

The latent variable **PoCE** (which has 4 manifest variables namely; *poce1*, *poce2*, *poce3*, *poce4*), has a unidirectional relationship with **BI**.

The latent variable **BI** (which has 3 manifest variables namely; *rec*, *loy*, *coop*), is the outcome variable determined by **Sat\_SS Hcs** and **PoCE**.

Error terms are: e3, e4, e6, and so on. The residuals are: r1, r2 and r3 are which are denoted for the latent variables that are determined by other latent variables. The double-headed arrows represent the covariances between error terms.

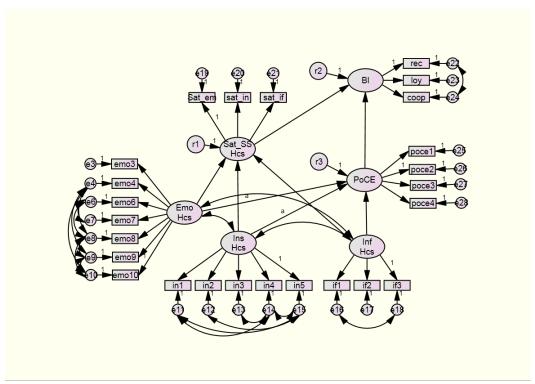


Figure 4.1
Structural model of hypothesized relationships

The Analysis summary provided by AMOS has been provided in tables 4.3 (a); (b); (c).

Table 4.3 (a)
Summary of SEM analysis output

Summary	Particulars	Value
Notes for Group	The model is recursive.	-
	Sample size	630
Variable counts	Number of variables in the model	59
	Number of observed variables	25
	Number of unobserved variables	34
	Number of exogenous variables	31

	Number of endogenous variables	28
Computation of	Number of distinct sample moments	325
degrees of	Number of distinct parameters to be estimated	75
freedom	Degrees of freedom (325 - 75):	250
Result	Minimum was achieved	-
	Chi-square	1446.800
	Degrees of freedom	250
	Probability level	.000

Table 4.3(b)

Parameter summary

	Weights	Covariances	Variances	Means	Intercepts	Total
Fixed	34	0	0	0	0	34
Labelled	2	0	0	0	0	2
Unlabelled	25	18	31	0	0	74
Total	61	18	31	0	0	110

Hair, Black, Babin, Anderson, & Tatham (2006), state that there is no magic value for the fit indices and it may not be practical to apply a single set of cut-off values to all SEM models as the quality of fit is dependent on sample size and model complexity. Also, complex models with large samples should not be subject to strict standards. The model developed for this thesis is complex as well as characteristic of a fairly large sample size which may not expect to yield excellent model fit. However, efforts were made to work towards attaining the standard fit indices and prescribed value range, without compromising on theory.

Table 4.3 (c)
Model Fit (Goodness-of-fit) Summary

REQUIRED FIT	CUT-OFF VALUES	VALUES
INDICES		ATTAINED
One absolute fit index -	GFI range 0 to 1	0.834
GFI		
One incremental fit index -	CFI range 0 to 1	0.924
CFI		
One goodness-of-fit index –	TLI range 0 to 1	0.909
TLI		
One badness-of-fit index -	RMSEA values	0.087
RMSEA	<0.10	

#### **SECTION II- RESULTS**

Analysis of data yielded results that were subsequently interpreted for further understanding in relation to proposed theory.

#### 4.3 RESULTS BASED ON QUALITATIVE ANALYSIS

For the analysis of data obtained through the exploratory study, the IPA approach was adopted so as to arrive at themes that further led to the development of variables and constructs. This study also led to the formulation of hypotheses based on the inferences drawn from the narratives transcribed. Details on the qualitative analysis have been included in 'Chapter 3 on Research Methodology'.

It may be noted here that although the exploratory study led to the emergence of a number of themes based on the study, only some of the themes were taken up for development of constructs and hypotheses. This was done so as to ensure study of a focused area in more detail.

# 4.4 RESULTS BASED ON QUANTITATIVE ANALYSIS

#### 4.4.1 Measurement model evaluation

CFA using the maximum likelihood method was conducted via AMOS 18. The quality and adequacy of our measurement models was assessed by investigating convergent validity, and reliability. First, convergent validity was supported as a result of the fact that all loadings were highly statistically significant and the AVE exceeded the threshold value of 0.5. Second, reliability was supported as a result of the fact that all Cronbach alpha values exceeded 0.70, indicating acceptable reliability levels. Thus, these results have showed that the data are reasonably fitting the model.

The following items were removed:

**emo1** (*The doctor helped me remain calm*)

**emo2** (*The doctor allowed me to talk freely about my problems*)

**emo5** (*The doctor was really concerned about me and my condition*)

poce5 (Happiness)

The reasons attributed towards removal of the specified items are:

Low factor loadings – This implied that the concerned factors were not strong determinants of the construct.

Exceedingly high standardized residuals (> 4.0).

#### 4.4.2 Path model and hypothesis testing

The model fit indices obtained through the analysis reveal the following:

The Absolute fit index, Goodness-of-Fit (GFI) of 0.834 was found to be within the acceptable range of 0 to 1, as values closer to 1 are better indicators.

The Incremental fit index, Comparative Fit Index (CFI) of 0.924 was found to be within the prescribed range of 0 to 1, with higher values indicating a better fit. CFI values of less than 0.90 are not associated with a well fitting model.

The Goodness-of-fit index, Tucker Lewis Index (TLI) of 0.909 was found to be within the prescribed range of 0 to 1, as models with a good fit have values that approach 1.

The Badness-of-Fit index, Root Mean Square Error of Approximation (RMSEA) of 0.087 was found to be satisfactory, as 0.10 is the recommended limit for acceptable models, with lower RMSEA values indicating a better fit.

# 4.4.3 Variance Explained (R<sup>2</sup>)

The standardised estimates shown in figure 4.2, below reveal the following:

81% of the variance in Health care social support satisfaction (Sat\_SS Hcs) is explained by Emotional social support (Emo Hcs), Instrumental social support (Ins Hcs) and Informational social support (Inf Hcs) received from the health care systems,  $R^2 = 0.81$ .

85% of the variance in Behavioural intentions (**BI**) is explained by Health care social support satisfaction (**Sat\_SS Hcs**) and Post consumption emotions (**PoCE**),  $R^2 = 0.85$ .

8% of the variance in Post consumption emotions (**PoCE**) is explained by Emotional social support (**Emo Hcs**), Instrumental social support (**Ins Hcs**) and Informational social support (**Inf Hcs**) received from the health care systems,  $R^2 = 0.08$ .

72% of satisfaction with emotional support from health care systems (*sat\_em*) is due to the overall social support satisfaction from health care systems.

81% of satisfaction with instrumental support from health care systems (*sat\_in*) is due to the overall social support satisfaction from health care systems.

84% of satisfaction with informational support from health care systems (*sat\_if*) is due to the overall social support satisfaction from health care systems.

95% of recommendation of health care systems (*rec*) is due to the behavioural intentions (**BI**).

84% of loyalty towards health care systems (*loy*) is due to the behavioural intentions (**BI**).

78% of cooperation with health care systems (*coop*) is due to behavioural intentions (**BI**).

59% of 'fear' (poce1) is due to consumer post-consumption emotions.

82% of 'disgust' (poce2) is due to consumer post-consumption emotions.

65% of 'anger' (poce3) is due to consumer post-consumption emotions.

60% of 'sadness' (*poce4*) is due to consumer post-consumption emotions.

#### 4.4.4 Testing of Hypothesized relationships

The path diagram in the hypothesized model revealed the following aspects of the proposed relationships:

The relationship between 'Emotional social support from health care systems' (**Emo Hcs**) and 'Satisfaction of social support from health care systems' (**Sat\_SS Hcs**) shows a path coefficient (standardised regression weight) of 0.58, p < 0.001 is significant.

H1 which states - There is a positive relationship between emotional support from healthcare systems and consumer social support satisfaction from healthcare systems; is thus supported.

The relationship between 'Instrumental social support from health care systems' (Ins Hcs) and 'Satisfaction of social support from health care systems' (Sat\_SS Hcs) shows a path coefficient (standardised regression weight) of 0.35, p < 0.01 is significant.

H2 which states - There is a positive relationship between instrumental support from healthcare systems and consumer social support satisfaction from healthcare systems; is thus supported.

The relationship between 'Informational social support from health care systems' (Inf Hcs) and 'Satisfaction of social support from health care systems' (Sat\_SS

**Hcs**) shows a path coefficient (standardised regression weight) of -0.2, p > 0.05 is not significant.

H3 which states - There is a positive relationship between informational support from healthcare systems and consumer social support satisfaction from healthcare systems; is not supported.

The relationship between 'Emotional social support from health care systems' (**Emo Hcs**) and 'Post consumption emotions' (**PoCE**) shows a path coefficient (standardised regression weight) of 0.06, p > 0.05 is not significant.

H4 stating - There is a negative relationship between emotional support from healthcare systems and consumer post-consumption emotions; is not supported.

The relationship between 'Instrumental social support from health care systems' (**Ins Hcs**) and 'Post consumption emotions' (**PoCE**) shows a path coefficient (standardised regression weight) of 0.06, p > 0.05 is not significant.

H5 stating - There is a negative relationship between instrumental support from healthcare systems and consumer post-consumption emotion; is not supported.

The relationship between 'Informational social support from health care systems' (**Inf Hcs**) and 'Post consumption emotions' (**PoCE**) shows a path coefficient (standardised regression weight) of -0.39, p > 0.05 is not significant.

H6 stating - There is a negative relationship between informational support from healthcare systems and consumer post-consumption emotions; is not supported.

The relationship between 'Satisfaction of social support from health care systems' (Sat\_SS Hcs) and 'Behavioural Intentions' (BI) shows a path coefficient (standardised regression weight) of 0.94, p < 0.001 is significant.

H7 which states - There is a positive relationship between consumer social support satisfaction from healthcare systems and consumer behavioural intentions of recommendation, loyalty and cooperation; is supported.

The relationship between 'Post consumption emotions' (**PoCE**) and 'Behavioural Intentions' (**BI**) shows a path coefficient (standardised regression weight) of 0.07, p < 0.001 is significant.

H8 stating - There is a negative relationship between consumer post-consumption emotions and consumer behavioural intentions of recommendation, loyalty and cooperation; is thus supported.

Table 4.4, presents the results of the research hypotheses of our structural equation model, after completing path analysis.

