

**“A CONSUMER STUDY ON FACTORS AFFECTING “CHOICE” AND BUYING  
BEHAVIOUR FOR MEDICLAIM POLICIES IN THE STATE OF GUJARAT”**

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**CHAPTER NUMBER FOUR  
RESEARCH METHODOLOGY  
CHAPTER FOUR AT A GLANCE**

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# CHAPTER NUMBER FOUR

## RESEARCH METHODOLOGY

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### 4.1: RESEARCH METHODOLOGY

The chapter number four provides the brief overview of research methodology to showcase tools and techniques, and method of carrying out analysis and drawing interpretations and conclusions as applied by the researcher.

#### 4.1.1: BASIC TERMS OF THE RESEARCH STUDY:

Considering the objectives of the research study, the following basic terms have been identified by the researcher:

##### 4.1.1.1: Consumer:

According to David Loudon and Della Bitta (2002)<sup>1</sup>, consumer can be referred as the person engaged in evaluating, acquiring, using, or disposing of goods and services. A consumer is a person who buys goods or services for personal needs and not for resale or to use in the production of other goods for resale ([www.yourdictionary.com](http://www.yourdictionary.com))<sup>2</sup>. Consumer is someone who trades money for goods as an individual or a person who acquires goods and services for his or her own personal needs ([www.dictionary.bnet.com](http://www.dictionary.bnet.com))<sup>3</sup>.

##### 4.1.1.1[A]: Customer:

According to David Loudon and Della Bitta (2002)<sup>1</sup>, customer can be referred as someone who regularly purchases from a particular store or company and can be defined or related to specific firm..

##### 4.1.1.3: Consumer Behaviour:

Consumer behaviour is the process and activities people engage in when searching for, selecting, purchasing, using, evaluating, and disposing of products and services so as to satisfy their needs and desires ([www.wikipedia.org](http://www.wikipedia.org))<sup>4</sup>. It is the decision process and physical activity individuals engage in when evaluating, acquiring, using or disposing of goods and services (David Loudon and Della Bitta, 2002)<sup>1</sup>. It is the dynamic interaction of affect and cognition, behaviour, and environmental events by which human beings conduct the exchange aspects of their lives (Philip Kotler, 2004)<sup>5</sup>. It basically blends the elements from Psychology, Sociology, Social Psychology, Anthropology and Economics. The discipline of consumer behaviour attempts to understand the buying decision making process, both individually and in groups by studying the characteristics of individual consumer, that is, Demographics and Behavioural variables as well as assess the influences of various groups, viz., family, friends, reference groups and society as well as on the consumers ([www.wikipedia.org](http://www.wikipedia.org))<sup>4</sup>.

#### **4.1.1.4: Buying Behaviour:**

Buying behaviour is the process by which individuals search for, select, purchase, use, and dispose of economic goods and services towards his or her satisfaction of needs and wants (www.businessdictionary.com)<sup>6</sup>. It comprises of the decision making process undertaken by consumers in regard to a potential market transaction before, during, and after the purchase of a product or service. It is the cognitive process of selecting a course of action from among multiple alternatives. It is also called as a psychological construct as even though an individual can never see a decision but can infer from observable behaviour that a decision has been made. It is a construction that imputes commitment to action which is based on observable actions. For representing this reality, integration of various aspects of interest, various consumer behaviour experts rely on models (www.wikipedia.org)<sup>4</sup>.

#### **4.1.1.5: Choice:**

Choice has been characterized by conflict, uncertainty as well as cognitive activity, and related psychological processes that can be observed which generally occurs, where the choice has not been discussed in the narrow sense. In other words, it can be explained as when the individual is thinking or exposed to information that is when s/he is reading listening to a message, or talking, conflict, un-certainty, and cognitive processes occurs which have been labeled as the conflict situations as in all of them an individual is faced with a certain amount of uncertainty and conflict (Hansen, 1972)<sup>7</sup>.

#### **4.1.2: SCOPE AND COVERAGE OF THE RESEARCH STUDY:**

As the attempt had been made in this research study to evaluate and report with an exclusive focus on “Choice” criterion in buying and availing of Mediclaim Policy in the context of their buying decision process. The research study was undertaken in the Gujarat State considering the fact that one relatively finds higher proportion and penetration of mediclaim policies especially in rapidly growing urbanized cities of the Gujarat State, viz., Vadodara, Ahmedabad, Surat and Rajkot.

#### **4.1.3: RATIONALE OF THE RESEARCH STUDY:**

The research study has focused on private health insurance plans called as mediclaim, on the basis of the review of literature. It explores and analyzes the varying kinds of the multiple influences on the selected mediclaim policyholders concerning their buying decision process with a specific and clear focus on ‘Choice’ criterion in selection of a particular kind of mediclaim policy.

#### **4.1.4: RESEARCH DESIGN OF THE RESEARCH STUDY:**

The research design of this research study considering its objectives, scope and coverage with an involvement of cross-sectional data on the basis of survey administration has been partially exploratory and descriptive in nature.

#### **4.1.5: OBJECTIVES OF THE RESEARCH STUDY:**

**The key objectives of the research study are listed out as follows:**

- To prepare an outline of the profiles of the selected medicaid policyholders' amongst the selected cities of the State of Gujarat.
- To identify the factors of choice considered by the selected medicaid policyholders of the selected cities in the Gujarat State.
- To analyze the expectations and experiences of the selected medicaid policyholders on the selected items while buying the medicaid policy, in the selected cities of the Gujarat State.
- To measure the satisfaction/dissatisfaction of the present medicaid policyholders for medicaid policy purchased by them selected in the selected cities of Gujarat State.

**The other objectives of the research study are listed out as follows.**

- To understand the crucial dimensions of buying decision as considered by the selected medicaid policyholders of the selected cities in the Gujarat State.
- To document the penetration of medicaid policy as offered by the insurance companies in the selected cities of the Gujarat State.
- To determine the influence of the selected demographic factors on the buying decision process and choice of the present medicaid policy by the selected medicaid policyholders' of the selected cities in the State of Gujarat.
- To collect the opinion on selected viewpoint about buying of medicaid policy from the selected medicaid policyholders of the selected cities of the Gujarat State.

#### **4.1.6: RESEARCH QUESTIONS OF THE RESEARCH STUDY:**

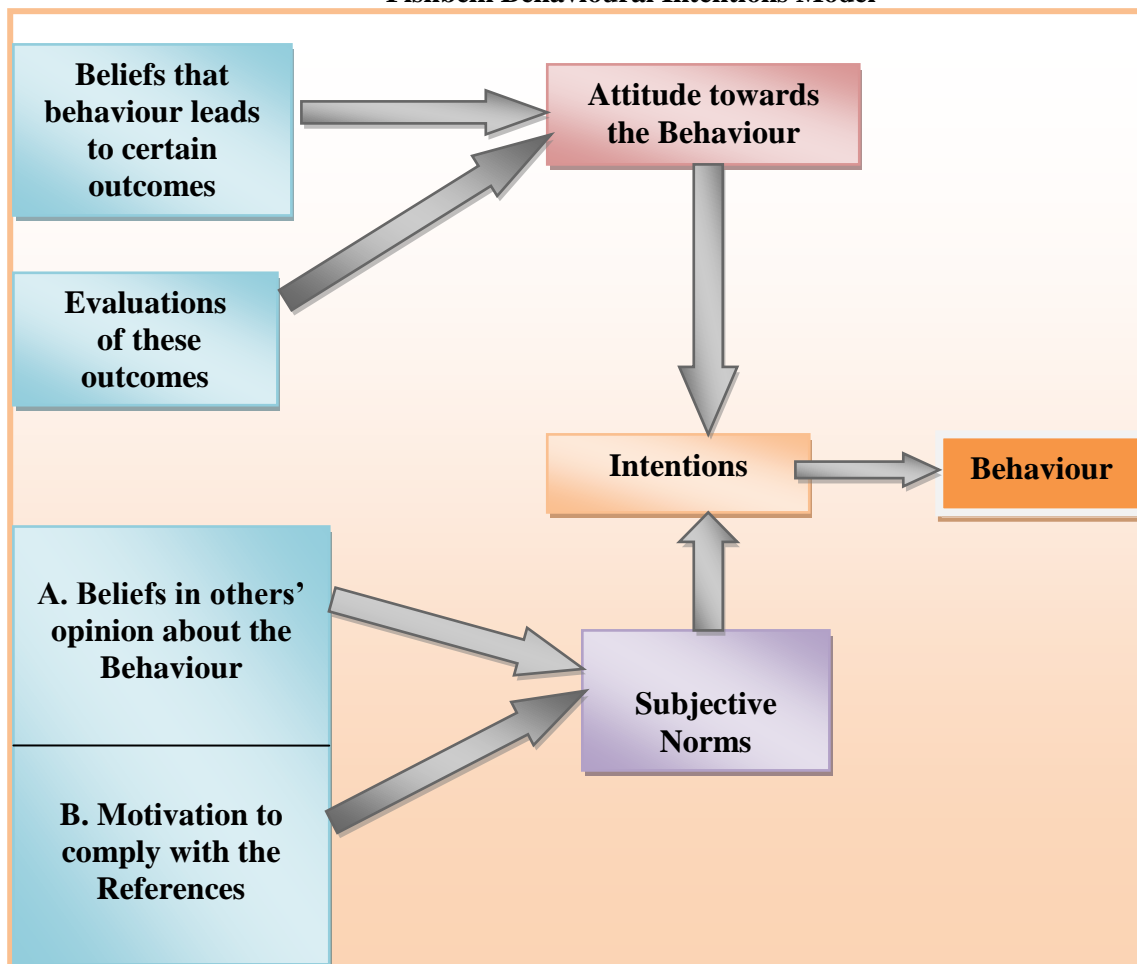
**The researcher had attempted to address the following research questions.**

