CHAPTER - 5

RESEARCH METHODOLOGY
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The study aims at exploring the potentials and finding the means and ways of promoting the herbal health care products by developing effective marketing mix for the achievement of total health of the people of India in particular and the world population in general. The broad aspects of research methodology are briefly given below:

Nature of the Study

The nature of this study is characterized by the following features-

1. It is a Social Research.
2. It is Exploratory.
3. It has an Applied Bias.

It is a Social Research

Considering the broad classification of researches we put this project into the Social Research category. It aims at obtaining the information on market and changing consumer attitudes towards the herbal medicines/remedies. Marketing itself is a social process, since it is having a human aspect and is resulted by the complex social behavior. The management of marketing is also socially oriented and leads to the improvement of quality of life and supplies better amenities to mankind in keeping with the growing and varied requirements of the society.

Being a social research, it tries to identify the complex human behavior and the set patterns in it. A social research may not be as precise and accurate as are the researches in physical sciences in making predictions. However the human intelligence has led to the development of logical and systematized techniques being reasonably accurate in studying social phenomena. Individually human beings may be unpredictable, but collectively
they tend to be reasonably accurately predictable. Advancements in social research methods have increased the accuracy of predictions considerably.

**It is Exploratory**

The approach of the study is exploratory in the sense that it is mostly directed towards identifying the various characteristics of the market and to create observations conducive to further study. This approach is generally followed for new areas of investigations where the problem itself may not be very clear and is needed to be diagnosed. The domain of the research is also required to be reasonably wide but properly specified.

This approach was thought necessary for this study in view of the new trends in the Indian market and also it suits the herbal medicines industry. Neither is the herbal medicines industry well defined in India, nor do we get enough examples of studies in this area.

The exploratory nature has necessitated keeping the coverage of the study wide enough to cover all marketing aspects. Had it not been the case, the scope could have been kept very narrow and only one aspect of marketing could possibly have made up an elaborate and voluminous project.

**It has an Applied Bias**

A research in marketing is required to have a bias for application as D. S. Tull and D. I. Hawkins [1], state in the very first line of their book ‘Marketing Research’- "Marketing Research serves a single purpose that of providing information to assist marketing managers and the executives to whom they report to make better decisions". Therefore, in spite of keeping the study wide enough and exploratory in nature, an attempt has been made to relate each aspect of the study with a managerial decision based on it. Each of the hypotheses is related with a management action. This enhances the value of the project beyond the pure academic one. It has specially been mentioned in the objective of the study that it will provide useful guidance to the
management of the existing companies in the industry as well as to the rest of the business community in respect of the emerging opportunities in the field.

**It Relies on Empirical Evidence**

Relying on experience and observations is always preferable over relying solely on theory, and especially when the available information is insufficient, the empirical study is the only way to get it.

In this particular case also, lack of information on various consumer groups, their tastes and preferences, their changing perceptions has been the main reason for preferring an empirical study. An extensive survey in the four East and North Indian districts/cities has been conducted and it is expected that the results may necessitate the changes in the presently held opinions and help in building a new theory altogether.

**Features of the Survey**

When secondary data sources do not provide sufficient data, primary data may be collected. Survey method is the most common method of collecting primary data for marketing studies. Survey is concerned with the administration of questionnaires or interviewing with the group we want to study. We call them respondents.

An advantage of this approach is that it brings the researcher and the respondent face to face and their cooperative efforts help to build up a better research database. Personal contact enables the researcher to use his intelligence to elicit precise information from them and analyze the data in the light of his experience. In fact it establishes a liaison between the research laboratories and field situations and stimulates research both ways.

This approach involves considerable time and effort in field investigations and requires sampling, questionnaire design, questionnaire administration and data analysis. The approach that has been decided to be used in this survey is structured and direct using personal interview method.
To have homogeneity in the survey in all the interviews throughout the segments, a structured method has been used. To cover a geographical region extending to four diverse districts/cities, an unstructured method would have been difficult and unjustified too. A structured method also makes the generalization and prediction easier for the whole population.

Considering the directness in interview, it is always difficult to seek the cooperation of illiterate and ignorant rural masses, whether you are direct or indirect. In many of the aspects, where factual questions were to be asked, the question of being direct or indirect has no meaning. In case of other questions, if you can motivate the less educated people like those of Sitamarhi district to cooperate, the degree of directness hardly makes a difference. Therefore to make the questions simpler and less time-taking, a direct approach was used.

**Scope Determination**

Covering the whole population of India was beyond the time and cost resources. Therefore, the scope of the study was kept limited. It was decided to cover two cities each of East & North India namely Patna, Sitamarhi (in east), Delhi and Aligarh (in north).