Table 4.4
Empirical results of the proposed structural model

Causal Path	Hypotheses	Expected	Path	Assessment
		Sign	Coefficient	(p≦ 0.05)
Emotional	H1	+	0.58	s*
Support> social				
support				
satisfaction				

Instrumental	H2	+	0.35	S
Support> social				
support				
satisfaction				
Informational	Н3	+	-0.2	n.s**
Support> social				
support				
satisfaction				
Emotional	H4	-	0.06	n.s**
Support> post-				
consumption				
emotions				
Instrumental	Н5	-	0.06	n.s**
Support> post-				
consumption				
emotion				
Informational	Н6	-	-0.39	n.s**
Support> post-				
consumption				
emotions				

Social support	H7	+	0.94	s*
satisfaction>				
behavioural				
intentions				
Post-consumption	Н8	-	0.07	s*
emotions>				
behavioural				
intentions				

s = significant; n.s = not significant

Note: \* denotes p< 0.001; \*\* denotes p> 0.05

Obviously, hypotheses H1, H2, H7 and H8 are supported while H3, H4, H5 and H6 are not supported.

Figure 4.2, shows the structural model with standardized factor loadings, path coefficients and variance explained.

Chi-square = 1446.8; Degrees of freedom = 250

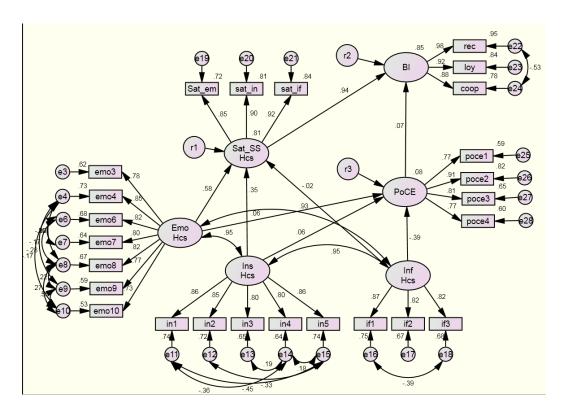


Figure 4.2 Structural model with standardized values

# DISCUSSION AND CONCLUSIONS

This chapter brings out the findings and summary of the study conducted and discussion on the results obtained after data analysis. The implications of the study for academicians and health care managers have also been brought out. Also included are, the limitations of the study conducted along with directions for future research and the final conclusions on the thesis.

#### 5.1 FINDINGS AND DISCUSSION

#### **5.1.1 Qualitative Research**

Although literature review threw up opportunities for further research in consumer emotions and coping mechanisms in the health care sector, in order to gain deeper insights and develop a better understanding of the research context for this thesis, an exploratory study was conducted. The IPA approach as a qualitative research paradigm was found suitable for the purpose of this study. Depth interviews were initially conducted using a sample size of 14 consumers of health care services;

- To understand the kind of emotions experienced by individuals in response to health concerns/issues.
- To learn about the experiences of people with respect to health concerns/treatments and identify methods adopted to cope with the situations faced.

 To learn about other direct/indirect influences on emotions felt during the experience.

The themes obtained from the depth interviews, during the first phase of the qualitative study, are summarized as under:

- Negative emotional experiences during illness.
- Social support as a strong coping mechanism during illness.
- Social support expectation from health care systems.

This revelation prompted further depth interviews of 10 more consumers of health care services which confirmed the above findings and also highlighted the need for social support from health care systems. Medical treatment and advice sought out by patients from health care services is viewed as social support. Another form of social support emphasized by respondents was the need for care, concern, assistance and special attention from service providers. While respondents would expect and receive social support from their social systems during their illness, it was noted that they had similar expectations from the health care systems since the persons involved were directly responsible for the treatment and cure of the illness experienced. This 'Social Support' perspective is thus an alternative to the 'Service quality' perspective in health care services.

While every human being goes through emotions every day, it was noted here that during illness, emotions are predominantly negative in nature. Respondents experienced negative emotions of anger, sadness, anxiety, frustration and disgust (of varying intensities) in response to negative symptoms of pain, discomfort, bleeding, nausea and abnormal growth.

The depth interviews also identified persons in the health care systems that interact with the patients throughout the treatment period, thus giving focus to the persons from whom social support was expected and perceived to have been received. Respondents revealed their feelings based on their experiences during treatment at the health care system. This revelation gave further impetus to the study. The depth interviews also brought to light the need to focus on the health care service sector for the study, given that health care service consumption is a highly emotionally charged experience and social support is especially required during stressful life situations such as illness.

The narratives of the interviews were studied for the underlying themes which helped to obtain a focused view that enabled formulation of hypotheses for further testing, through the use of quantitative methods.

#### **5.1.2** Quantitative Research

Based on the insights obtained through literature review, qualitative study (using IPA approach) and the research forum discussions; a questionnaire was developed, pilot study conducted and the quantitative survey carried out.

630 patients suffering from chronic illnesses formed the sample for this study that was conducted at health care service organizations (hospitals) from all over the state. Data obtained through the quantitative survey was analysed using SEM through AMOS18. The CFA/measurement model was first tested for validity and reliability and after having achieved the same, the structural model was analysed for the purpose of path analysis and testing the hypothesized relationships. In an effort to achieve satisfactory model fit, a number of modifications and

adjustments were required before the model was finally accepted. The prescribed SEM fit indices namely; GFI, CFI, TLI and RMSEA along with a low chi-square value, were indicators of an acceptable model fit.

Health care social support satisfaction, with an R<sup>2</sup> of 0.81 suggests that the three constructs - emotional social support, instrumental social support and, informational social support - greatly determine variations in the overall health care social support satisfaction of consumers. This finding is consistent with Da Costa, et al. (1999), whose study on patient satisfaction with health care, found that social support was a very significant predictor of overall health care satisfaction.

The findings support hypotheses H1 and H2, according to which emotional and instrumental social support from health care systems positively impact consumer social support satisfaction from health care systems. Higher the emotional social support from health care systems (standardized  $\beta=0.58$ ), higher is the overall health care social support satisfaction. This reveals that the patients' belief that the health care providers care for and, are concerned about them, gives rise to an increase in social support satisfaction. Emotional support appears to be the strongest predictor of overall social support satisfaction in health care systems. The impact of instrumental social support from health care systems (standardized  $\beta=0.35$ ), on health care support satisfaction is moderate. Higher the instrumental support from health care systems, higher will be the overall satisfaction with social support. This result slightly differs from that of Cheng (2004), who found little support for the impact of instrumental support in patients suffering from chronic illness. The indicators of instrumental support measured in this thesis

include - the reliability of the doctor, the doctor's efforts to cure the illness, provision of necessary treatment by hospital staff, arrangement of necessary technical assistance and, proper care provided by hospital staff. The stated indicators might be the minimum requirements of any health care service provider, and perhaps patients would not usually consider those indicators to relate to social support.

The findings do not support H3, which states that there is a positive relationship between informational social support and health care social support satisfaction. In fact, informational social support from health care systems has the weakest influence on social support satisfaction (standardized  $\beta = -0.2$ ), in comparison to emotional and instrumental social support. This result differs from that of Cheng (2004), who found that informational support appears to be more effective when provided by healthcare workers, and most helpful when the source was a physician. Informational social support indicators in this thesis include - medical advice by the doctor, decision assistance on a suitable medical treatment and, proper guidance provided by the hospital staff. A look at these indicators, point to the possibility that patients may not totally rely on the advice and guidance of the health care system on matters relating to medical treatment. Other sources such as books, internet, social systems, persons' suffering from similar diseases/ experiencing similar symptoms; may be resorted to for informational support. Therefore, unless the health care system provides more in terms of informational support, it would not impact overall social support satisfaction. Also, all kinds of support may have a link to emotional social support (Trobst, Collins, & Embree,

1994) and informational social support could also be perceived of being 'emotional' in character.

The study findings also do not support hypotheses H4, H5 and H6, which state that emotional, instrumental and informational social support negatively impacts consumer post-consumption emotions. An R<sup>2</sup> of 0.08 reflects the poor relationships of the three stated constructs with consumer post-consumption emotions. Perhaps perceived social support from health care systems alone does not lead to a positive change in emotions and, other extraneous variables such as magnitude of the illness, outcome of the treatment and social support from social systems (which are not a part of this study) may be strong influencers in this regard.

The results confirm hypothesis H7, according to which there is a positive relationship between health care social support satisfaction and consumer behavioural intentions. Hypothesis H8 is also accepted, which means that there is a negative relationship between consumer post-consumption emotions and consumer behavioural intentions. An  $R^2$  of 0.85 indicates that the two constructs social support satisfaction and post-consumption emotions - greatly determine the variation in positive consumer behavioural intentions in health care systems. However, social support satisfaction has a greater impact (standardized  $\beta = 0.94$ ) on behavioural intentions in health care systems than post-consumption emotions (standardized  $\beta = 0.07$ ). While customer satisfaction is crucial for marketing planning since it influences customers' positive behavioural intentions (Fen & Lian, 2007), the strong relationship found between social support satisfaction and behavioural intentions indicates that in the health care industry social support

satisfaction plays an important role in creating a significant impact on positive consumer behavioural intentions.

Fen & Lian's (2007) study investigated the influence of service quality and satisfaction on positive BI of re-patronage, and found the strength of the relationship between satisfaction and positive BI with R<sup>2</sup> value of 0.68. Sheu's (2011) study states that satisfaction is an evaluative summary of consumption experience which is likely to have a direct impact on intentions. His findings on the relationship between satisfaction and favourable behavioural intentions reveal R<sup>2</sup> value of 0.76. In this thesis, the high R<sup>2</sup> value obtained for BI as a result of the impact of social support satisfaction may generate research interest in the latter.

Although consumer post consumption emotions were found to predict behavioural intentions of recommendation, loyalty and cooperation with treatment procedures, this relationship does not appear to be very practical and meaningful. Perhaps in chronic illness situations, where the illness may not be curable, post consumptions emotions are not necessarily strong predictors of positive behavioural intentions, as compared to social support satisfaction.

#### **5.1.3** Achievement of Objectives

The extent to which the stated objectives were achieved in this study is explained below:

Objective (a): To study the role of emotional, instrumental and informational social support from healthcare systems, in determining consumer social support satisfaction.

To achieve this objective, a categorization of the three types of support were made by identifying variables/ indicators from the narratives (obtained from depth interviews) using social support theory as a base. The newly developed scale incorporated the three types of social support in tune with existing social support scales and issues relevant to patients in the health care sector. This was then subject to inter-rater reliability for confirmation of categorization. Relationships relating to the objective were hypothesized (H1, H2 and H3) and tested using SEM. The results of the study revealed that there is a positive relationship between perceived emotional and instrumental social support on social support satisfaction while informational social support does not have the same effect.

<u>Objective (b):</u> To determine the impact of health care based social support satisfaction on consumer behavioural intentions of recommendation, loyalty and cooperation.

To achieve this objective, overall social support satisfaction was evaluated using three indicators of emotional, instrumental and informational social support satisfaction, which were measured in the quantitative study along with behavioural intentions of recommendation and cooperation. The hypothesized relationship relating to this objective (H7) is supported by the analysis and has proved to be the highlight of the findings, with social support satisfaction being posited as an alternative to service quality satisfaction in determining positive consumer behavioural intentions.

<u>Objective (c):</u> To determine the extent to which emotional, instrumental and informational support from heath care systems influence consumer post-consumption emotions.