1. What is the profile of the selected medicaid policyholders' amongst the selected cities of the State of Gujarat?
2. What factors were considered by the selected medicaid policyholders of the selected cities of the Gujarat State to choose/procure the particular medicaid policy while making buying decision?
3. What are the expectations and experiences of the selected medicaid policyholders on the selected items while buying the medicaid policy, in the selected cities of the Gujarat State?
4. Whether the selected medicaid policyholders of the selected cities are satisfied/dissatisfied with the buying decision of the present medicaid policy in the selected cities of Gujarat State?

5. How the selected mediclaim policyholders of the selected cities of the Gujarat State have made the buying decision to procure the mediclaim policy?
6. How is the penetration of the mediclaim policy as offered by the insurance companies in the selected cities of the Gujarat State?
7. Whether the selected demographic factors affects the buying decision process and choice of the present mediclaim policy by the selected mediclaim policyholders' of the selected cities in the State of Gujarat?
8. Whether the selected beliefs, attitudes and intentions influence the buying decision process and buying behaviour of the selected mediclaim policyholders from the selected cities of the Gujarat State?

**The Fishbein Behavioural Intentions Model was applied in the research study.**

**Figure Number. 4.1**  
**Fishbein Behavioural Intentions Model**



**Source:** David Loudon and Della Bitta, 2002<sup>1</sup>

#### **4.1.7: HYPOTHESES OF THE RESEARCH STUDY:**

**An illustrative list of hypotheses tested has been given as follows.**

**H1:** The average opinion of selected medicaid policyholders concerning his/her health status, benefits of the general insurance, and attitudes for buying the medicaid policy vis-à-vis the selected medicaid policyholders' selected background variables viz., age; gender; educational qualifications, marital status, occupation, type of family, annual income; number of dependent family member and number of earning family member is equal.

**H2:** The perceived importance of the selected medicaid policyholders' measured vis-à-vis the selected medicaid policyholders' selected background variables viz., age; gender; educational qualifications, marital status, occupation, type of family, annual income; number of dependent family member and number of earning family member is independent.

**H3:** The satisfaction/dissatisfaction of the selected medicaid policyholders' vis-à-vis the selected medicaid policyholders' selected background variables viz., age; gender; educational qualifications, marital status, occupation, type of family, annual income; number of dependent family member and number of earning family member is independent.

**H4:** There is no association between the overall expectations of the selected medicaid policyholders' measured on the selected criteria vis-à-vis the selected medicaid policyholders' selected background variables viz., age; gender; educational qualifications, marital status, occupation, type of family, annual income; number of dependent family member and number of earning family member.

**H5:** There is no association between the overall satisfaction/dissatisfaction of the selected medicaid policyholders' measured on the selected criteria vis-à-vis the selected medicaid policyholders' selected background variables viz., age; gender; educational qualifications, marital status, occupation, type of family, annual income; number of dependent family member and number of earning family member.

**H6:** There is no association between the overall satisfaction/dissatisfaction of the selected medicaid policyholders' vis-à-vis the selected medicaid policyholders' selected background variables viz., age; gender; educational qualifications, marital status, occupation, type of family, annual income; number of dependent family member and number of earning family member.

**H7:** The intentions of the selected medicaid policyholders' concerning buying of the medicaid policy vis-à-vis the selected medicaid policyholders' selected background variables viz., age; gender; educational qualifications, marital status, occupation, type of family, annual income; number of dependent family member and number of earning family member is equal.

**H8 to H11:** Mean of the opinion of the selected mediclaim policyholders' of selected cities on selected factors viz., AEC = Age Eligibility Conditions, RP = Range of Premium, CID = Coverage of Illness and Diseases, CMEx = Coverage of Medical Expenses, BeneMP = Benefits of Mediclaim Policy, PI = Promotional Incentives, ImCo = Image of the Insurance Company, SeAg = Services provided by the Insurance Agents, SeCo = Services provided by the Insurance Companies, Neth = Network of Hospitals, CMPx = Complexity in the Rules and Regulations for selection of the Mediclaim Policy is equal.

#### **4.1.8: SOURCES OF INFORMATION:**

##### **4.1.8.1: Secondary Data:**

**An overview of various kinds of the sources referred by the researcher for the secondary data is listed out as follows.**

In order to develop the conceptual insight in the selected areas of research study, the researcher has referred various books, viz., Marketing Management; Consumer Behaviour; Services Marketing; Principles and Practices of Insurance and Insurance Products. The researcher has also gathered secondary data by using sources, viz., Business Newspapers viz., The Times of India, The Economic Times, The Financial Express and the Business Standard, etc. The researcher has referred various magazines, viz., The Economic and Political Weekly; The Health Outlook, The Health Plus, Business World, etc.

The researcher has reviewed various articles as well as research papers published in different research journals, viz, International Journal of Health Care Quality Assurance; International Journal of Pharmaceutical and Health Care; International Journal of Social Economic; International Journal of Health Care Finance and Economics; International Economic Review; Journal of Health Management; The Journal of Insurance; The Journal of Risk and Insurance; The Journal of Marketing; The Journal of Consumer Marketing; IRDA Journal; The Journal of Business; Strategic Management Journal; Management Science; Journal of Marketing Research; The Millbank Memorial Fund Quarterly- Health and Safety; Medical Care; Journal of Public Policy & Marketing; Journal of Business and Industrial Marketing; Journal of Applied Behavioural Science; Financing and Delivery of Health Care Services in India; Qualitative Health Research;

Journal of Indian Academy of Clinical Medicine; Health Education Journal; 11<sup>th</sup> Workshop on Medical Information & CME on Biomedical Communication; Indian Journal of Medical Research; The Journal of American Association of University Teachers of Insurance; The Journal of Finance; The Journal of Human Resources; Operations Research; Econometrica; The Journal of Political Economy; Management Decisions; European Journal of Marketing; Marketing Intelligence & Planning; The Journal of Operational Research Society; The Journal of Political Economy; Marketing Science; The Economic History Review; Journal of Services Research; Inquiry-Excellus Health Plan; Journal of Health Politics; American Demographics; Orange Country Business Journal;

Journal of Law and Economics; Journal of European Social Policy; The Journal of Negro Education – The Health Status and Health Education of Negroes in the United States; Journal of the Royal Statistical Society; Financial Analyst Journal; Academy of Health Care Management Journal; Risk Management and Insurance Review; Qualitative Health Research; The Journal of Family Issues; Health Affairs; Vikalpa-The Journal of Decision Makers; The Journal of Consumer Psychology; The Journal of Health and Social Behaviour; The Journal of International Business Studies; Daffodil International University Journal of Business and Economics; Journal of Health Services Management Research; Journal of Insurance Issues, and, BMC Health Services Research, respectively.