**Objectives of the Study**

The broad objectives have already been stated in the introduction chapter. The main objectives of the present study are as follows.

1. To assess the effectiveness level of herbal treatment system as perceived by the cross-sections of the consumers in the region under study.
2. To study whether the herbal medicines are perceived to be more effective in certain disease categories and in certain stages of the diseases.
3. To identify the reasons why different cross-sections of the society opt for herbal medicine rather than the other kinds of medicines.
4. To ascertain the assumption of growing trend of Herbalism in health related problems.
5. To measure the performance level of different herbal manufacturers and a few popular brands of herbal remedies.
6. To study the effect of peculiar forms and sizes of herbal medicines in their promotion and identify the more acceptable forms, sizes and packaging types by the cross-sections of the consumers.
7. To assess the preference level of consumers and the doctors for different attributes of herbal medicines.
8. To identify the knowledge sources and the promotional media responsible for convincing and motivating the cross-sections of the consumers and the doctors for using / recommending the herbal remedies.
9. To measure the effect of alternative promotional tools in the promotion of herbal remedies.
10. To assess the attitude of the cross-sections of doctors for trying the newly launched herbal products in place of the ones under their use.
11. To identify and recommend the major steps required for promoting the herbal remedies.
12. To study the impression of the cross-sections of the consumers about the prevailing prices of herbal remedies.
13. To trace out the stocking pattern and measure the movement rate of the popular brands of herbal remedies in different types of stores in different regions under study.
14. To study the regular supply position and to probe in the problems of stock outs for herbal medicines if any.
15. To assess the dealers margin given and accepted by them for selling the herbal remedies.
16. To find the means and ways of promoting the involvement of dealers and investment in herbal medicines in their distribution functions.
Hypotheses

The formulation of hypothesis is an important step in a meaningful research. Hypothesis is an assumption that is sought to be proved or disproved. If there is no hypothesis, what a research is to prove or disprove remains a big question. A well-laid hypothesis also keeps the researcher on the right track and saves his time by not letting him get astray.

The hypotheses have been developed in a descriptive manner rather than making very statistical in their language, as generally stated in most of the quantitative projects. This is mainly because of the exploratory nature of the study. Had it been a research of a more decisional nature, in the sense that some proposed decisions were pending, tied up with the results of the research, the hypotheses would have been made more objective and in purely statistical language.

For example, hypothesis number 15 states, "A substantial portion of doctors feel the need for producing the herbal drug in all forms and sizes". Had there been a managerial decision on some particular market constraint, and if it was decided that the proposal will be adopted only when 70% of the doctors feel the need for producing the herbal drugs in all forms and sizes, the situation would have necessitated changing the above hypothesis in the following manner.

H0: More than 70% doctors feel the need for producing the herbal drugs in all forms and sizes.

H1: The doctors who feel the need for producing the herbal drug in all forms and sizes are ≤ 70%.

Many other hypotheses would have also needed a change in appropriate manner, had there been some decision linked with the findings of the research.

For most of the measurements in the study, no such cut-off points may be specified. The objective is to know the existing situation and its different
variables, which requires the hypotheses to be quite open and their tests very informative rather than being deciding. Therefore, various dimensions which have been identified for different problems have been translated into a number of hypotheses to highlight the interactions and associations among various factors involved.

A number of hypotheses have been developed to be tested for various aspects of the study. These hypotheses have also been classified into four groups to be included in each of the major chapters (6th, 7th, 8th and 9th) separately. The null hypotheses have been listed chapter-wise below:

For Chapter 6 (Market Analysis)

Ho1: There is a distinct level of effectiveness in herbal treatment system as perceived by the consumers of different regions.

Ho2: There is a distinct level of effectiveness in herbal treatment system as perceived by the consumers of different educational level.

Ho3: Effectiveness level of herbal medicines varies in different disease categories as felt by the consumers and by the doctors.

Ho4: Effectiveness level of herbal medicines varies in different diseases categories as felt by the consumers of different educational level and by the doctors with different qualifications.

Ho5: There are certain reasons for the popularity of herbal medicine more important than others as thought by the consumers and by the doctors.

Ho6: There are certain reasons for the popularity of herbal medicine more important than others as thought by different income groups of consumers and by the doctors of different qualifications.

Ho7: The practitioners of alternative medicinal system consider different reasons for the popularity of herbal medicine system.
Ho8: The trial of herbal treatment is more frequent in certain disease stages than the others as felt by the consumers and by the doctors.