Three relationships were hypothesized to achieve the stated objective namely; H4, H5 and H6, all three of which were not supported by the findings. While these findings were not expected, given that a different understanding was developed in this regard during the qualitative survey; there appears to be more to be done in this area in order to arrive at a definite conclusion. It is assumed that the inclusion of other extraneous variables, as influencers of consumer post-consumption emotions may yield different results. However, in relation to the present study, each of the support types namely; emotional, instrumental support and informational support appear to have little influence on consumer post-consumption emotions.

<u>Objective (d):</u> To study the role of consumer post-consumption emotions in influencing consumer behavioural intentions of recommendation, loyalty and cooperation.

The hypothesis H8 was formulated to fulfil this objective. The post-consumption emotions that were measured in this study were all negatively valenced, with the positively valenced emotion being removed due to low factor loading and standardized residuals exceeding the threshold value. These negative emotions were studied as being similar in nature to the pre-consumption emotions, with a change in intensity (either reduced or increased) post-consumption of the service.

The findings support the hypothesis however; the low path coefficient ( $\beta$  value) indicates that the relationship may not be very meaningful.

## **5.2 THEORETICAL IMPLICATIONS**

Extant literature in the domain of emotions, social support, social systems, health care and service marketing was reviewed in order to obtain an understanding of the theoretical background behind the phenomenon being studied. Each of the domains had a huge body of knowledge firmly set in theories that have been well defined and formulated.

This thesis moved towards an attempt to study knowledge gained from theories set in the fields of psychology, sociology, health care and clinical studies; with an objective of applying the same within the purview consumer behaviour and service marketing, particularly health care service marketing. The development of a new measurement scale was warranted to fulfil the same objective and customize the study to suit the requirements of the unit of analysis and the sector of study.

Some significant theoretical contributions appear to emerge from this research.

First, to the knowledge of the researcher this is a different approach (in comparison to other studies on services marketing), to understand the factors that strongly influence positive consumer behavioural intentions. Most studies have been found to emphasize on the importance of service quality satisfaction as a determinant to consumer behavioural intentions. This contribution to academic

theory provides a relatively new dimension of thought which may lend well to the domain of health care service consumption.

Second, the newly developed scale was subject to a series of prior testing that involved group discussions, expert ratings, validity and reliability tests and pilot survey before it was finally accepted. This scale may be used for further studies on social support in the health care sector.

Third, stories obtained through the qualitative survey may be used for formulating fresh hypotheses that could warrant further quantitative data collection and analysis. This would open up new areas of thought and research. The same can also be said of data obtained through the quantitative survey.

Finally, this research which was conducted in the health care service sector is another contribution to knowledge gained through deeper insights from patients which, is relatively a difficult task; given the frame of mind of the patients, their physical discomfort, awkwardness associated with the disease or symptoms and, lack of motivation to participate in surveys such as this one.

Existing literature points out that supportive actions tend to enhance coping performance, while perceptions of available support have the effect of making potentially threatening situations seem less stressful (Lakey & Cohen, 2000; Ali, et al., 2010). Knowing that they are valued during illness is an important psychological factor in helping patients to forget their stressful situation, and think more positively about their environment (Ali, et al., 2010). This research adds to existing literature on social support, emotions, coping, customer satisfaction and behavioural intentions; in terms of proposing a new perspective of thought and

theory, that of social support satisfaction and consumer emotions as determinants of behavioural intentions. Research on patient coping may benefit from a deeper understanding of these concepts from the health care service perspective, which has been the focus of this study.

### 5.3 MANAGERIAL IMPLICATIONS

The study posits emotional support as the strongest predictor of social support satisfaction as compared to instrumental and informational social support. This portrays the importance of the 'personal touch' provided by service providers in enhancing customer satisfaction. As stated earlier, experience of illnesses are stressful life events, evoking negative emotions and, the consumption of health services thus become emotionally charged experiences. Emotional support in such situations would greatly impact the overall social support satisfaction of consumers/ patients. Health care service providers could benefit greatly by providing social support in the form of love, care, concern and empathy towards their patients, besides curative treatment efforts.

The patients' need for social support stems from trying to cope with the illness experienced. Health care personnel can be equipped with necessary training and information to gauge and handle patient emotions appropriately, as it is believed that victims of disease or distress would communicate the need for support and thus elicit the same (Dunkel-Schetter & Skokan, 1990). This is also relevant since social support has been found to play a significant role in improving the effect of medical treatment through providing patients with a positive frame of mind (Junghyun, Han, Shaw, McTavish, & Gustafson, 2010). Vanpariya (2010), in his

study on emotional satisfaction and loyalty recommends that employees should be trained to observe evoked emotions in customers and to report them to the organization in order to increase the potential positive impact on customer loyalty and relationship quality.

While quality of health care service does assume significance, the 'people' aspect should be emphasized within the purview of health care and service providers should focus on achieving social support satisfaction which will ensure positive behavioural intentions. Besides cure of the illness, the patient would probably decide on follow-up, cooperate with treatment procedures and recommend the service provider to others based on the personal touch and social support satisfaction experienced at the organisation. Therefore, management strategy should incorporate initiatives that maximize patient social support satisfaction.

#### 5.4 LIMITATIONS OF THE STUDY

Since data on emotional experiences and social support were required to be gathered from chronic patients, it became necessary to obtain the same from very recent consumers of health care services. Practical difficulty was therefore encountered in gathering information from patients due to their state of mind and discomfort during the illness. Besides, the need to ensure that responses were accurate required personal administration of the questionnaire to the large sample requirement of Structural Equations Modelling.

The sample was drawn from the state of Goa in India, limiting the geographic scope. However, efforts were made to ensure that both private and government managed hospitals from all regions of the state were covered. In addition, patients

from neighbouring states who take advantage of the financial concessions offered by the government hospitals were also a part of the sample. Therefore the findings of the study may be generalised across different populations.

The concepts of emotional, instrumental and informational social support originate from social support theory where, they have been related with social systems/networks. Differences in age, cultural and gender perspectives have not been considered in this study and various types of chronic diseases were covered to arrive at the findings.

### 5.5 DIRECTIONS FOR FUTURE RESEARCH

This research which has been carried out on chronic patients in the health care service context would perhaps benefit from further studies taking into consideration differences across age, gender, culture and specific disease types.

Future research may also consider other variables that would impact consumer emotions and the resultant impact on consumer behavioural intentions. A recategorisation of types of social support specific to health care service sector might also be considered for research. The role of social systems along with that of health care systems in the provision of social support and the resulting impact on positive behavioural intentions is another area ripe for research. Related studies that include additional emotions within the context of post-consumption emotions; besides negative behavioural intentions such as switching behaviour and complaining behaviour of consumers may also be considered.

#### 5.6 CONCLUSIONS

According to Cobb (1976), social support can reduce the amount of medication required, accelerate recovery and facilitate compliance with prescribed medical regimens. This clearly underlines the impact of health care social support on positive consumer behaviour intentions. A focused study on this aspect has been dealt with in this thesis.

Recent studies in various service sectors, have found customer satisfaction to be a strong predictor of behavioural intention (Cronin Jr., Brady, & Hult, 2000; Chen, 2008; Cao, 2012; Park & Nunkoo, 2013; Rajaram & Sriram, 2014). However, the focus in these studies appears to be on 'service quality' satisfaction.

Considering the significant impact of health care social support satisfaction on consumer behaviour intentions proved here in this study, health care service providers need to formulate new strategies to enhance social support satisfaction so as to develop positive consumer behavioural intentions. While service marketing literature propounds that service quality leads to satisfaction and ultimately positive behavioural intentions, in the case of health care service organisations social support satisfaction assumes great significance.

As health care services are emotionally charged by nature, individuals look for social support to tide over the negative emotions experienced during illness; and professional treatment offered to cure the disease, is just a part of social support. The influence of consumer emotions in determining consumer behavioural intentions may go alongside proper and successful medical treatment, thus in case

of diseases where there is no hope for cure, post-consumption emotions may be an influencing factor in behavioural intentions.

This research arrives at the conclusion that 'social support satisfaction' should be viewed as a strong predictor of positive consumer behavioural intentions of repeat visits, customer recommendation and, cooperation with treatment procedures in the health care service industry.

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## **QUALITATIVE SURVEY**

## **NARRATIVES**

**Respondent –A:** Age: 40-45

Gender: female

Marital status: married, 2 children.

Disease type: chronic

The abnormal signs made me go to the hospital. It did not seem very serious in nature.

There was no fear in the early stages of my illness due to the ignorance of the type of illness.

The suggestion to be concerned and worried about my illness came from my relative who is a professional nurse.

I worried about myself and the uncertainty that lay ahead.

The hospital, especially the doctors caused more worry as they prescribed MRI, CT scan and x-ray. It worried me more since the MRI was taken first.

The doctors then recommended immediate surgery and treatment. I was then scared and in doubt.

I did not want to undergo treatment at the hospital of consultation since I did not trust the hospital.

At first the cause of my illness was not found.

I was informed about dire consequences in case proper treatment was not undertaken.

I sought treatment elsewhere.

My religious beliefs helped me through the entire ordeal. I had strong faith in God

and the confidence that alternative treatment would be available.

A 2<sup>nd</sup> hospital was consulted and the doctors there recommended a different

treatment and also referred me to other doctors.

I had been hopeful all along.

Proper explanation was given by the 3<sup>rd</sup> doctor. The treatment, a 3-stage process,

had been recently introduced (2 years earlier). This created some doubt in my

mind since the success rate was not known. So the decision was taken to go

through only one of the stages (1<sup>st</sup> stage only). And I left the rest to God.

What helped all along was- the support from my husband, relatives (close family

members).

-I had strong faith in support from my husband in

dire circumstances.

Did the thought of dependent children create an impact? There was an increase in

worry about my special child and the need to be there for her.

Post treatment feelings: I went for religious retreats and prayers. I felt that being

in constant touch with god will prevent aggravation and recurrence of the disease.

There was knowledge that god is the greatest doctor and took the decision not to

go back for the 2<sup>nd</sup> and 3<sup>rd</sup> stage of treatment.

There is a realisation that stress will cause recurrence of the disease and so will

physical exertion.

I did not have any health problem earlier in my life.

The doctor mentioned that hypertension could be a possible cause of the ailment.

I am happy that the disease has not recurred and I don't have it anymore.

**Respondent –B:** 

Age: 40-45

Gender: female

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Marital status: married, 2 children.

Disease type: chronic

I had a heavy bleeding problem for 6 months. I waited for 6 months to take a decision to finally visit the doctor. I felt that the problem would pass off but since it persisted, I got scared and then visited the gynaecologist.

The diagnosis seemed accurate. It did not increase my fear. Medication was prescribed to keep the ailment under control.

My relatives advised me not to consume the prescribed medication which led to an increase in fear. So then I decided to take the medication in moderation as and when I felt I required it the most. I did not take the medication as per prescription.