The researcher has also referred private publications of various institutions, viz., The Working Papers, IIM- Ahmedabad; Discussion Papers, The University of New York; The Brookings Papers on Economic Activity, The Brookings Institution, and, Proceedings of the National Academy of Sciences of the United States of America, as well as a dissertation of the Nova South Eastern University. The researcher has also referred to the policy documents issued by the varied insurance companies in India offering the health insurance products.

The researcher has also accessed different Publications and Reports, viz., ICMR Bulletin published by the Indian Council for Medical Research, New Delhi; The Indo Italian Chamber of Commerce and Industry, Mumbai; India Brand Equity Foundation, Earnest & Young; Report by ECS Private Limited; Report of the National Commission on Macro-Economics and Health, published by the Ministry of Health and Family Welfare, Government of India; MIS Quarterly published by Management Information Systems Research Center, University of Minnesota; Public Opinion Quarterly published by Oxford, as well as, various reports, circulars, notifications and guidelines announced by Insurance Regulatory and Development Authority of India.

The researcher has also referred Global Social Policy - Los Angeles, London, New Delhi, Singapore and Thousand Oaks; Reports and Publications from Indian Council for Research on International Economic Relations, New Delhi; Bulletin of World Health Organization; Economic Survey, Government of India; Socio-Economic Review, Gujarat State; Various Reports of the World Health Organization; Global Infrastructure: Trend Monitor Indian Healthcare Edition; Health Care Outlook: Industry Trends; Health Care: An Overview of the Healthcare Industry of India and other reports published by IICCI, Mumbai.

Various Reports of the Health Ministry, Government of India; Issues Monitor, KPMG, and, Various Reports and Approach Papers; by the Planning Commission of India, were also referred by the researcher. The researcher has also made use of Internet medium to access the websites of various insurance companies as well as other online articles and news articles, through the use of search engines to collect secondary data and information on selected areas of this research study.



#### **4.1.8.2: Primary Data:**

The Primary data were collected from the cross-section of mediclaim policyholders' belonging to heterogeneous socio-economic households that is families who had already procured a Mediclaim Policy which was in force. They were purposively drawn from the selected cities of the State of Gujarat. The primary data were collected during March to June 2012 from the selected cities of the Gujarat State, viz., Vadodara, Ahmedabad, Surat and Rajkot, respectively.

The responses of total number of 1463 selected Mediclaim Policyholders from the above mentioned selected four cities were considered for the purpose of data analysis and interpretation. The structured non-disguised questionnaire was also translated into Gujarati language for easier understanding among the selected mediclaim policyholders.

#### **4.2: REVIEWING LITERATURE FOR DRAFTING OF THE STRUCTURED QUESTIONNAIRE**

A brief outline of literature on methodological issues and scale development with regard to the factors affecting buying behaviour, buying decision process and the effects of the beliefs, attitudes and intentions on the buying decision of the mediclaim policy has been offered as follows:

Mark Schlesinger, Shannon Mitchell, Brian Elbel (2002)<sup>8</sup> had undertaken the comprehensive assessment of voicing in response to problems with health plans by developing hypotheses regarding the characteristics of problems, patients and settings that might inhibit the effective voicing. The data were collected through telephonic survey from randomly selected samples of 2,500 adults aged 18 to 64 from the Kaiser Family Foundation's National Survey on consumer experiences with the health insurance plans other than medicare during the end of the year 1999 both in English and Spanish languages. The researchers had used SAS software for data analyses. The factors related to consumers' willingness and ability to voice their grievances for their health plan as well as those pursuing alternative forms of voicing were identified by the researchers. The factors associated with the effectiveness of voice on the basis of the consumers' judgments about the satisfactory resolution of the problem in questions were also identified which showed that voicing is far more common, and obvious response to the problems in comparison to the exit option which has been limited by number of factors. The researchers had examined three dependent variables, two measures of voice and one measure of the effectiveness of voice of which the primary voice variable identified whether the respondent had any complain, oral or written, to his or her health insurance plan or not. Moreover, in order to assess the effectiveness of the voice, the measure of voicing was used as an explanatory variable in the model of problem resolution to determine the respondents' feelings on the satisfactory resolution of their healthcare problem which was considered as the dichotomous variable.

The logistic regression was applied to identify predictors of voice and the effectiveness of voice. Moreover, in order to assess the impact of voice on the resolution of problems related to the health plan without bias, the two-stage regression model was estimated by the researchers of which the voice regression represented the first stage. In the second stage regression predicting problem resolution, the predicted value of voice as an explanatory variable was used. Consequently, the coefficient on predicted voice provided an unbiased estimate of the relationship between voice and problem resolution.

While, in order to assess the impact of regulations on the efficacy of voice, the researchers had estimated two separate regressions for problem resolution, one for respondents who had voiced their grievances, and the second for respondents who had not facilitated to explore whether the regulations intended to enhance voice might also benefit enrollees who did not file grievances.

Barry G. Saver and Mark P. Doescher (2000)<sup>9</sup> had studied the associations of factors including minority-group membership, education, income, wealth, and health status with the voluntary purchase of non-group, private health insurance by analyzing the adult respondents in 2574 health insurance eligibility units (HIEU), those who were uninsured or who had purchased non-group, private health insurance, by using the data elements of National Medical Expenditure Survey (NMES). The researchers had studied the selected demographic factors, viz., Race/Ethnicity; Earned Income as a per cent of the Federal Poverty Level; Asset-based income; Home Equity; Years of Education; Diagnosed with Heart Disease; Hypertension; Arteriosclerosis; Diabetes; Cancer; Arthritis; Smoking Habits; Residence Area; Census Division as well as health to need health status of the study population. The researchers had presented the bi-variate association with the purchase of non-group health insurance along with the weightage for general health Status and mental health status on greatest number of the disability days, on the scale of 1 = Strongly Disagree and 2 = Strongly Agree. Logistic regression model concerning the purchase of insurance, and variance estimates were adjusted for the multistage probability sampling strategy of the NMES with SUDAAN using the first-order Taylor series linearization method. The marginal effects for categorical factors was computed by computing the probability of purchasing non-group insurance in its presence or absence for each observation as well as the marginal effects for a unit increase in the value of other factors too was computed.

Harris Schlesinger and J. Matthias Graf von der Schulenburg (1993)<sup>10</sup> had examined the interaction of the factors, viz., the expectations about the insurer quality attributes, search costs and switching costs, on the individuals' decision about switching their auto insurers, by using data of 2,004 German individuals of the consumer survey from the Federal Republic of Germany in the year 1983. On the basis of the empirical analysis, it was found that consumer informedness, performs the key role in switching decision and explains its effects on the consumer's insurers switching decision.

They had also studied various factors affecting consumer informedness and the sources of consumer information which was considered to be the mere consequences of the selected socio-economic factors to determine the type of consumer search. Consequently, the Broader Information Index reflecting the consumer overall informedness was developed by them.

Also, the degree of accuracy of consumer perceptions was been examined on the basis of the data on relative perception of the individuals about their insurers' expensiveness and that on the actual price differentials.

It was found that the consumer informedness is not only the conditional probability of switching higher for informed individuals, but the price variables, which significantly affect the switching decision of the informed individuals, were insignificant in the switching decisions for the uninformed consumers. The ordinary least squares regression was applied to assess the effects of the selected socio-economic factors on the information index by considering information index as the dependent variable. By measuring the likelihood of being informed by the application of probit analysis, it was found that the use of each source of information increased the likelihood of individual being informed, wherein each of the variables used were the dummy variables in the regression. It was also found that the use of the information sources was highly correlated with individuals' informedness.