Ho9: The trial of herbal treatment in different disease stages varies with the doctors practicing alternative medicines.

Ho10: The trend of herbal medicines' use is perceived to be different in different regions as felt by the doctors and by the dealers/retailers.

Ho11: The trend of herbal medicines' use is perceived to be different as felt by the doctors practicing alternative medicinal systems and as felt by the dealers/retailers dealing in alternative medicines.

Ho12: The willingness of the retailers for stocking the herbal medicines varies with the region as well as with the retailers dealing in alternative medicines.

For Chapter 7 (Company/ Product Preferences)

Ho13: The performance level of different drug manufacturers varies in different regions as perceived by the consumers and by the doctors.

Ho14: The performance level of different herbal drug manufactures is differently perceived by the doctors practicing different medicinal systems.

Ho15: A substantial portion of doctors feel the need for producing the herbal drugs in all forms and sizes.

Ho16: The need for producing herbal drugs in all forms and sizes is felt differently by the doctors practicing different medicinal systems.

Ho17: Some forms, packing types and sizes of herbal medicines are more preferred than others by the consumers of different regions.

Ho18: Some forms, packing types and sizes of herbal medicines are more preferred than others by the consumers of different income groups.
Ho19: Some attributes of herbal medicine are more desired than the others by the consumers and by the doctors of different regions.

Ho20: Some attributes of herbal medicine are more desired than the others by the consumers of different professions and by the doctors practicing different medicinal systems.

Ho21: The difficulty level in using the typical forms and methods of herbal medicines is felt differently by the consumers and by the doctors of different regions.

Ho22: The difficulty level in using the typical forms and methods of herbal medicines is felt differently by the consumers of different professions and by the doctors of different medicinal systems.

For Chapter 8 (Promotion and Information Preferences)

Ho23: There are some distinct knowledge sources for herbal medicines for consumers and for the doctors.

Ho24: There are some distinct knowledge sources for herbal medicines for consumers of different educational background and for the doctors practicing alternative medicinal systems.

Ho25: Some media of advertising are reported to be more effective for herbal medicines by the consumers of different regions.

Ho26: Some media of advertising are reported to be more effective for herbal medicine by the consumers of different educational background.

Ho27: On the whole a positive impression is drawn by the consumers from promotional tools used for herbal medicines.

Ho28: On the whole a positive impression is drawn by the consumers of different income groups and by the different age groups from promotional tools used for herbal medicines.
Ho29: The attitude of doctors towards newly launched herbal products varies with the region.

Ho30: The attitude of doctors towards newly launched herbal products varies with the doctors of different qualifications.

Ho31: Major steps required for promoting herbal medicines in the opinion of doctors vary region wise.

Ho32: Major steps required for promoting herbal medicines in the opinion of doctors vary with the practitioners of alternative medicinal systems.

Ho33: Some specific actions are strongly recommended by the dealers / retailers which need priority for the promotion of herbal medicines.

For Chapter 9 (Price & Distribution)

Ho34: Prices of herbal medicines are generally found by the consumers to be at the higher side.

Ho35: Prices perception about herbal medicines as generally held by the consumers vary with their profession and their family income.

Ho36: Herbal medicine stores are the major source that the consumers use for buying the herbal medicines.

Ho37: The educational level of consumers affects the source that they use for buying herbal medicines.

Ho38: Stock-out is a major problem faced by the consumers of different regions.

Ho39: The consumers of different age group and the consumers of different profession face the problem of stock-outs differently.

Ho40: Some herbal brands are moving faster than the others in different cities surveyed.
Ho41: Movement rate of the selected herbal brands varies with the dealers/retailers dealing in different types of medicines.

Ho42: The sellers are offered higher margin for selling the herbal medicines as compared to that in modern medicines.

Ho43: Investment in herbal medicines' selling is more profitable in the opinion of dealers / retailers.

Ho44: The supply of the herbal medicines to the dealers / retailers is not always regular.

Research Design

It will be useful at this stage to attempt to crystallize the whole research project by way of making a blue-print of the study. The pre-requisite for the purpose will be to specify the data requirement and evaluate it in terms of time and resource constraints. An adjustment in the study becomes inevitable to bring the tasks identified within the available financial and time restraints. This is done so that the amount of information sought matches the resources which are likely to be made available.

The design of the structure of the study consists of seven stages, some of which have to be followed consequently, but others can be followed concurrently. These are the following:

1. Pilot survey.
2. Sample Size Determination.
4. Questionnaire Design.
5. Field Work.

Now, before we determine the above mentioned variables, it is preferable to prepare a list of the needed information.
**Information Requirements**

When satisfied with the statement of research objectives, the researcher prepares a list of the information which is needed, to achieve the objectives. Going through the objectives and the hypotheses stated in the previous chapter, it is not very difficult to set down the following information needed for the purpose.