Repeated visits to the doctor and scans were done. I was not willing to go according to the doctor's advice for surgery on the uterus, during the prime time of my life. I took a 2<sup>nd</sup> opinion which again prescribed surgery. I was then too afraid to visit doctors. Numerous tests were done-ultrasound, pap smear, biopsy. There has been a fear of having a disease in future.

I feel as if life is miserable.

I can't continue with a single doctor for long since I am not confident with the advice and consultation. I also have the fear that the medication may lead to other problems. Every time a doctor suggests some treatment, fear stops me from visiting the same doctor again.

I have visited other doctors for 3 months.

During the time of going through the illness, my mind gets the better of me. Now I have decided not to visit any doctor but just to wait and watch.

I am fed up and disgusted. I have reached a stage where I have decided that I will adopt a healthy lifestyle by eating fruits and vegetables.

Through the illness period what influenced me to visit the doctor was: when fear increased, on a friend's advice, knowledge of the doctor's expertise.

I felt weak when I felt that the children needed me more since they were too small. The fear is less now since the kids have grown.

I did not meet many people with my type of problem.

I have decided to take life as it comes and now I feel much better. I had taken the decision to go to the gym. I felt that exercise did not worsen and if it is continued, it may help me.

I now avoid certain food items for fear that it may aggravate my condition. e.g.: papaya, chocolate. I don't indulge in heavy/hard work during the days when I face the problem. I feel that prevention is better than cure.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**Respondent – C:** Age: 30-35

Gender: male

Marital status: married, 1 child.

Disease type: chronic

Personality type: usually optimistic

Chronic ailment-bone and muscle related; stomach related.

When I began to feel a continuous pain in my knee, I felt that a medical check-up was required.

The doctor advised me to get an x-ray done and later on suggested that I go in for surgery. I felt scared as it was not expected and I was not sure of the success of the surgery.

My family advised me to take a 2<sup>nd</sup> opinion. The 2<sup>nd</sup> doctor advised me to undergo physiotherapy. My fear decreased considerably and I followed the doctor's advice.

After treatment, I felt relieved.

Sometimes the pain seems to recur so the process is on-going. When the problem recurs, I fear that the problem might aggravate and that I may have to undergo surgery.

I invested in a mediclaim policy due to this situation.

Later on I discovered a different health problem; I experienced a severe pain in the stomach and promptly went for a check-up at a specialised hospital since I feared a severe problem like gall bladder stones or something as severe. I was more worried than before, and even began inquiring about the issue with the scan technician. More inquiries followed with the doctor and finally I relaxed after consultation with the doctor.

What /who helped me cope:

- -my mother and wife helped me through the entire ordeal. My family did not let me go through it alone.
- -my physiotherapy gives me relief.
- -I follow a proper diet plan.
- -mediclaim investment for future use has reduced my financial worries.

I go for regular follow-up/check-up. Now I am more relaxed.

I am usually optimistic but when it comes to my health problems, I feel more pessimistic.

I am not confident of the services at GMC. The type of hospital played a major role in the treatment of my disease.

My current feelings:

- -I am very hopeful
- -I am content with life
- -I am less fearful of the future
- -I have learnt to live life as it comes

I believe that whatever is bound to happen will happen and there is no need of worrying about it.

My family has advised me to live a stress-free life. The high degree of family support helped me to cope.

\*

**Respondent – D:** Age: 30-35

Gender: male

Marital status: married, no children.

Disease type: chronic

The ailment was self-noticed. I felt an abnormal pain, bouts of pain which disturbed me completely. Then I visited the doctor who recommended surgery. After the surgery the disease has been controlled.

Post treatment I have felt huge satisfaction since the disease could have been serious. I was relieved. However a slight fear still remains, although I still feel optimistic about the future.

What has helped me cope with the condition was:

- My optimism
- -my wife has been a huge support
- -my doctor has also been a personal support with whom I share a high comfort level.
- -the quality of hospital service
- -the added knowledge through personal research carried out.

I did not share my problem with other family members because I did not want to create fear or worry in them.

I have planned a health insurance investment

I keep a regular check on myself, even the slightest doubt take s me to the hospital.

The hospital has a good administrator and excellent nurses.

I am usually an optimistic person and usually focus on the solution and not on the problem, whether it is work-related, health-related or otherwise.

I sometimes expected more of the doctor's time which, I did not always receive but, it was not his normal/usual behaviour.

The doctor and the hospital played a role in controlling my emotions.

The doctor was realistic about my condition.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**Respondent** – **E:** Age: 35-40

Gender: male

Marital status: married, 2 children.

Disease type: chronic

I noticed a painless and abnormal swelling/growth on my hip. The fear that the growth could lead to something dangerous prompted me to visit the doctor.

I feared that the growth could be cancerous since the growth did not hurt. It was a self decision to visit the doctor. After consultation with the doctor, I felt some relief since the doctor said that it was just a harmless growth called lipoma.

When the lump kept on growing, fear arose again and then I went in for a second opinion. The 2<sup>nd</sup> opinion did not rule out cancer so the fear crept in again.

I decided to go in for a minor surgery to get the lump removed and have it sent for testing.

After the surgery I felt relieved a little but was anxious about the test results.

The test results revealed that the lump was benign (non-cancerous)/negative for any disease and I felt relieved.

During the experience of fear and anxiety what helped me cope was:

- -my self-confidence
- -keeping myself busy
- -faith in god
- -I also had the support of my wife and parents.

I am usually an optimistic person and have remained so even during the lipoma phase.

\*

**Respondent** –  $\mathbf{F}$ : Age: 40-45

Gender: female

Marital status: married, 2 children.

Disease type: umbilical hernia (acute)

An abnormal growth was experienced. The doctor observed the abnormal growth during pregnancy consultation in Dubai. I did not worry about it then.

After consulting the doctor in Goa, I realised the magnitude of the ailment and felt a little worried.

The doctor's advice proved to be very helpful. I was told that the surgery would not hurt but I felt a slight anxiety.

I am not afraid of any health issue; I feel I can handle my health fears on my own.

During the treatment period, I was not sure of the success of the treatment and felt some anxiety. I was back to my normal self after a month since the treatment.

I am satisfied with the treatment but still feel the pressure after a hard day's work. I continue to have minor health issues.

My coping strategies include:

- -positive thinking
- -setting deadlines for myself
- -religion and faith in God.
- -my family support (mainly my husband and mother)
- -medical advice (the role of my doctor)

I take each day at a time. I have no worries about recurrence of health issues in future.

\*

**Respondent –G:** Age: 35-40

Gender: female

Marital status: married, 2 children.

Disease type: incisional hernia

After my 2<sup>nd</sup> delivery through c-section I realised that 1 ½ month after surgery there was some swelling and redness on a part of the surgery scar.

I went back to the surgeon who prescribed an ointment which seemed inappropriate to me, since the problem was internal.

I did not have faith in the doctor or the nurses/hospital due to the previous experience. I felt that the doctor and his hospital were just running a business for profit.

The pain caused by the swelling (on the surgery scar) caused worry. I do not like visiting hospitals; the hospital odour itself always seems scary ever since I was a child.

I experienced fear at the prospect of further surgery and worried about the future course of treatment. The uncertainty about the cause of the swelling was also causing some anxiety.

Then I decided to ignore the pain and try to live with it. In fact even the doctor said that I should ignore it. I was so disgusted with the doctor since I somehow felt that he did not perform the c-section properly and he was responsible for my pain and swelling.

Every time I pass by that hospital, I seem to feel a slight shiver through my body.

It took me almost a year to finally seek the advice of another specialist on my condition. When I went to the hospital, I was hopeful since I would be consulting a renowned gynaecologist. He diagnosed my condition as incisional hernia. However the manner in which this 2<sup>nd</sup> doctor examined me felt a little awkward and improper but, I went along with what he said and did since I had heard only good reports about his skills. I was hopeful that the exercises recommended would help me. Every visit to the hospital however seemed like a waste of time since the waiting period was very long, going up to even 5 hours at times, since the doctor would leave for surgery on many occasions.

I began to feel hopeless and helpless but I just wanted to put an end to my suffering and pain.

When the doctor recommended surgery, I was scared again as I hate hospital treatments, injections and hospital stay.

After the surgery I felt relieved but later I realised that the doctor did not inform me about important aspects regarding the surgery. He did not inform me that he

would be using internal staples.

After the entire treatment, I felt that the doctor was not very professional but just

business-oriented.

The hospital was also very mechanical. There was no personal touch during any

stage of my treatment or follow-up, the same as in the case of my previous doctor

and hospital.

I would not recommend that doctor or hospital to anyone and will not visit that

place again.

I felt angry and disgusted with the hospital and doctor. I regret having visited that

hospital.

I sometimes worry that I am unable to be as energetic as I want to with my kids.

The surgery pain (perhaps due to the internal staples) hurts at times.

What/who helped me cope?

- I used prayer as my coping mechanism

-faith in god

-my husband was a strong support

- My parents and extended family was also concerned and supportive.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**Respondent –H:** 

Age: 20-25

Gender: female

Marital status: single.

Disease type: urinary infection.

I am moderately pessimistic.

I experienced a stomach ache, since it was unbearable; I decided to visit the

doctor.

I did not know the problem and I did not know what to do.

I felt irritated, there was too much of fear and anxiety. I cried bitterly and made others also cry. The condition was so bad that many of my family members also accompanied me to the doctor. I felt depressed.

The doctor irritated me with his questions. Although he diagnosed the problem, he seemed unsure of the treatment. However, the initial treatment was effective.

I felt that the doctor wasted time, first in meeting me and then with his questions.

After treatment, I felt relieved but some fear was still there since I was unsure of whether the ailment would recur.

The problem seemed to recur due to improper eating habits and lack of sufficient water intake.

When the problem recurred (after 9 years), there was worry and fear. The doctor diagnosed it as kidney stones. Now the fear and worry remains.

## Coping mechanisms:

- -I had strong family support (immediate and extended family). They helped me to calm down. They take care of my diet and ensure that I follow a proper diet regimen.
- Prayer and religious beliefs
- -I pray a lot when in pain and it has calmed me down. I feel fine after prayer. I also feel that even if I had an improper diet, prayers would not allow me to suffer. God is my healer.

I always pray that my ailment may not recur.

I plan to go in for specialised treatment from a specialised doctor. I am hopeful for a better and healthy life after treatment.

Now I realise what it is to be in pain and undergo hospital treatment. When I see anyone on drips or treatment I also feel their pain.

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**Respondent –I:** Age: 45-50

Gender: female

Marital status: married, 2 children.

Disease type: benign lump (fibroids)

I am moderately pessimistic-optimistic.

After my sister went through the ailment, I decided to get a check-up. That's when I realised that I too have a growth which could be malignant /cancerous.

The doctor advised me to ignore the issue and gave me some medication.

Later, when a specialist examined me, he seemed to be unsure and advised me to get rid of the growth.

That night was the worst. I thought about my dependent children, my job, my leave, my survival.