Jeff Ritter (2004)<sup>11</sup> had examined senior citizens' beliefs, attitudes and intentions in relation to their healthcare purchasing decisions with the help of Fishbein and Ajzen's model of Theory of Reasoned Action. The data were collected by administering telephonic survey method from 113 cross-sectional senior citizens from two community-based membership organizations of South East Florida. Systematic sampling was applied for data collection wherein the degree of randomness was ensured by generating the random lists and selecting every third name on the random list. Descriptive statistics was put to use to analyze the demographic characteristics including the healthcare plan. The *t*-test was applied to analyze the significance between the means of two variables, and ANOVA was applied to analyze the significance between the means of three or more variables particularly categorical variables, viz., gender, marital status, ethnicity, and education.

The researcher had applied Chi-square test to assess the relationships between two categorical variables in small samples such as the demographic characteristics and the independent variable, that is, seniors' health care choices. To determine the relationship between two or more continuous variables, that is, income and current health status, as well as to determine the relationships among the concepts operationalized as individual items such as the relationship between the seniors' beliefs, intentions and attitudes in the research study, Pearson's Correlation analysis was applied. The testing was undertaken at 5 per cent significance level which is considered as the accepted level of significance in the social science research.

It was found that the senior citizens' health care coverage decisions and their beliefs about their health care coverage decisions were not influenced by gender, marital status, ethnicity, education, income, and current health status. It was also found that the seniors' beliefs were correlated with their intentions about purchase and that the intentions of the senior citizens were influenced by their healthcare coverage purchase decisions.

David M. Studdert et al., (2002)<sup>12</sup> had used the expert opinion as the basis for comparing different forms of health insurance in their study on the personal choices of health plans by applying the case-control design. They had surveyed the managed care experts at 17 academic institutions in the United States for determining the type of health plan they chose, along with the controls on academicians from other disciplines at these institutions who superficially faced the same insurance options.

For comparing the healthcare plan choices among the experts, viz., physician and non-physician, and controls, multinomial logit model was applied by them. Simultaneously, the choice behaviour within the moderate and high income level respondents was also examined by the researchers. The data were obtained by administering e-mail survey with the help of questionnaire containing the questions on choice set of the health insurance plan available to them at their institution, and the plan in which they were currently enrolled; information on respondents' age; health status; household income category; household profile, and members covered in their present health insurance policy between October 1999 and December 1999. It was found by the researchers that physician experts were approximately half as likely as controls or non-physician experts to enroll in health care plans of Health Maintenance Organizations (HMO). They found that the moderate-income households, both physicians and non-physician experts were less likely than control to opt for the health care plan of HMO, as well as, the propensity of the experts to choose HMO coverage varied little with income, in comparison to the propensity of the controls which changed remarkably between moderate and high income categories. It was concluded by the authors that the aversion of physician experts, and non-physician experts with moderate income, to HMO plans may be caused by their stronger distaste for the constraints on choice and access that was accompanying their HMO coverage, which was determined by their ability to absorb, understand and utilize information about the available alternative of insurance plans, apart from their insights in quality in managed care.

Joachim Winter et al., (2006)<sup>13</sup> had investigated use of prescription drug, information and enrollment intentions for the new Medicare Part D drug insurance program. The sample of Medicare eligible respondents were surveyed before the commencement for the open enrollment for new Medicare Part D drug insurance program.

It was found by the researchers that despite the complexity of competing plans offered by private insurers under Part D, majority of the Medicare population had information on the new program in the study and sizeable majority of the respondents had plan to enroll into the new insurance programme. The researchers had found that the elderly respondents, irrespective of their present drug use status, expected to benefit from enrollment into the new program which offered them the opportunity to enroll at the lower premiums in comparison to the current market plans.

While, it was found that there has been the significant risk of poor enrollment to the new plan by the eligible low-income elderly with poor health or cognitive impairment.

Charles A. Metzner and Rashid L. Bashshur (1967)<sup>14</sup> had dealt with the bases of choice between Blue Cross and Blue Shield Comprehensive Plan and Community Health Association group practice plan by auto workers in the Detroit Metropolitan Area. The data were collected by drawing the two independent probability samples which represented the choice groups, and had applied different sample rates to equalize the sample sized for group comparisons. The questionnaire emphasized on the questions on three major areas of study, health, that is how plan attributes were expected to affect health; finances, expected relief from bills and social position, covering social distance, control, and like features; general values, under the health, finances and social position; influence paths, including demographic variables. The results were reviewed on the basis of the clear intentions of interviewing to obtain the beliefs and attitudes of the respondents which influenced their health care plan choice. It was concluded that most respondents selected their plan on the basis of pragmatic and specific criteria rather than the ideological and general criteria.

Richard Tessler and David Mechanic (1975)<sup>15</sup> had examined the basis for selection of prepaid group practice in the dual-choice situation, and the social, attitudinal and health characteristics of populations opting for prepaid programs in contrast to other plans by undertaking the household survey of public employees of major metropolitan area including blue and white collar workers who had chosen their health care plan from the pre-paid group practice, and an alternative Blue Cross-Blue Shield Insurance plan. The objective of the study was to measure the selectivity in terms of socio-demographic characteristics, attitudes, and illness experience before it has been diluted by the particular selection of the plan. The study had been designed in such a way that the interview can be taken place soon after the choice situation, and usually before the prepaid plan enrollees had any experience with the medical group. The researchers in parallel to the choice study also assessed the patients' satisfaction with the prepaid practice and alternative insurance plans, using the same questionnaire, and thus had examined the existence of any consistencies and inconsistencies between the various populations used in the studies. The sample for the satisfaction study were drawn from two large industrial firms which had been offering a dual choice including the same prepaid group practice involved in the choice study.

In order to assess respondents' reasons for the choices made, the questionnaire comprised of the open-ended questions on the reason of choice, followed by the question suggesting various choice reasons and the extent of importance of each reason to the respondents' family, and finally selection of the single reason of choice of greatest importance to the family of respondents amongst the various given reasons of the health plan choice.

In order to determine whether there were any differences in health status between families enrolling in prepaid group practice and families retaining their Blue Cross-Blue Shield policies, the questions pertaining to the respondents' medical histories and current health problems, and those of other family members as well were asked to the respondents in the context of the list of 34 selected chronic health problems. The results were drawn on the basis of applying un-standardized regression coefficients, with the help of '*F*' distribution at 5 per cent significance level. It was inferred by the researchers that prepaid-group-practice respondents reported significantly more chronic conditions than Blue Cross-Blue Shield respondents. However, the analysis of the relationship between chronicity and utilization had been undertaken with data collected for the satisfaction study by applying Chi-Square test. It was inferred that there existed significant relationships between respondents' responses of their own chronicity and various indicators of medical-care utilization. To examine the relationship between the orientations toward the preventive health practices and the choice of prepaid group practice, the questions pertaining to the propensities of use of medical services under various situations, perceptions of the importance of regular checkups, last routine checkup, and owning of the medical reference book were included in the questionnaire along with the general questions on the perceived control over illness, faith in doctors, and skepticism about medical care. The results showed non-significant differences which were drawn statistically by applying un-standardized regression co-efficient on the basis of '*F*' distribution at 5 per cent significance level. It was also found by the researchers that no selectivity had resulted from preventive health attitudes and practices.

A. Taher Moustafa, Carl E. Hopkins, Bonnie Klein (1971)<sup>16</sup> had examined the health insurance choice and change decisions when the employment group was offered with a choice between the variety of plans with different organizational characteristics and extent of coverage in their study which was the part of the long-range comprehensive study of social and economic aspects of healthcare services conducted at the University of California, Los Angeles with the support of the United States Public Health Service. The researchers had also examined the relationship of the selected demographic characteristics of the enrollees, health status, health ideology and attitudes, characteristics of the plans, and knowledge about the extent of coverage with their decisions to choose or change the plans. The study population consisted of 312 enrollees, and 157 plan changers of the total eligible University Employees of California, and the data were collected on the basis of mail survey.

The Questionnaire comprised of the questions on the basic demographic information, and the additional information on the past-illness, use of services, and out-of-pocket expenses. The special section of the questionnaire dealt with the attitudes and ideologies towards health and sickness, extent of awareness of the benefits and limitations of the plan. Also, the special section of the questionnaire had been directed to the changers which dealt with the reasons for changing from the present plan.