1. What are the important reasons for the popularity of herbal medicines among others?
2. What are the sources of their purchase of herbal medicine?
3. What is the effectiveness level of herbal medicine in different disease categories?
4. What is their perception about different treatment systems?
5. What are the preferred forms and sizes of herbal medicine?
6. What is the influence of different purchase decision factors on the consumers?
7. What the perception of good quality and right product is as held by the consumers?
8. What is the effect of promotional schemes?
9. What are their sources of information?
10. What is the price perception of the consumers about the herbal medicine?
11. How is the supply of herbal medicine?
12. How attractive is the margin offered by the companies on herbal drugs?
13. Which of the advertising media are heavily used?
14. What is the relation of the above factors with the background factors like geographical region, age, income, education, occupation etc.?

**Sources of Data**

Other than the secondary sources available to provide the relevant information from different companies, government agencies and the libraries the focus in this research is on the primary sources of information which is collected through survey of the following groups of respondents.
1. Consumers i.e. the potential users of herbal remedies
2. Doctors i.e. the potential advisors / consultants of the herbal medicines
3. Dealers / retailers i.e. the suppliers who stock and offer the herbal medicines to the end users

An effort has been made to cover the cross-sections of the above groups. For example the doctors of all kinds who practice in modern medicine, herbal medicine or homeopathy are surveyed. Similarly the retailers of all kinds of remedies who stock any kind of medicine are included in the sample.

Separate questionnaires have been designed for separate groups of respondents.

**Resource-Quantity Compromise**

In an ideal world, a field research will involve the personal interviewing of all the individuals who can give relevant information or whose opinion is important. However, a trade-off between ideals and economic reality are inevitable. A number of reasons have been given by Livingstone:

1. Too many people are to be interviewed either in absolute terms or within any reasonable financial budget.
2. It may be impossible to get round all the people who are distantly located.
3. Some people may be unwilling to be interviewed but still might be ready to supply limited information sought in another way than by interview.

There are of course other reasons but these, as well as two of the three listed above, almost inevitably come down to costs. With an unlimited budget most obstacles can be overcome, but no researcher is ever remotely likely to have an unlimited budget.

Another dimension is that of accuracy requirement. The erroneous public opinion polls in the pre-election period sometimes misguide the market researchers demanding the highest level of accuracy maintenance. It is in the nature of these polls, relying on interviews of a thousand or at most two thousand of millions of voters giving rise to a standard error as high as two to
three percent. And in most democratic elections two or three percent can make all the difference to which party wins.

How often do these conditions apply in a business research survey, particularly for a relatively small company? Accuracy to within two or three percent may be an unnecessary refinement, for the individual company’s performance is not likely to be affected by rather marginal considerations. What the company needs to know is roughly what share of the market it has, and over time whether it is holding its own or increasing or decreasing its share. If acceptable results can be achieved by ‘quick and crude’ methods, there is no real justification for going expensively for a far higher level of accuracy than is really required or indeed practical.

The compromise has mainly been done by way of limiting the scope of the study to only Eastern & Northern Zones of the country and a sample has been drawn of a limited number of cities from this. The questionnaire has also been designed to cover only the more relevant questions needed for the study to keep it within the manageable limits. The details of the design variables in the following pages will clearly show the nature of this compromise.

**Pilot survey**

While trying to prepare a design of the survey, it was thought necessary to conduct a test or pilot survey to ensure the work ability of the design before giving it a final shape. The pilot survey was mainly conducted for three purposes.

1. To determine the sample size.
2. To test the questionnaire.
3. To improve the fieldwork organization.

The most common method of sample size determination requires three kinds of specifications, namely allowable error, confidence coefficient and the estimate of the standard deviation of the population. The first two of these specifications are matters of judgment involving the use of data but the third
specification, the estimate of the standard deviation of the population, is the responsibility of the researcher. Sometimes these estimates are available from the previous studies. But no previous study on these marketing aspects could be known that had been conducted for the industry under consideration.

In the absence of such sources, one has to go for a pilot survey to estimate the population standard deviation and use it for sample size determination.

Another reason for conducting the pilot survey is to ensure that the questionnaire that has been designed and looks simple and unambiguous to the designer will appear equally so to the respondent. There is, therefore, a strong case for trying out the questionnaire in a pilot survey before the main launch. It can be a humbling experience for the designer to find what can go wrong.