I was scared to death since the same specialist ruled out the problem in my sister's case.

I could not believe it and questioned- why me? Finally too tired, I dozed off.

I also cried and shared my feelings with my husband and mother.

The mammogram was a horrible experience.

What/who helped me cope?

- -my husband was very practical and clamed me down.
- My mother also made me calm.

However my family support did not seem to alleviate the problem. I felt that I was going through the problem so no one would be able to understand it.

- I prayed a lot during the ordeal.

My experience with the mammogram was a horrible experience. The technician was stern and un-co-operative. I felt scared and worried.

The mammogram revealed no problem, the growth was benign.

I was relieved beyond imagination and was unable to express my happiness. The growth was also removed. The kind of fear during surgery was different, related

to the pain that I would have to go through. I thought of forgiving all the wrongs of others.

I had become melodramatic before the scan. I had begun to think of death.

I have now developed a kind of phobia. I do not feel like going for a follow-up. The nagging feeling about recurrence still haunts me.

I am also reluctant to go through scans due to the harmful effects of radiation.

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**Respondent -J:** Age: 35-40

Gender: male

Marital status: single.

Disease type: hernia

I am a highly optimistic person by nature.

An abnormal sensation prompted me to visit the doctor. I felt a little worried.

The doctor made me comfortable and made me realise that I was going through a common problem.

The private hospital I went to was very supportive. The hospital had a tie-up with the company that I worked for. They gave me personal attention. The hospital gave me the best treatment.

The best surgeon operated upon me. I was very happy with the service. I did not realise when the surgery began and ended.

After surgery I went to the doctor for a follow-up and he checked upon me.

The surgery was a success. The ailment was cured.

Except for the initial worry, I felt relaxed, relieved and ultimately happy and satisfied with the experience.

## Coping mechanism:

- I had an optimistic attitude that this too shall pass.
- -a little bit of prayer.
- -I had faith in god.
- -I had a good doctor.
- -the hospital was good.

-the company (my employer) financed my surgery.

I was all alone, without my family but I did not have to worry as I was taken care of very well. Even though I was in a foreign country, I did not have any financial worry as my employer took care of my hospital bills.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**Respondent –K:** Age: 30-35

Gender: female

Marital status: married, 1 child.

Disease type: gall bladder stones

The first symptoms appeared on dec 31/2011; I woke up at 3.a.m with extreme discomfort in the upper abdominal area. It was a burning sensation that just worsened over the next one hour and then subsided. This episode reoccurred on Jan 9 at 3a.m again, for some reason it surfaces up early morning. But this time the pain worsened and did not get better and this time the pain was radiating to the left side of my chest. It was accompanied by vomiting and chest pain.

My husband, seeing my deteriorating condition prompted me to seek immediate medical attention

When I felt sick, I underwent mixed feelings of anxiety, pain, and anticipation.

The doctors made me feel at ease and once the entire process of laparoscopy was explained, I was more comfortable undergoing the surgery. I was glad I was in capable hands. Surprisingly enough I was not scared at this point.

My husband was my strong support, so also family friends who cared for our son and provided us with meals all through my first week of recovery. My mum provided me with much needed emotional and moral support all throughout this experience. Relatives and friends offered prayers and the confidence needed through their personal experience.

Thankfully the laparoscopic recovery is pretty quick approximately a week or two. I didn't feel the need for painkillers, would take small walks to enhance blood circulation from day 2 onwards. I needed minimal assistance to get up from the bed, but other than that everything else was smooth.

After the treatment, I felt some relief as well as anxiety as to how my body would cope-up with digesting oily food.

Before the diagnosis my condition felt like an acid reflux, when it deteriorated it felt like a heart attack .I knew it either could be something really petty or probably something fatal. I started to get concerned before the diagnosis, we called the ambulance and the doctor informed me it was a gall stone attack. I think at that point we were relieved but also were looking for answers as to how it happened. To summarize my feelings I would say they were feelings of stress, anxiety, worry and frustration up until the diagnosis ,once diagnosed I was happy and relieved.

I was a little nervous having to leave my one year old in my friends care, I was not mentally prepared for such a situation, but the almighty took care of my concerns and worries. He was in safe hands of a friend and, was happy to be there amongst her two sons who kept Nathan entertained. Once the surgery was performed the recovery period was a little frustrating since there were restrictions on heavy lifting. All I could do was just watch Nathan but could not carry him, hold him, feed him or tend to his needs. Thankfully my spouse did a great job in tending to our sons needs which in turn settled my worries.

I would be very honest when I say I am glad I had the gall bladder taken out the reason being it caused me a lot of anxiety, pain and discomfort. My main concern was digestion problems, but that does not seem to be the case, most of the times at least.

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**Respondent –l:** Age: 70-75

Gender: male

Marital status: married, 4 children (all independent adults).

Disease type: malaria (Falciparum)

I had a slight fever. It appeared to increase and was very unstable. I was feeling very uncomfortable.

At first I thought it could be treated at home with the usual fever medication but since there seemed to be no improvement, I visited a doctor.

The doctor recommended a blood test and even after the test the problem could not be diagnosed.

I was advised hospitalisation, there was a doubt regarding typhoid or something similar.

The fever seemed to increase during the nights.

On one occasion when the fever was very high, a blood test was done and malaria was detected.

The doctor, who was an intern, seemed worried and what she said was not very comforting. She said that I was suffering from the most fatal type of malaria, called Falciparum and that most people don't survive this kind of malaria. Then she said "anyway let us see what will happen".

I was worried since I might not have been cured.

But, I was assured of family support and prayers. I also did not have any more desires to be fulfilled; all my children were also capable and employed.

Fortunately I was fully cured of the disease.

I was very happy as I was normal in terms of my routine activities.

I had full faith in God that I would be cured.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**Respondent - M:** Age: 70-75

Gender: male

Marital status: married, 4 (adult and independent) children,

1 grandchild.

Disease type: hernia

There was some pain and swelling in my stomach so I visited the doctor. The doctor said that it was hernia. He advised surgery but he also said that I could decide to not to have the surgery and it was left for me to decide. The doctor said that although I could face some discomfort, I could still go about my daily activities.

But I decided to go ahead with the surgery, just to finish it off.

I was not afraid at all because nobody dies with hernia. I usually worry when I am not well so I had the usual worry about sickness.

All my children were independent, capable of taking care of themselves and supportive. My wife is always by my side.

The doctor was well known to me so I was very comfortable with him.

I took it as a part of my life. I just wanted to be active again.

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**Respondent - N:** Age:

Age: 75-80

Gender: male

Marital status: married, 4 children, 7 grandchildren.

Disease type: herpes

I had gone to Canada for 6 months, for my daughter's delivery. I was feeling very uneasy and felt a slight increase in my temperature. I tried to get it under control. For around 15 days the fever continued, increasing during the nights.

I was worried.

I also noticed some boils on my body and thought it was prickly heat. When I visited the doctor, he diagnosed it as herpes.

My worry increased when the doctor prescribed a special diet since I would not be able to eat the food that I liked.

I got worried again when my appetite decreased.

For 18 days there was no effect of the medication. The doctor said that the medication would take at least a fortnight to show improvement.

I felt a lot of weakness. I was consuming more of a liquid diet.

When the doctor told me that it would take at least 5-6 months to heal, again I was worried.

I wanted to be home in Goa, I did not even know the doctors there in Canada.

While travelling back home I felt more sick. After reaching Goa I felt a little better.

I consulted 2-3 doctors who also told me that it would take 6 months or more to recover.

I spoke to other people who had the disease and they told me that it took them 1-2 years and I was more worried.

I would get the pain sometimes and immediately go to consult a doctor.

Slowly the pain began to decrease but the weakness remained. I would not be in a position to go for my regular walks or daily mass service.

After 6 months I was relieved, I started to go for my walks, meet people and go to church daily.

My fear was not being able to walk and go for parties and other gatherings.

I usually keep my emotions to myself. I don't like to upset my family members. But my family members are always concerned about me.

I did not worry about my family as all my children are well settled and happy with their families. I have nothing more to achieve in life. I had full faith in the doctors in Goa. While in Canada I felt more comfortable only with one Goan doctor who attended to me.

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**Respondent - O:** Age: 40-45

Gender: female

Marital status: married, 3 sons (school-going)

Disease type: appendicitis

All of a sudden one day I had unbearable pain on the right ride of my abdomen. I took a painkiller and went about with my routine work. I was cool about it at first and did not intend to visit a doctor. My dad and brother persuaded me to consult a doctor. Action was taken on the same day.

The doctor advised me to consult a specialist who diagnosed my condition as acute appendicitis. The surgery was scheduled for the next morning.

I never worry about surgery. I just can't bear the drips, I get irritated because of the swelling, blocking and to add to it my hands are very thin.

I had to bear the pain that comes with the surgery; there is no other way out. I take life as it comes.

My only worry was -the kids, managing the home during my hospital stay was a problem even with the help of my husband.

I had no trouble during my 3 caesarean deliveries w.r.t managing my kids since my parents, sisters and brothers were managing everything.

With this surgery, first my parents, brothers and family helped and then when my husband came down, he tried to manage.

The kids were independent but they were worried. They keep telling me "mama no more surgeries please, you may die".

My experience at the hospital was good. I had full faith in the doctor and nurses due to past experience with surgeries in the family.

The treatment and follow-up was very satisfactory.

I felt relieved after the treatment and was back to normal in 2 weeks.

My main worry during the treatment was only the drips and my home.

Whenever I think/feel any pain, I worry about having another surgery, especially because of the drips. I prefer keeping quiet and bearing any pain rather than visiting a doctor.

I am not very health conscious; I take things as they come.

I always worry about the kids. They should be grown-up enough to take care of themselves if at all anything has to happen to me.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

#### **Respondent - P:**

Age: 65-70

Gender: female

Marital status: married, 5 independent children,

grandchildren.

Disease type: arthritis (total knee replacement surgery

was performed)

At the age of 58, I had a problem with my knee when I used to teach in the school. I used to feel as if I would fall off.

After retirement, I began to experience terrible pain especially in the right knee. The doctor diagnosed it as arthritis.

A 2<sup>nd</sup> doctor recommended consulting a specialist. He gave me some painkillers at first to see if it would bring me some relief.

The pain was still there and it would not allow me to sleep during the nights.

Then the doctor recommended TKR surgery.

I was reluctant to have the surgery. I was worried about the surgery and recovery. Finally I relented after my family encouraged me to go in for it. I also tried to find

out about other people who went through TKR. I spoke to an NRI patient of the same doctor who also encouraged me to have the surgery.

The surgery was done on both knees in a gap of 2 months. The surgery on the 1<sup>st</sup> knee was successful. With the 2<sup>nd</sup> knee there was a problem since the doctor entrusted me with interns. There was carelessness with the 2<sup>nd</sup> knee. This resulted in abscess.