It had been concluded by the researchers that the choice or change of the health insurance plans was determined more by the health insurance plan characteristics in comparison to the customer characteristics, and that the customers' knowledge of details of plan characteristics had been low, but their choices were found compatible with the health insurance plan realities. The study had also underlined the two major dilemmas of choice as experienced by the health insurance customers, viz., that which has been existing between comprehensive plan and a less comprehensive plan and that which has been existing between open and closed panel of physicians.

William C. Stratman (1975)<sup>17</sup> had examined the selection of the health care by the patients through an offering of the theoretical construct of the choice process and to report on the results of a survey on the basis of the model tested through survey of 521 household representatives in the area of Rochester, New York. The researcher had assessed the relative importance of the selected factors, viz., individual's perceptions of the utility of cost, time, convenience, socio-psychological factors, and the technical quality of care in relation to the socio-demographic characteristics of the respondents along with their individual health care utilization patterns. In order to understand the differential explanatory power of both socio-demographic characteristics, and the operationalization of the Rational Choice Model, the researcher had applied several stepwise multiple regressions. It was suggested that the customers justified their actions and health care decisions as they were found to be aware about what they wanted and that their health care decisions were the conscious attempt to meet their identified goals. The individual judgment of their own health care decisions varied with the individual qualifications. However, it was emphasized that the individual, irrespective of his/her qualification, does takes pride and establishes his/her own privilege over his/her health care decisions by evaluating the quality of medical care received as well as various other aspects of the health care process, no matter how illogical or worthless those customer perceptions may be viewed by the medical professionals. Hence, the patients' health care decisions, and its evaluation was not whimsical and unreliable but rational, as it was in accordance with their cognitive awareness of the relative utility of things that they are concerned about which should be taken into consideration by the health care system intending to provide welfare of patients. It was concluded by the author that the utilization of the health care services is the function of the patients' satisfaction with their identified health care aspects and health care process and that the reaction of the patient to the health care process is an essential determinant of the merit of any health care delivery system.

Ramesh Bhatt and Nishant Jain (2006)<sup>18</sup> had analyzed the factors determining the demand for private health insurance in a micro insurance scheme setting by applying the Heckman Two-Stage Estimation Model, that is, first, in order to determine the factors affecting the insurance purchase decision and second, to determine the factors affecting the amount of insurance purchase on the basis of econometric analysis.

The data were collected by undertaking a survey of the health insurance scheme holders of the health insurance scheme offered by the Charutar Arogya Mandal in the Anand District of Gujarat state. It was found that income and healthcare expenditure were the significant determinants of the health insurance purchase along with the age, coverage of illness and knowledge about insurance. Income was also found to be the significant factor but having non-linear relationship with the decision on the amount of the health insurance to be purchased. Other factors, viz., the number of children in the family, age and perception regarding future health care expenditure were also found to be significantly affecting the decisions regarding amount of health insurance purchase. The primary data were collected from the Anand District of the health insurance scheme provided by the Charutar Arogya Mandal in Gujarat State has also been used by Ramesh Bhatt and Nishant Jain (2007)<sup>19</sup>, to study the factors affecting the renewal decision of the health insurance policy by applying logistic regression. Out of the total sample size taken for the survey of 301 households, 145 households had purchased the health insurance from the Charutar Arogya Mandal. The researchers had found that income and health expenditure were not significant variables that affected the renewal of the health insurance. Claims variable was also found affecting non-significantly. While, education and age was found to be significant factor, except for higher age groups respondents. The researchers had examined the effect of the perceptions of the policyholders in the context of the various parameters of the health insurance policy of which coverage of illnesses and coverage of services were statistically found to be significantly affecting to the renewal decisions of the health insurance policyholders. The researchers had also underlined the probability of renewal of the health insurance policy by the health insurance policyholders experiencing higher satisfaction in their experience from the services of the insurer regarding provision of services, problem-handling during service delivery, assistance in getting the treatment, and diagnostics done and discounts pertaining to non-covered services etc.

#### **4.3: DRAFTING OF THE STRUCTURED QUESTIONNAIRE:**

While, drafting the structured questionnaire various factors as depicted in statements or items were selected in the drafting of the structured non-disguised questionnaire with necessary alterations as per details provided in tables given as below.



**Table Number 4.1**  
**List of References of Selected Criteria Used in Design of Structured Questionnaire to**  
**Study the Satisfaction/Dissatisfaction experienced by Selected Medclaim Policy Holders from the**  
**Mediclaime Policies in Selected Cities of Gujarat State**

<b>Selected Criteria</b>	<b>Name of Author</b>
<b>Demographic Criteria</b>	Jeff Ritter (2004) <sup>11</sup>
	Barry G. Saver and Mark P. Doescher (2000) <sup>9</sup>
	David M. Studdert, Jayanta Bhattacharya, Michael Schoenbaum, Brandee Warren, Jose J. Escarce (2002) <sup>12</sup>
	A. Taher Moustafa, Carl E. Hopkins, Bonnie Klein (1971) <sup>16</sup>
	Ramesh Bhatt and Nishant Jain (2007) <sup>19</sup>
	Dwight M. Scherban and Charles H. Nightingale (2000) <sup>16</sup>
	O Bryan, David; Clow, Kenneth E; O Bryan, Jane; Kurtz, David (1996) <sup>21</sup>
	Ramesh Bhatt and Nishant Jain (2006) <sup>18</sup>
<b>Other Socio-Economic Criteria:</b> Ownership/Use of the Selected Assets; Information on Daily Activities; Media Habits; Mobile Brand, Driving of the Vehicle	A. Taher Moustafa, Carl E. Hopkins, Bonnie Klein (1971) <sup>16</sup>
<b>Investments Made and Beliefs Opinion on Health Status and Benefits of the General Insurance Medclaim Policy (Q.1 and Q.2)</b>	Jeff Ritter (2004) <sup>11</sup>
	Barry G. Saver and Mark P. Doescher (2000) <sup>9</sup>
	A. Taher Moustafa, Carl E. Hopkins, Bonnie Klein (1971) <sup>16</sup>
	Richard Tessler and David Mechanic (1975) <sup>15</sup>
	Charles A. Metzner and Rashid L. Bashshur (1967) <sup>14</sup>
	David M. Studdert, Jayanta Bhattacharya, Michael Schoenbaum, Brandee Warren, Jose J. Escarce (2002) <sup>12</sup>
<b>Attitudes Towards the Buying of the Medclaim Policy (Q.2)</b>	Jeff Ritter (2004) <sup>11</sup>
	A. Taher Moustafa, Carl E. Hopkins, Bonnie Klein (1971) <sup>16</sup>
	H. Ronald Moser (2008) <sup>22</sup>
<b>General Information on:</b> Name of the Insurance Company, Year of Purchase, Renewal Status:	Ramesh Bhatt and Nishant Jain (2006) <sup>18</sup>
	Ramesh Bhatt and Nishant Jain (2007) <sup>19</sup>
<b>Information Sources for buying Medclaim Policy (Q.7), Buying Channels (Q.8), and Choice of Insurance Company (Q.9)</b>	Dwight M. Scherban and Charles H. Nightingale (2000) <sup>20</sup>
	Harris Schlesinger and J. Matthias Graf von der Schulenburg (1993) <sup>10</sup>
	David M. Studdert, Jayanta Bhattacharya, Michael Schoenbaum, Brandee Warren, Jose J. Escarce (2002) <sup>12</sup>
	Joachim Winter, Rowilma Balza, Frank Caro, Florian Heiss, Buying-hill Jun, Rosa Matzkin, Daniel McFadden (2006) <sup>13</sup>
	A. Taher Moustafa, Carl E. Hopkins, Bonnie Klein (1971) <sup>16</sup>
<b>Awareness on the Selected Medclaim Health Insurance Terms (Q.10)</b>	Harris Schlesinger and J. Matthias Graf von der Schulenburg (1993) <sup>10</sup>
	A. Taher Moustafa, Carl E. Hopkins, Bonnie Klein (1971) <sup>16</sup>
	www.irda.gov.in and Medclaim Policy Documents <sup>23</sup>
<b>Factors Considered for Buying Medclaim Policy, Choice of the Medclaim Policy (Q. 11A to 01-67),&amp; Factors considered for Measuring Actual Experience for the Purchase of the Medclaim Policy (Q. 11B 01-67)</b>	Jeff Ritter (2004) <sup>11</sup>
	Richard Tessler and David Mechanic (1975) <sup>15</sup>
	A. Taher Moustafa, Carl E. Hopkins, Bonnie Klein (1971) <sup>16</sup>
	Charles A. Metzner and Rashid L. Bashshur (1967) <sup>14</sup>
	Harris Schlesinger and Matthias Graf von der Schulenburg (1993) <sup>10</sup>
	William C. Stratmann (1975) <sup>17</sup>