Now I feel good since the recovery was good. I'm much better now. The pain prior to the surgery would not even allow me to sleep. Earlier the pain killers also did not help.

My husband was my major support for feeding and helping me with everything. He was always there to support my every activity.

The doctor gave me a special doctor's room. Except for the 2<sup>nd</sup> knee experience where there was carelessness shown, the nurses gave me good treatment.

Sometimes the interns make fun which is hurtful. E.g. At the time of surgery when my dentures had to be removed, the intern asked me who ate my teeth. People say that GMC is not good but I got very good treatment. The doctor was also very sweet.

The physiotherapist at the GMC is very good but does not give personal attention at all. They do not bother whether the exercises are done properly /at all.

I used to worry about my family, grand children but. Later I realised that they were managing well. There was constant worry about the home.

All the activities that I used to do earlier, I can do now. But I am not allowed to strain myself (by my husband). Now my husband does not allow me to do outside jobs like going to the shop nearby, etc.

I feel there should be more encouragement for a person to do normal/routine work/exercise. People tend to get scared saying "don't do this or that" and this hampers the normal activities.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**Respondent - Q:** Age: 25-30

Gender: male

Marital status: single

Disease type: kidney stones (chronic)

A month ago, it all started with pain in the abdomen. After lunch the pain kept increasing. I could neither sit nor stand. I went to the doctor who gave me a pain killer. He said that it could either be a stone problem or appendicitis. The scan report showed a stone measuring 7mm outside the kidney.

I have been taking medication since then for dissolving the stone and passing off. When I experienced the pain, I was crying, I had no strength and felt helpless. I had fear. Until I visited the doctor, I did not feel relieved. After sonography, surprisingly I had no pain (it was the very next day).

My friends and relatives gave me advice and suggestions.

I received more support than was expected which helped me to cope.

I also had the moral support from my parents. My organisation provided me with leave, my boss showed concern.

With regard to my work there was a slight worry since the problem was minor. Other activities were not hampered.

The medication was good, now I am trying to get well.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**Respondent - R:** Age: 35-40

Gender: male

Marital status: married, 2 minor kids (1 new born)

Disease type: kidney stones (chronic)

Years ago I had severe pain in the abdomen; the doctor had advised an ultrasound where a small stone was detected. I was given medication and finished the course. After that, there was occasional pain and bleeding through the urine so I went to another doctor (a homeopath). The bleeding stopped after the medication and the pain was less frequent.

After moving to Kuwait, due to the increase in calcium intake the pain started again and began increasing. A scan revealed that the stone grew in size. When I came down to Goa on a vacation, my doctor changed the medication to one that would dissolve the stone.

The local clinic in Kuwait gave me a series of medications which, I did not take since I knew that they were not meant to solve the problem. An x-ray revealed the stone's presence again.

The doctor there then advised an MRI which I did not get done due to other commitments. This annoyed the doctor.

Finally I had the MRI done and a surgery was scheduled for removal of the stone.

Before the surgery, I was mentally prepared for a week's treatment. I knew the rooms and every tiny detail would be kept clean. The food was just like it would be served in an airline.

I was admitted at the hospital one day prior to the surgery and prepared for the same. At the operation theatre the next day I was kept waiting for half a day since there are many OT's and one had to wait for his/her turn. Meanwhile my family was told by a nurse that the surgery was done and that I was on the way to recovery. They were busy praying the whole time for the successful surgery.

While I was tired and hungry from the long wait for my turn, a nurse tells me that the surgery could not be performed since the anaesthetist was unavailable. Due to public holidays thereafter, the surgery would not be performed during that entire week.

I then called up my wife who was surprised that I could speak so well after being under the effect of anaesthesia. I then returned home.

The next surgery was scheduled for the following week. After going through the same preparatory procedure, the surgery was finally performed but I had severe, terrible pain. They gave me only one pain killer after the surgery and despite having informed the nurses about m condition, no pain killer was given to me. I had no sleep the whole night.

The drips/iv area was swollen and I was poked again brutally. As it is I was in agony.

When the staff on the next shift took over the next day, I was given a pain killer after requesting for it and then I slept.

2 days later I was told to walk and it was just not possible. The male nurse was rude. When I finally got on my toes, I could walk along with my catheter and discharge pipe (connected to the kidney).

After 2 more days I noticed that the discharge pipe was leaking and reported it to the nurse. The pipe was cleaned and re-attached with a bag. My wife (being a doctor herself) informed the doctor in charge that perhaps there was still another stone. He dismissed her fears.

After some medication through drips, the bag was removed and a big clamp was attached.

That night I slept on the other side to avoid any leakage. Suddenly, everything was soaked in blood; my dressing gown, the bed sheets, everything. Then a nurse changed the plaster but I was still in blood soaked clothes and had to sleep with it. When my wife and brother-in-law visited the next morning, they were shocked to see me in that state.

Later, under local anaesthesia a stent was inserted. It was just like having another surgery. Then the doctor informed my wife that she was right about the presence of another stone.

I was discharged from the hospital.

After 2 weeks I went back to the hospital to have the stent removed and that's when the stone fell off. It was supposed to be a 2-day job which lasted for a week.

After the anaesthesia wore off I felt dizzy and could not even sit. I had to lie down and remain on drips until the anaesthesia was flushed out. Visits to the loo had to be quickly done before I felt dizzy again and I had to do it myself. Every time I visited the loo, stones would fall off.

Nothing bad happened to me with the anaesthesia during the main surgery. I felt my life was over.

No doctor could give me a proper answer, the doctors kept changing.

During my hospital stay itself when people would visit, they would say to me "why did you not have the surgery done in India?" This would increase my worries.

I returned home with a lot of medication and pain killers. The stones were falling off almost every day when I was told that only a fragment was left. Dressing of the wound also had to be done.

After a month, I had to go for a follow-up. The x-ray revealed that there were no stones in the kidney. I was given more medication.

I felt the worst when the stent was inserted and then again after it was removed.

I was worried about the stent (as it was a foreign body) and the anaesthesia.

I thought something bad was going to happen.

My baby was just born and my wife had to manage both our kids. . My 5 year old son was very mischievous. My wife had a tough time looking after both the kids.

Many people kept calling and praying for me.

I had no worry about my job. My manager was very supportive.

I'm glad it is over; I never want hospital treatment again.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**Respondent- S:** Age: 40-45

Gender: female

Marital status: married, 1 minor son

Disease type: laryngitis (chronic)

I had hoarseness of my throat which gradually built up. The doctor prescribed antibiotics almost every month. Every morning I used to have a rusty, choky voice.

I took a 2<sup>nd</sup> opinion and was prescribed steroids. He said if it did not work, I would have to change my profession to one where no talking would be required.

I enjoyed teaching and I could not think of changing my profession.

I began praying about it.

I then consulted another doctor in Manipal who recommended surgery to remove the nodules. But then another doctor said that even after surgical removal, the nodules would reappear so I did not go in for surgery.

I began to talk less. Socialising was really affected. I felt very low. I began to think- "what kind of life am I living?"

It so happened that once I consulted a homeopath since all the doctors were on leave. Within 2 months there was a big change/ an improvement.

It's been over a year now and I'm very happy with homeopathy.

I always go to the doctor with a little problem as I believe that a small ailment leads to a faster cure.

I follow a philosophy of strong willpower and faith that things will surely change. There is a pharma in the body which heals itself. During those days I used to read a lot.

I am a very philosophical person. Every medication usually helps to cure.

I used to struggle with teaching maths and science. I even began to carry my own

dust-free chalks. But it did not help much since there was always chalk dust

around the board.

I am a very strong person, I can control my emotions. But during those days I

used to feel irritated and disgusted.

My role as a teacher did not get affected but I would vent out my anger on the

children. But if I had to get better, I had to stop screaming at the kids so it led to

control of my anger.

My headmistress understood me and supported me. She did not give me the X std.

So I was happy. I got support without expecting it.

I believe in the doctor. Whatever the doctors give is the best. I believe that when

you change the environment also changes. I have got the support from my

environment without asking.

I never expected anything from anybody. When you have expectations, you feel

depressed quickly when the expectations are not met.

Now I feel light and free. If the problem starts again, I know that there is a way

out.

\*

**Respondent - T:** 

Age: 40-45

Gender: male

Marital status: married, 3 minor kids

Disease type: ear infection (chronic)

I used to experience some giddiness and ear discharge. The doctor gave me some

medication and wanted to observe whether my condition would improve. After 2

weeks the doctor diagnosed an internal ear infection which was growing. He said

that there was a possibility that it could affect the brain. It was suggested to

surgically remove the infection to avoid complications.

The surgery was scheduled. I was admitted in the morning. When local anaesthesia was administered, I could feel giddiness and pain so general anaesthesia was then administered. The hospital stay lasted for 2 days.

After surgery I used to go for a weekly follow-up, then every 15 days, 1month and finally after 2 months. The progress was well monitored.

Ever since the surgery I have had no problems.

I always had a problem with my ear since childhood. I had no worry or fear about the surgery. The doctor assured me that there was no cause for worry.

I was advised 2 weeks of complete rest from work.

I had a good family support and doctor's support.

I had planned the surgery after taking care of all social responsibilities so I did not have my activities hampered.

Many people discouraged me from availing of treatment at the concerned hospital due to the high cost involved but my doctor reassured me and said that the facilities required for the surgery were better there. The hospital was ISO certified so the service was very good.

Enough of support was provided by my boss and colleagues. Leave was granted for the purpose of surgery and recovery.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**Respondent -U:** Age: 20-25

Gender: female

Marital status: single

Disease type-appendicitis

One night while sleeping, I suddenly felt nauseated. I threw-up and felt the same repeatedly. Mom gave me some hot water. Then I had a severe stomach ache.

Mom called the neighbours to take me to the hospital. I did not want to go. Finally I left with a neighbour, holding my stomach all the while even at the hospital.

The nurses used an IV, followed by an injection. The doctor (my family physician) visited in the morning; he did not know the cause. He called another

doctor who diagnosed it as appendicitis.

The surgery was scheduled for the next day.

They gave me local anaesthesia at the back against my wishes. I told my family

doctor not to leave the OT since I was afraid of the other doctor. Everyone was

laughing.

I went to sleep for an hour after the surgery. My doctor visited me and reassured

me.

They gave me drips and juice. I was getting unbearable pain and did not want

visitors.

I left the hospital after 3 days and returned back to remove the stitches.

I was scared throughout the treatment. I expected a laser treatment. I could think

of nothing but the pain.

My mother was my strongest support. My family was also supportive.

I had no responsibilities to worry about.

My back troubled me more than the surgery due to the anaesthesia given there. I

don't want to go through any more surgeries or stitches again.

I was satisfied with the treatment. Normal activities resumed after a week. The

hospital was a private one and the service was good.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**Respondent - V:** Age: 60-65

Gender: female

Marital status: married, 2 independent children

Disease type: cataract (chronic)

I was unable to read even with my glasses on and surprisingly after check-up the

optician gave me another lens with the same number.