	Ramesh Bhatt and Nishant Jain (2007) <sup>19</sup>
	Dwight M. Scherban and Charles H. Nightingale (2000) <sup>20</sup>
	O Bryan, David; Clow, Kenneth E; O Bryan, Jane; Kurtz, David (1996) <sup>21</sup>
	Ramesh Bhatt and Nishant Jain (2006) <sup>18</sup>
	Mark Schlesinger, Shannon Mitchell, Brian Elbel (2002) <sup>8</sup>
<b>Overall Perceived Importance Reported and Satisfaction/Dissatisfaction as and Reported Based on the Selected Factors considered for Buying Medclaim Policy (Q. 12 A 01 to 13 and Q.12 B 01 to 13)</b>	Richard Tessler and David Mechanic (1975) <sup>15</sup>
	Ramesh Bhatt and Nishant Jain (2007) <sup>19</sup>
	Dwight M. Scherban and Charles H. Nightingale (2000) <sup>20</sup>
	O Bryan, David; Clow, Kenneth E; O Bryan, Jane; Kurtz, David (1996) <sup>21</sup>
	Harris Schlesinger and Matthias Graf von der Schulenburg (1993) <sup>10</sup>
	Dwight M. Scherban and Charles H. Nightingale (2000) <sup>20</sup>
<b>Overall Satisfaction as Experienced &amp; from Buying Medclaim Policy (Q.13)</b>	Harris Schlesinger and Matthias Graf von der Schulenburg (1993) <sup>10</sup>
	Dwight M. Scherban and Charles H. Nightingale (2000) <sup>20</sup>
<b>Intentions on the basis of Buying of the Present Medclaim Policy (Q.14)</b>	Jeff Ritter (2004) <sup>11</sup>
	O Bryan, David; Clow, Kenneth E; O Bryan, Jane; Kurtz, David (1996) <sup>21</sup>

**\* Adapted as per the Objectives of the Study**

The researcher has attempted to collect the primary data from the cross-section of medicaid policyholders' belonging to heterogeneous socio-economic strata households that is across the selected cities of the Gujarat State, viz., Vadodara, Ahmedabad, Surat and Rajkot, as the collection of the demographic data of the selected respondents was very crucial. Moreover, in order to meet the objective of this research study, viz., to present the profile of the medicaid policyholders in the selected cities of the Gujarat State, the introductory part of the Structured Questionnaire was drafted considering the selected demographic factors, viz., Age-Group; Gender; Educational Qualifications; Marital Status; Occupation; Type of the Family; Annual Family Income; Number of the Dependent Family Members, and the Number of the Earning Family Members in the Family. These demographic factors were selected and included in the Questionnaire, after reviewing the various earlier studies on the Consumer Behaviour; Buying Behaviour; Healthcare Buying Decision Making; Insurance Buying Decision Making; Health Insurance Buying Decision Making as well as the studies on the Healthcare, Insurance, and Health Insurance Choice, were considered that too has been outlined in chapter number three, entitled as the "Review of Literature". Moreover, the daily activities, and the ownership of the selected Gadgets/Appliances was also determined, along with the questions to get an overview of the Media Habits of the selected medicaid policyholders referred as respondents who were drawn across from among the selected cities in the State of Gujarat, viz., Vadodara, Ahmedabad, Surat and Rajkot. Also, an attempt was made also to know the overall investment behaviour of the selected respondents.

In order to know, the penetration of the various insurance companies, in the selected cities of Gujarat, the Open-ended questions related to the Name of the Insurance Company and the Year in which the medicaid policy was purchased, along with the dichotomous type question to know the respondents' regular renewal status, was also kept in the Questionnaire.

The objective of the research study was also to study the crucial dimensions considered in the buying decision of the mediclaim policy on the consumer buying behaviour, the research questions on the use of the varied information sources, the channel for the purchase of the mediclaim policies as well as their awareness about various companies, and its consideration in the choice set for taking the buying decision for befitting questions were framed and included in the Structured Questionnaire. In order to determine the awareness of the selected mediclaim policyholders on the health insurance, Question No. 10, comprising of 39 selected health insurance and health insurance related terms was included, in the pattern of the cafeteria type of Question, as an extension of the Dichotomous questions, whereby the respondents were asked to select from more than one category of the alternatives.

Also, in order to evaluate and understand buying decision process of selected mediclaim policyholders with a specific focus on Choice criterion in selection of a particular mediclaim policy in the selected cities of the Gujarat State, the comprehensive Question, comprising of 67 items on 11 selected factors, affecting the choice of the mediclaim policies was designed. the 11 selected factors, that were considered, viz., age eligibility conditions; range of premium; coverage of the illness/diseases; other coverage related to the treatment and medical expenses; benefits of the individual mediclaim policy; promotional incentives; image of the company; services provided by the agent; services provided by the insurance company; network of the hospitals, and the complexity involved in the operations, respectively. Also to assess the perceived importance and overall satisfaction/dissatisfaction on the selected factors of the selected mediclaim policyholders, Question No. 12 was drafted. Undoubtedly, the structured non-disguised questionnaire used neutrally worded questions and the selected mediclaim policyholders, that is, the selected respondents, were asked to rate their responses on Likert Scale for Question No: 11 and 12 were gathered on a five point scale, defined as viz, 01=Least Important and 5 = Most Important respectively, and, 01=Highly Dissatisfied and 05= Highly Satisfied)

Moreover, it was identified on the basis of the review of literature that customer choice of the healthcare plan is also influenced by their beliefs on their health, that is, from the Item No. 1 to 7 of Question No. 2, and on the General Insurance Policies that is from Item No. 8 to 13 of Question No. 02, were drafted, on the Likert Scale to be answered on five point scale, viz., 01 as Strongly Disagree and 05 as Strongly Agree, respectively. Also, as the same scale was applied to determine the overall attitude of the selected mediclaim policyholders on buying of the mediclaim policy and on the Mediclaim Policy, for which the Items No. was 14 to 20 were designed and covered in Question No. 02. Also to determine the overall satisfaction of the selected mediclaim policyholders, Question No. 13 was drafted, which also served as the tool for internal check of the responses of the respondents.

At the end, the overall intentions in terms of the, renewal of the same policy; renewal from the same company; the switching over to the another policy and company in view of the benefits of the portability; recommending of the policy to the others/friends', and, the likeliness of switching over to the other policy and a company, too was considered in the Question No. 14. Questionnaire was also verbatim translated in vernacular language, that is, Gujarati, to help the respondents to better understand and to respond to it (Please Refer Annexure 01 & 02).

#### **4.3.1: Reliability of Structured Questionnaire:**

Reliability refers to the extent to which a scale produces consistent results when repeated measurements are made on the characteristics. The popular approach used for assessing the reliability is the internal consistency reliability amongst others methods assesses the reliability of a summated scale where several items are summated to form total score. The simplest measure of internal consistency is split-half-reliability. A popular approach of overcoming its problem is to use the Coefficient Alpha or Cronbach's Alpha. The Coefficient Alpha is the average of all possible split – half coefficients resulting from different ways of splitting the scale items. The value of this coefficient varies from 0 to 1, and average of 0.6 or less generally indicates unsatisfactory internal consistency reliability.

In this study, reliability tests were run to determine how strongly the opinion were related to each other and to the composite score. All dimensions of the questionnaire related with measuring the multiple influences of the selected items of the selected factors were tested and the Cronbach's alpha value ranged from 0.671 to 0.894 which showed internal reliability of the scale reflecting the degree of the cohesiveness among the scale items (Naresh K. Malhotra, 2007). The summary of Cronbach's Alpha score for all 11 groups of factors is given in the Table Number 4.2 as follows.