My friend advised me to visit a renowned doctor who immediately detected a cataract (tender). He advised me to go in for surgery of the right eye first.

I was very nervous so the doctor sent me to an in-house counsellor.

Later due to my mom's illness and subsequent death, treatment of my left eye got delayed.

When I visited the doctor next at his new clinic, he administered some drops. I wanted to have the surgery done quickly since I had to go abroad for my daughter's delivery. The surgery took only 35 minutes. I had informed the doctor that I did not want anaesthesia through an injection, so gel anaesthesia was administered for the purpose.

The doctor applied some more gel to make the area numb. There was a machine that monitored the entire process. My relatives could view the entire surgery on a screen outside the OT.

Science and god have made surgery of the delicate eye so easy. The doctor is very gifted and a god-fearing man. Drops were given for healing and 'betadine' drops were given for infection.

The next day I was called for a follow-up. Follow-up was regularly done.

My anxiety was only because of my daughter who is pregnant and has miscarried twice earlier. But I put my trust in god.

The doctor is a genuine person. He made me very comfortable. My eye surgery was the most comfortable compared to my earlier surgeries (kidney, gall bladder).

My doctor met all my expectations. I was very free with the doctor. He remembered me even after 4 years of my previous treatment.

I have recommended the same doctor to people I know.

We should seriously follow the doctor's advice.

I strongly believe in Jesus. I was not afraid. I knew that the hand of the lord was there. I am a very prayerful person.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**Respondent -W**: Age: 30-35

Gender: male

Marital status: married, 2 minor kids

Disease type: kidney stones (chronic)

On a Friday, I had a slight stomach ache and thought it was a gas problem. It remained the whole day but, I did not think much about it. While having an informal discussion with my friends that day we also discussed about kidney stones, not knowing that it could be my problem. After returning home, the pain kept getting worse and I thought it was a back ache.

Later I realised it was a kidney stone problem and there was no immediate relief. I tried everything including sitting, standing, changing positions, nothing helped.

I did not even have a pain killer at home so I tried one of dad's which he takes to work for an emergency. It numbed the pain for the night.

The next day I spoke to my doctor who could not do anything since she was unavailable. She advised me to take my pills.

I had a lot of pain and diarrhoea during the Sunday mass. After the mass my cousin informed me that he had the same pain and he gave me some of his medication. I also had a nurse friend who happens to work in the kidney dept. She administered a pain killer injection which lasted the whole night.

The doctor recommended a scan which revealed 2 kidney stones outside the kidney, one of which was moving. She gave me a pain killer and medicine (homeopathy) to remove the stone.

After returning home I did not take any allopathic medicine, only the homeopathic ones.

That night again saw pain. My doctor had given up and recommended another homeopath, who advised another scan. The scan did not show much change since the previous report. As long as I was on homeopathic medicines I continued to face intense pain. Only deep breathing seemed to help.

Different medicines were given to me, even the doctor was tensed. I took medicines every hour as prescribed.

Once again another scan was recommended which showed that the stone moved down quickly, it was the  $6^{th}$  day.

Everyone who called up offered different remedies which, I tried but the pain was still there.

Pain killer injections were the only things that gave me relief from pain.

I went through this whole painful experience for a week.

However, the homeopathic medicines helped to move the stone down quickly.

Initially, I thought it was a chance for me to relax (while on pain killers). I caught up on sleep and pending work.

I could not think clearly, I did not attend calls from well-wishers or work.

Towards the end, I was frustrated and just wanted it to get over. I was comparing the experience to the last time i.e. 2 years ago when the pain lasted for just 4-5 hours and left after a pain killer.

I resorted to prayers, I kept praying, began reading the bible again. I had the thought that everything happens for the best. I always believe that there is something good that happens even in difficult times.

I was touched by the concern of my nurse- friend who kept calling and said that I could call her at any time, even at night.

My wife was a strong support, taking care of everything including the medicines which I would take only after she called me from work.

I felt bad for the doctor who was annoyed that she could not do anything for me. Both the doctors were upset at not being able to help me and they were confident with the medication. I had no worry about work since I had everything taken care of. The kids and TV were a distraction from my pain.

Never again would I want that experience but, I'm not scared of pain-I think I can handle it.

\*

**Respondent -X:** Age: 35-40

Gender: female

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Marital status: single

Disease type: kidney stone and gynaecological

I went to the doctor for one ailment, a little burning sensation while urinating, kidney stone problem (the reason being less of water intake because of travelling to my work place and too much calcium intake i.e. Ice cream, cheese and other milk products) since this was the second time a small stone came up, the doctor recommended an 'x-ray' which showed the size of the kidney stone more clearly, (earlier ultrasound done) since this new stone came up, the doctor also advised a scan of the pelvic region.

Since I was doing the scan the doctor performing the scan asked me if I wanted to do scan of the gynac region, since anyway I was doing of the pelvic region. I told her I would get back to my doctor and let her know.

My doctor said no problem go ahead with the scan of pelvic and gnac region. When scan was recommended I was afraid, especially since I had seen the procedure on TV-which the patient goes into a machine, although I had done a brain scan before when I had a bike accident. There was fear within coupled with anxiety - i.e. what would the reports reveal? Would I need to go through more complex medical procedures?

Since my dad is a heart patient I tried to put up/hide my fears. My parents too were worried but so as not to get me worked-up they would avoid talking on the topic.

My fears disappeared when I prayed and sought divine intervention.

I did go through a minor gynac surgery, which involved hospital stay for 24 hours, followed by 15 days of rest. However since my job involved travelling I took leave for 2 months although, the doctor told me not to waste my leave.

Besides, at work place 15 days leave would create syllabus completion problems especially with the Isa's. So the authorities were of the opinion that if I wished I could proceed on comparatively longer leave of 2 months and they would advertise the post as leave vacancy for 2 months this would benefit me and them. My benefit would be, I would get rid of my anxiety of syllabus completion because if I joined after 15 days, I would need extra classes to complete the syllabus. Engaging extra classes would mean that the rest I took would be nullified. I thought over it and realised that for the authorities, the benefit would be that, syllabus completion would not be delayed as the new teacher appointed would have the responsibility of completing the same thus they and students would benefit.

24 hours before the surgery were anxious moments, coupled with fear but again trust in god would bring some peace and calmness. Support from my relatives in terms of volunteering to stay at the hospital, lunch/tea arrangements for the person staying with me the night before my surgery (I was asked to get admitted to hospital in the evening and next morning surgery was performed) and the night of the surgery meant a lot to me. Their kind and helpful nature meant a lot to me.

The hospital staff was also polite and kind probably since my brother - in- law was also from the medical profession and had spoken to the doctor performing my surgery. Besides, 3 other doctors, our family friends had also spoken to the doctor and this helped me to be more confident that the doctor would do his best (because of the influence used). This gave me psychological satisfaction.

By God's grace things went on well and continue to do so.

The kidney stone problem got secondary importance and they have passed away by God's grace and home remedies.

Post surgery, calls from college staff and relatives made me feel good i.e. their concern, love.

Prior to surgery I had 2 appointments with the doctor who explained the do's and don'ts like don't eat outside food, for if I had a stomach upset etc. The surgery would not be performed on the scheduled day; besides to explain about the cost etc. The wait at the doctor's clinic was horrible as the appointment would be at 5.00 p.m. And I would actually get to meet the doctor by 8.30p.m, due to deliveries to be performed. This would bring bitter feeling of anger, irritation and annoyance. Similar was the case with regard to waiting for check-up post surgery.

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# INTER RATER RELIABILITY & CONTENT VALIDITY

#### **EXPERT RATING FORM**

The measurement scales are being developed to provide academicians, health care service providers and psychologists with a measure of social support influence and emotions of patients, on consumer behavioural intentions.

The scales may be used to evaluate perceived social support and emotions experienced during medical treatment, and its impact on consumer behavioural intentions. The scale is based on commonly recognized forms of social support namely; emotional support, informational support and instrumental support.

The measurement instrument consists of 3 scales which are: Health care social support scale (HCSSS), Emotion scale (ES), Behavioural Intentions scale (BIS).

The scale has been designed to be completed by the subject under study namely; the patients/ consumers of health care services.

#### **DESCRIPTION OF SCALES**

#### 1) Health Care System Social Support Scale (HCSSS):

This scale has been designed to measure- (a) Perceived social support from health care systems; (b) Patient satisfaction with social support from health care system providers.

Social support from health care systems refers to resources provided by the health care service provider to help the patient endure or cope with negative emotions caused due to illness.

A total of – items have been incorporated into this sub-scale.

Social support resources have been divided into:

- a) <u>Emotional support</u> is the most commonly recognized form. It includes empathy, concern, caring, love, and trust.
- b) <u>Instrumental support</u> is a tangible form of social support, which covers help in the form of money, time, in-kind assistance, and other explicit interventions on the person's behalf.
- c) <u>Informational support</u> includes advice, suggestions, or directives that enable the person to respond to personal or situational demands.

#### 2) <u>Behavioural Intentions Scale (BIS):</u>

Behavioural Intentions refer to the consumer's intention to engage in a specific type of behaviour based on his experience with the service provider. This scale intends to measure positive behavioural intentions of (a) Patient loyalty intentions; (b) Patient recommendation intentions; (c) Patient cooperation intentions.

#### 3) <u>Emotions Scale (ES)</u>:

This scale has been designed to measure post- consumption emotions of consumers which represent the change in negative emotions (experienced during pre-consumption stage), expected to be experienced during the postconsumption stage. The post-consumption emotions are measured in terms of the change in emotions experienced during the service consumption process.

*Pre-consumption negative emotions* are negative states of feelings experienced at the onset of an illness, prior to the consumption of health services; triggered by the stimulus that gives rise to those feelings.

*Post-consumption emotions* refer to the emotion change experienced after medical treatment. The stimuli triggering the change in emotion would be the treatment process, outcome of the treatment and/or the manner of emotion handling/social support provided by the health care system.

#### EXPERT JUDGEMENT OF ITEMS CONSTRUCTED

The objective is to analyze to what extent the items created are representative of the target construct and the degree to which such items represent the facet of the construct they were developed for (i.e., their relevance)

#### ITEM CONSTRUCTION

The details of items constructed for each of the dimensions are as follows:

- 1) <u>Health care system social support scale (HCSSS)</u>: A total of 34 items generated.
- a) Emotional support dimension- 12 items (excluding 2 measuring overall support)
- b) Informational support dimension- 5 items (excluding 2 measuring overall support)

- c) Instrumental support dimension- 9 items (excluding 2 measuring overall support)
- 2) Behavioural Intentions Scale (BIS): 6 items generated.
- a) Patient loyalty intentions 2 items
- b) Patient recommendation intentions 2 items
- c) Patient cooperation intentions 2 items
- 3) Emotions Scale (ES): 5 items generated.
- a) Post-consumption emotions- 5 items

#### **RATING GUIDELINES**

The rater is required to review the test items based on the relevance of the content in each of the sub-scales. In the rating sheet provided, the rater is required to indicate the following:

1) Identification of the type of support: (Only for social support based scales)

Against each of the items specified, indicate whether you would categorise
the item to measure Emotional Support- E; Informational Support-IF; or
Instrumental Support- IN.