**Table Number 4.2: Summary of Indicators and Reliability Alpha Score**

<b>Sr. No.</b>	<b>Selected Criteria</b>	<b>Cronbach's Alpha Coefficient</b>
01	Experiences on Medclaim Policy for Age Eligibility Conditions (Q-11)	<b>0.750</b>
02	Experiences on Medclaim Policy for Range of Premium (Q-11)	<b>0.696</b>
03	Experiences on Medclaim Policy for Coverage of Illness and Diseases (Q-11)	<b>0.756</b>
04	Experiences on Medclaim Policy for Coverage of Medical and other Expenses (Q-11)	<b>0.862</b>
05	Experiences on Medclaim Policy for Benefits of Medclaim Policy (Q-11)	<b>0.769</b>
06	Experiences on Medclaim Policy for the Promotional Incentives (Q-11)	<b>0.855</b>
07	Experience on Medclaim Policy for Image of the Company (Q-11)	<b>0.831</b>
08	Experiences on Medclaim Policy for Services Provided by Agents (Q-11)	<b>0.881</b>
09	Experiences on Medclaim Policy for Services Provided by Insurance Co. (Q-11)	<b>0.882</b>
10	Experiences on Medclaim Policy for Network of the Hospitals (Q-11)	<b>0.838</b>
11	Experiences on Medclaim Policy for Complexity of Operations (Q-11)	<b>0.894</b>
12	Group of All Factors (Q -12)	<b>0.880</b>

#### 4.3.2: Validity of Structured Questionnaire:

The researcher had also measured convergent validity by comparing mean scores of scale with other measures of the same construct. It becomes clear from below given table, that the means of same construct were measured, and less variation was observed in the given question categories and average satisfaction score was found to be as similar. Majority of the respondents were found to be placed between highly dissatisfied to highly satisfied category as follows.

**Table Number: 4.3**

**Table Showing Comparison of Mean Scores of Extent of Respondents' Opinion on the Selected Items of the Selected Factors for buying the Mediclaim policies in Selected Four of Gujarat State**

Respondents' Opinion with respect to Criteria		Respondents' Opinion with respect to Criteria		Difference in Mean Count (Column 2 – Column 4)
Rating Scale 1 (Highly Dissatisfied) to 5 (Highly Satisfied)				
(Q-11-1 to Q-11-67)	Mean Score (Rank)	(Q-12-1 to Q-12-11)	Mean Score (Rank)	
1	2	3	4	5
Age Eligibility Conditions	3.54	Age Eligibility Conditions	3.56	-0.02
Range of Premium	3.49	Range of Premium	3.56	-0.07
Coverage of the Illness/Diseases	3.24	Coverage of the Illness/Diseases	3.63	-0.39
Other Coverage related to the Treatment and Medical Expenses	4.01	Other Coverage related to the Treatment and Medical Expenses	3.54	0.47
Benefits of the Individual Mediclaim Policy	3.74	Benefits of the Individual Mediclaim Policy	3.79	-0.05
Promotional Incentives	3.23	Promotional Incentives	3.23	0
Image of the Company	3.39	Image of the Company	3.71	-0.32
Services provided by the Agent	4.14	Services provided by the Agent	3.73	0.41
Services provided by the Company	3.88	Services provided by the Company	3.58	0.3
Network of the Hospital	4.15	Network of the Hospital	3.49	0.66
Complexity involved in the operations	4.08	Complexity involved in the operations	3.20	0.88
Overall Average	3.72		3.55	0.17

#### 4.4: A BRIEF ABOUT SAMPLING DECISIONS:

In view of the available time, resources and other constraints being faced by the researcher, it was decided to conduct a sample survey to study the buying decision process and influences of the selected demographic factors on the buying decision of the mediclaim policy of the selected mediclaim policyholders across the selected four cities of Gujarat State, and an attempt was also made to measure their overall satisfaction/ dissatisfaction based on evaluation of his/her own actual experience, using structured non-disguised questionnaire which was put to use for the same.

#### 4.4.1: A Representative Sample:

The primary data were collected from the cross-section strata of mediclaim policyholders' belonging to heterogeneous socio-economic households that is the families who had already bought or availed mediclaim policy which was in force who were conveniently and purposively drawn from the selected cities of the State of Gujarat, viz., Vadodara, Ahmedabad, Surat and Rajkot, respectively.

#### 4.4.2: Sampling Frame:

An attempt in this research was made also to get contact details about various mediclaim policyholders who have already availed mediclaim policy from the cross-section of mediclaim policyholders' belonging to heterogeneous socio-economic households that is families who had already availed a particular kind of mediclaim policy which was in force at the time of data collection who were purposively selectively drawn from amongst the selected cities of the State of Gujarat, viz., Vadodara, Ahmedabad, Surat and Rajkot respectively.

#### 4.4.3: Sample Size:

The ever increasing demand for research has created a need for an efficient method of determining the sample size needed to be representative of a given population. The formula for determining sample size is given below.

##### Formula for determining Sample Size:

$$n = \pi (1 - \pi) z^2 \div D^2$$

Where

$n$  = required sample size.

$\pi$  = the estimated population proportion (based on pilot study of 200 sample drawn from Vadodara city researcher has estimated that 73 per cent (0.73) were satisfied with the mediclaim policy purchased by them.

$z$  = suppose the level of confidence is 95 per cent than associated  $z$  value is 1.96

$D$  = the level of precision and desired precision is such that the allowable interval is set as  $D = p$  (sample mean [proportion]) –  $\pi$  (population mean [proportion]) = + or – 0.05.

This formula used from Naresh K. Malhotra and Satyabhushan Dash (2011)<sup>25</sup> 'Marketing Research – An Applied Orientation' 6<sup>th</sup> Edition, Pearson, Page number 364.

##### Calculation of Sample Size:

$$n = \frac{\pi (1 - \pi) z^2}{D^2}$$

$$n = \frac{0.73 (1 - 0.73) (1.96)^2}{(0.05)^2}$$

$$n = \frac{0.73 (0.27) (3.8416)}{0.0025}$$

$$n = \frac{0.757179}{0.0025} = 302.8717 \text{ so sample size is } \mathbf{303}$$

Based on total 303 sample size we can also determine the total sample size for four selected cities as given in the following table.

**Table Number: 4.4**  
**City Wise Distribution of Sample Size for Calculating Total Sample Size**

Sr. No.	Name of the City in State of Gujarat	Calculated Sample Size	Actual Sample Size form each city
01	Vadodara	303	517
02	Ahmedabad	303	400
03	Surat	303	286
04	Rajkot	303	260
	<b>Total</b>	<b>1212</b>	<b>1463</b>

1463 numbers of sampling units were chosen considering the urbanized population of households in selected cities of the Gujarat State based on available authentic population data were correlated with available data and information considering proportionate penetration percentages of mediclaim policyholders at the time of collection of the primary data had been put to use to decide on suitable figure (1463) of sample size in the proposed research study. Moreover, the sample size was determined by the similar studies, too were also referred for deciding the sample size for this research study. On the basis of this, the total number of 1463 representative sample units were taken for the purpose of the data collection through from the selected cities of Gujarat State, viz., Vadodara, Ahmedabad, Surat and Rajkot respectively.

#### **4.4.5: Sampling Design and Method:**

The non-probability sampling design was applied based on convenience sampling method for purposively drawing of the selected mediclaim policyholders amongst the selected cities of the State of Gujarat, viz., Vadodara, Ahmedabad, Surat and Rajkot respectively.

#### **4.4.6: Sampling Media:**

The primary data were collected by the researcher through administering structured non-disguised questionnaire in person in this research study from the selected mediclaim policyholders from the selected cities of the Gujarat State, viz., Vadodara, Ahmedabad, Surat and Rajkot respectively.

### **4.5: CHAPTERISATION SCHEME:**

**The Thesis comprises of total number of seven chapters that have been described in brief as follows.**

The chapter number one has been entitled as, 'Reviewing Health Sector and Health Care Sector of India'. The objective of this chapter was to offer outcome of the conduct of the review of the health and health care sector of India, the researcher has divided this chapter into two sections. The Section-I had dealt with the various aspects on the health and health sector. The researcher has also provided a brief conceptual framework of the health followed by the review of the health sector at global level, national level as well as at the Gujarat State level respectively.