#### 2) Relevance:(for all scales)

Indicate on a scale ranging from 1-4 whether the specified item is relevant as a measure for which it is intended. The rating is as follows:

- 1- Not Relevant
- 2- Item needs some revision

- 3- Relevant but needs minor revision
- 4- Very relevant

#### 3) Clarity: (Only for social support based scales)

Indicate on a scale ranging from 1-4 whether the specified item has clarity in understanding. The rating may be represented thus;

- 1- Not Clear
- 2- Item Needs some revision
- 3- Clear but needs some minor revision
- 4- Very clear

#### 4) Simplicity: (Only for social support based scales)

Indicate on a scale ranging from 1-4 whether the specified item is simple to understand. The rating may be represented thus;

- 5- Not Simple
- 6- Item Needs some revision
- 7- Simple but needs some minor revision
- 8- Very Simple

#### **RATING SHEET**

## HEALTH CARE SOCIAL SUPPORT SCALE (HCSSS) & BEHAVIOURAL INTENTIONS SCALE (BIS)

Item	Support type (strike off what is not applicable)	Relevance (Rate on a scale of 1-5)	Clarity (Rate on a scale of 1-5)	Simplicity (Rate on a scale of 1-5)
Respondent	XXXXXX			
Instructions	E/IE/INI			
The doctor helped me remain calm.	E/IF/IN			
	E/IF/IN			
The doctor gave me good medical	12/11/111			
advice.				
The doctor allowed	E/IF/IN			
me to talk freely				
about my				
problems.				
The doctor helped	E/IF/IN			
me to decide on a				
suitable medical				
treatment.				
The doctor listened	E/IF/IN			
to me patiently				
with				
understanding.				
The doctor was	E/IF/IN			
really concerned				
about me and my				
condition.	E/IF/IN			
The doctor ensured that I was taken	E/IF/IIN			
good care of when				
I was under his/her				
treatment.				
The doctor was a	E/IF/IN			
real source of				
comfort to me.				
The doctor did	E/IF/IN			
his/her best to cure				
me of my illness.				

The doctor has	E/IF/IN		
been very reliable.			
The doctor made	E/IF/IN		
	L/11/11N		
me feel important			
& valued.			
The doctor gave	E/IF/IN		
me reassurance			
whenever I needed			
it.			
	E/E/DI		
The hospital staff	E/IF/IN		
provided me with			
the necessary			
treatment.			
The hospital staff	E/IF/IN		
took good care of	2,11,11		
me during medical			
treatment.			
The hospital staff	E/IF/IN		
arranged for			
necessary technical			
assistance required			
for my treatment.			
	E/IE/IN		
The hospital staff	E/IF/IN		
gave me proper			
guidance for			
necessary treatment			
of my illness.			
The hospital staff	E/IF/IN		
provided me with	L/11 / 11 V		
*			
necessary facilities			
in the waiting			
room.			
The hospital staff	E/IF/IN	 	
listened to my			
feelings patiently			
with			
understanding.			
The hospital staff	E/IF/IN		
gave me			
reassurance when I			
needed it.			
The hospital staff	E/IF/IN		
-	11/11V		
helped me to calm			
down when I was			
worried.		 	
I am satisfied with	E/IF/IN	 	
the emotional			
support given to			
me by the doctor.			

I am satisfied with the concern shown towards me by the hospital staff.  I am satisfied with the knowledge that was provided to me by the doctor.  I am satisfied with the advice that was given to me by the hospital staff.  I am satisfied with the timely assistance that was provided to me by the doctor.  I am satisfied with assistance that was given to me by the hospital staff.  I am satisfied with the overall support that was given to me by the hospital staff.  I am satisfied with the overall support that was given to me by the doctor during my medical treatment.  I am satisfied with the overall support that was given to me by the hospital staff during my medical treatment.  I will recommend the hospital staff during my medical treatment.  I will recommend the hospital to other people.  I plan to visit the same hospital if & when it is necessary  I will consult the same doctor if I require medical advice & treatment.  I will follow the advice given by the				
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doctor in case of			
follow-up			
treatment.			
I will follow the	XXXXXX		
suggestions given	XX		
to me by the			
hospital staff in			
case of follow-up			
treatment.			

### **EMOTION SCALE (ES)**

	EMOTIONS AFTER TREATMENT	Relevance (rate on a scale of 1-5)	Clarity (Rate on a scale of 1-5)	Simplicity (Rate on a scale of 1-5)
	Respondent instructions			
a	Fear		XXXX	XXXX
b	Disgust		XXXX	XXXX
c	Anger		XXXX	XXXX
d	Sadness		XXXX	XXXX
e	Happiness		XXXX	XXXX



## **HCSSS-BIS-ES: MEASUREMENT SCALES**

## **Health Care Social Support Scale (HCSSS)**

& of	The statements below represent the kind of support provided to you by your doctor & hospital during the period of your medical treatment. Please indicate  on a scale of 1-5, how often you received the stated support.  There is no right or wrong answer.				
Α	The doctor gave me good medical advice.				
	1 -None of the time 2-Rarely 3-Sometimes 4-Most of the time 5-All of the time				
В	The doctor helped me to decide on a suitable medical treatment.				
	1-None of the time 2-Rarely 3-Sometimes 4-Most of the time 5-All of the time				
С	The doctor listened to me patiently with understanding.				
	1-None of the time 2-Rarely 3-Sometimes 4-Most of the time 5-All of the time				
D	The doctor has been very reliable.				
	1-None of the time 2-Rarely 3-Sometimes 4-Most of the time 5-All of the time				
Ε	The doctor was a real source of comfort to me.				
	1-None of the time 2-Rarely 3-Sometimes 4-Most of the time 5-All of the time				
F	The doctor did his/her best to cure me of my illness				
	1-None of the time 2-Rarely 3-Sometimes 4-Most of the time 5-All of the time				
G	The doctor made me feel important & valued.				
	1-None of the time 2-Rarely 3-Sometimes 4-Most of the time 5-All of the time				
н	The doctor gave me reassurance whenever I needed it.				
	1-None of the time 2-Rarely 3-Sometimes 4-Most of the time 5-All of the time				

I	The hospital staff provided me with the necessary treatment.
	1-None of the time 2-Rarely 3-Sometimes 4-Most of the time 5-All of the time
J	The hospital staff gave me reassurance when I needed it.
	1-None of the time 2-Rarely 3-Sometimes 4-Most of the time 5-All of the time
K	The hospital staff arranged for necessary technical assistance required for my treatment.
	1-None of the time 2-Rarely 3-Sometimes 4-Most of the time 5-All of the time
L	The hospital staff gave me proper guidance for necessary treatment of my illness.
	1-None of the time 2-Rarely 3-Sometimes 4-Most of the time 5-All of the time
М	The hospital staff listened to my feelings patiently with understanding.
	1-None of the time 2-Rarely 3-Sometimes 4-Most of the time 5-All of the time
N	The hospital staff took good care of me during medical treatment.
	1-None of the time 2-Rarely 3-Sometimes 4-Most of the time 5-All of the time
0	The hospital staff helped me to calm down when I was worried.
	1-None of the time 2-Rarely 3-Sometimes 4-Most of the time 5-All of the time
Р	I am satisfied with the emotional support given to me by the doctor.
	5-Stongly agree 4-Agree 3-Undecided 2-Disagree 1-Strongly disagree
Q	I am satisfied with the concern shown towards me by the hospital staff.
	5-Stongly agree 4-Agree 3-Undecided 2-Disagree 1-Strongly disagree
R	I am satisfied with the knowledge that was provided to me by the
	doctor.  5-Stongly agree 4-Agree 3-Undecided 2-Disagree 1-Strongly disagree
S	I am satisfied with the advice that was given to me by the hospital staff.
	5-Stongly agree 4-Agree 3-Undecided 2-Disagree 1-Strongly disagree

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		Behaviou	ral Intention	s Scale (BIS	)
	_	•	ent your future b		•
	•	Please indicat wrong answe	e your intentions er.	on a scale of 1-	5.
	rill recomm -Stongly agree	end the doc	tor to other ped 3-Undecided	ople.  2-Disagree	1-Strongly disagree
2 I w	ill recomm	end the hos	pital to other po	eople.	
5	-Stongly agree	4-Agree	3-Undecided	2-Disagree	1-Strongly disagree

3 I plan to visit the same hospital if & when it is necessary.

4-Agree

4-Agree

5-Stongly agree

5-Stongly agree

treatment.
5-Stongly agree

treatment.

5-Stongly agree

3-Undecided

4 I will consult the same doctor if I require medical advice & treatment.

3-Undecided

3-Undecided

I will follow the suggestions of the hospital staff in case of follow-up

3-Undecided

I will follow the advice given by the doctor in case of follow-up

2-Disagree

2-Disagree

2-Disagree

2-Disagree

1-Strongly disagree

1-Strongly disagree

1-Strongly disagree

#### **Emotions Scale (ES)**

Listed below are some emotions that could be experienced after medical treatment. Indicate  $\checkmark$  on the given scale of 1-5 the extent to which you experienced **each of the listed emotions** *after* your medical treatment.

	EMOTIONS AFTER TREATMENT	Not at all	A little	Moderately	Quite a lot	Extremely high
		1	2	3	4	5
а	Fear					
b	Disgust					
С	Anger					
d	Sadness					

Kindly provid	de the following details:(strike	off where options are not applicable)
Age:	Gender: Male/ Female.	Marital Status: Married/Single
Employment	/Work status:	
Employed/Se	elf-employed/Homemaker/ Un	employed / Other
Type of illnes	ss experienced/Medical treatr	nent:

## SURVEY REQUEST LETTER

Sir/ Madam,
Warm Greetings!
This questionnaire is a part of an academic research to understand the social
support available to people and emotions experienced during an illness. For this
purpose, we seek your kind cooperation in providing the required information.
Your cooperation and participation in this survey is appreciated.
Thank you very much.
Aruna Mesquita e Noronha
(Research Scholar- Goa University)

#### PUBLICATIONS OUT OF THIS RESEARCH

- 1) Mesquita e Noronha, A., & Mekoth, N. (2013). Social support expectations from healthcare systems: Antecedents and emotions.

  International Journal of Healthcare Management, 6(4), 269-275.
- 2) Mesquita e Noronha, A., & Mekoth, N. (2014). The influence of demographic variables on social support expectations from health care systems. *International Research Journal of Commerce, Business and Social Sciences (IRJCBSS)*, 3(3), 144 147.
- 3) Mesquita e Noronha, A., & Mekoth, N. (2015). Impact of emotions and social support on consumers of health care systems. *Journal of Health Management*, 17(1), 1 12. *Forthcoming*\*