The key areas therefore included in this section of the chapter number one are, viz., evolution of the health sector and components of the health sector, along with the comparative picture of India with the other countries of the world in the context of health parameters; regulatory and promotional role of the Government; budget allocation, and, issues and opportunities in the health sector.

Similarly, Section-II had dealt with the various aspects on the healthcare and healthcare sector. It comprises of the introductory conceptual framework about the health care and health care sector along with the performance of the health care sector globally, nationally and the Gujarat State level. The key areas as emphasized by the researcher in this section of the chapter one are, viz., review of the health care sector and health care spending pattern; investments and foreign collaboration in the health care sector; health care infrastructure, from the context of India as well as the State of Gujarat, along with the review of literature. The researcher has concluded the chapter by offering concluding remarks about the chapter.

The Chapter number two has been entitled as the, 'The Marketing of the Health Care, Insurance Services & Mediciam Policies in India', The researcher had attempted to provide the review of the marketing of the health insurance services in India with the objective to identify the key issues in the marketing of the health insurance services, along with the review of the health insurance sector of India. Therefore, the researcher has reviewed earlier studies concerning to marketing of healthcare services and had also reviewed marketing of the insurance and mediciam polices of India. Finally, the researcher has presented the overview of the mechanism of the mediciam policies accompanied by the review of the literature on the marketing of the mediciam policies in India. The researcher has also offered the concluding remarks at the end.

The Chapter number three has been entitled as the, 'The Review of Literature'. The objective of this chapter has been to offer the review of literature of the area under the research study. For this the review of the literature has been undertaken in three categories, that is, general review of literature, relevant review of literature and specific review of literature. Hence, the general review of literature has been undertaken on topics such as, viz., buying decision process and buying behaviour; factors affecting the buying behaviour and the choice. The relevant review of literature has been carried out on the healthcare buying decision process, health care choice and models, insurance buying decision process, and, insurance choice and models. The specific review of literature has been undertaken in the context of specifically health insurance in the key areas indentified under the research study, namely, health insurance buying decision, factors affecting health insurance buying decision making, health insurance choice, and health insurance choice models.



The Chapter number four has been entitled as the, ‘Research Methodology’. The chapter number four has explained about the research methodology as applied by the researcher in this research study. It comprises of the rationale of the research study, scope and coverage of the research study, objectives of the research study, research design, research methodology aspects, that is, viz., sources of data and the sampling decisions. It has also covered the review of literature pertaining to the drafting of the structured questionnaire put to use for the collection of the primary data, along with the test of reliability and validity of the research instrument. It has offered the brief about the secondary data referred by the researcher, along with the explanation and justification on the sampling decisions involved in the research study. It has also offered explanation on the data collection methods and the use of the statistical tools and techniques selected for the purpose of the data analysis.

The Chapter number five has been entitled as the, ‘Data Analysis and Interpretation’. Under this chapter an attempt has been made by the researcher to provide explanation on the data collection methods inclusive of editing, coding and validation of collected responses. The researcher has carried out the frequency distribution, content analysis, Anova and factor analysis, the purpose of the data analysis. The Chapter number six entitled as the, ‘Findings of the Research Study’. Under this chapter an attempt has been made by the researcher to present the accumulated and processed statistic in the form of findings after appropriate interpretations, in less technical version to the extent possible, in order to increase its utilitarian version. Considering the objectives of the research study, an attempt was made to explain practical implications of the research by the researcher.

The Chapter number seven entitled as the, ‘Conclusion, Recommendations and Suggestions’. This chapter has been divided into two sections, namely, Conceptual Part and Empirical Part. The objective underlining the conceptual part is to present the brief about the research study, in the form of summarized picture of the review of the health and health care sector, marketing of the health insurance services and the review of literature undertaken under the present research study.

The second part of the chapter has been underlined by the researcher with the objective to present the summarized view of the research methodology applied by the researcher, the highlights of the data analysis and interpretations and key findings of the research study. Further, an attempt has also been in this section of the chapter by the researcher to offer some valuable recommendations based on the findings of the research study along with the suggestions. The researcher has also made an attempt to offer the future directions of research study as well as the limitations of the present research study.

At the end the researcher has provided the list of the various references used in the research study in the form of Bibliography and Webliography, as well as has provided the List of Abbreviations, List of Tables and Graphs, in the form of Appendix.

#### **4.6: DIRECTIONS FOR THE FUTURE RESEARCH:**

In a low-income country like India, utilization of health care facilities is poor because of financial constraints. It can be expected that utilization of mediclaim will drastically increase if such constraints are removed or reduced. This will imply much higher health expenditure than current expenditure incurred by public and private mediclaim insurance provider. The present research study has not dealt with these aspects but provides the overview of the status of the role of the government in the health care improvement and the standing of the India in comparison to the countries of the world to the researcher aspiring to conduct the research in the broad area of the health sector.

Similarly, the researcher aspiring to undertake the review of the health care sector of India can undertake the research into the various aspects of health care. As the present research study highlights various key issues and opportunities in the health care sector too, specifically in the area of health care spending, health care infrastructure and budget allocation in the health care sector of India and Gujarat, it can serve as the resourceful secondary data sources to the researcher interested in undertaking the study in health care sector.

This research study also offers the base to further undertake the research at the state level in the health insurance marketing and marketing of the mediclaim policies in Gujarat State. Similar studies can be undertaken in the other states, to identify the comparative picture of the buying decisions and experiences of the mediclaim policyholders as well as the location/region specific differences in the patterns of buying of the mediclaim policies.

A comparative study of the perceptions of the mediclaim policyholders towards the public sector, private sector and standalone insurance companies can also be undertaken by the researcher. The research study can also be undertaken to study the renewal decisions of the mediclaim policyholders with the broader scope, that is, at the state level or the comparative study of the two or more states.

The future research could also have scope for formulating strategies for user-friendly claim settlement procedure. The core problem of the research study can also be examined to analyze impact of Information Technology in marketing of medical insurance policies in near future.

Moreover, the research can also be undertaken in the upcoming area of the health insurance portability and the perceptions of the mediclaim policyholders towards the health insurance portability, along with the critical evaluation of the role of insurance companies, the insurance agents and the third party administrators.

With the insurance companies announcing the cash less system of payment, the future researchers may undertake the similar research to study the perceptions of the mediclaim policyholders towards the network hospitals and IT adoption by the Insurance Companies.

#### **4.7: LIMITATIONS OF THE RESEARCH STUDY:**

- The present study is limited to the study of factors affecting choice and buying behaviour for the mediclaim policies in the selected cities , viz., Vadodara, Ahmedabad, Surat, and Rajkot of the Gujarat State only.
- The research study is restricted to the policyholders of private mediclaim policyholders, and the any other type of the health insurance policyholders are not taken into consideration.
- The research study is in the nature of sample survey therefore, only the representative samples from the entire population of the private mediclaim policyholders in the selected cities of Gujarat State has been considered unlike the entire population of the population survey.
- Willingness of the mediclaim policyholders in providing information for data collection might have influenced the results of this research study.
- The research study was also having limited time duration, and monetary resources, which might have influenced the results.
- The limitations in the use of secondary data sources to the research study does prevail.
- The responses of the mediclaim policyholders are subject to the personal biases, and the obvious limitations in the form of responses in the nature of, “Don’t know”, “Undecided” and “Neutral” response options from the surveying samples.
- Errors due to question misinterpretation or misunderstanding or inattention of the selected mediclaim policyholders might or might not have affected results systematically.
- The researcher has made an attempt in the present research study to conduct an overall analysis of the choice and buying behaviour of the mediclaim policies in general, rather than analyzing individually for each type of insurance company and the mediclaim policyholder.
- Though, results of the study obtained from selected samples are fairly meaningful, due care should be exercised in extending its conclusions for conducting the similar study in any other state, any other rural set up, or for any other health insurance category.
- The researcher has applied quantitative methods in establishing relationships between variables which is valuable, but, it is also considered as weak when applied to identify the reasons for those relationships.

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