If the researcher is not going to do the entire interview himself, it is useful for him to involve others in the pilot survey, while keeping himself also fully associated with it. This gives a good idea to the researcher of the possible difficulties in the fieldwork of the main survey. This helps the researcher in better fieldwork organization and control.

A small sample of fifty respondents was drawn from the city of Aligarh on convenience basis. It comprised of all the 'types' of the consumers i.e. urban, semi-urban and rural. The researcher accompanied with others, who were going to be involved in the main survey, visited a number of places to administer the first draft of the questionnaire. The problems arising in the field situations were carefully noted. The reactions of respondents to different questions were also recorded. The experience led to the modifications in the initial design in the following dimensions.

1. Changing the nature and wordings of some of the questions.
2. Changing the sequence of the questions looking to the level of difficulty.
3. Cutting short the size of the questionnaire by omitting some of the less important questions.
4. Preparing a different instruction set for the investigators.
5. Modifying the fieldwork plan in respect of time and effort requirement.

The analysis of the pilot survey was also done, so as to be used in the sample size determination. This facilitated deciding on the most immediate design variable i.e. sample size determination.

**Sample Size determination**

The logic of Sampling Distribution gives a relationship as follows-

Number of Standard Errors = Allowable Error

Implied by Confidence Coefficient Standard Error

Where Standard Error (defined as Standard Deviation of the Sampling Distribution) of the 'proportion' is given by-

\[ \sigma_p = \sqrt{\frac{\pi (1-\pi)}{n}} \]

The area under the sampling distribution between any two points can be calculated in terms of z-values. The z-value for a point is the number of standard errors a point is away from the mean. The z-values may be computed as follows-

\[ Z = \frac{\bar{X} - \mu}{\sigma_p} = \frac{D}{\sqrt{p(1-p)/n}} \]

\( D = p - \pi \) where Population Proportion = \( \pi \)

Sample Proportion = \( p \)

\[ \sigma_p = \frac{D}{Z} \]

\[ = \frac{\sqrt{\pi (1-\pi)}}{Z} \] or

\[ n = \frac{\pi (1-\pi)z^2}{D^2} \]
Using the above formula, we take confidence coefficient level (CL) of 95%. The corresponding z-value associated with CL is 1.96 and take allowable error to be only 5%.

Thus the sample size calculation is summarized as-

Steps:
1. Level of precision  \( D = p - \pi = \pm 0.05 \)
2. Confidence Level (CL)  \( CL = 95\% \)
3. z-value associated with the CL  \( z = 1.96 \)
4. Standard Deviation of the Population Estimate \( \pi \): \( \pi \) can take various values
5. Sample size

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

Now, whatever the proportions (value of \( p \)), the sample size comes out to be less than 385. This implies that a sample of size 400 will be more than sufficient to estimate the population proportions with 95 percent confidence, allowing only 5 percent error. Therefore a sample size of 400 has been decided for the study.

**Sample Selection**

A stratified two stage sampling design has been used. Stratification has been done on the basis of the type of city. The following two regions and the types of cities have been included in the study:

Region:  
1. Eastern Zone &  
2. Northern Zone

Types of cities:  
1. Large size cities &  
2. Small cities.

In the first stage two cities were selected from each zone i.e. Eastern Zone and Northern Zone. In the second stage respondents have been taken in equal number from each of the cities to ensure sufficient representation of each zone and the selected city. The whole population (Eastern and Northern India) has been divided into two strata (Divisions) of East and North zone. Out
of these zones four cities were chosen on convenience basis. Consequently the following selections were made.

<table>
<thead>
<tr>
<th>Zones</th>
<th>Populations*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eastern Zones</strong></td>
<td></td>
</tr>
<tr>
<td>Patna</td>
<td>(Large city) 47,09,851</td>
</tr>
<tr>
<td>Sithamarhi</td>
<td>(Small city) 26,69,887</td>
</tr>
<tr>
<td><strong>Northern Zone</strong></td>
<td></td>
</tr>
<tr>
<td>Delhi</td>
<td>(Large city) 1,37,82,976</td>
</tr>
<tr>
<td>Aligarh</td>
<td>(Small city) 29,90,388</td>
</tr>
</tbody>
</table>

* On the basis of census India 2001

The sample size of 400 was distributed to these selected cities in equal numbers. The allocation of sample was as follows:

<table>
<thead>
<tr>
<th>Districts/ Cities</th>
<th>Consumers</th>
<th>Doctors</th>
<th>Dealers/ Retailers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patna</td>
<td>50</td>
<td>25</td>
<td>25</td>
<td>100</td>
</tr>
<tr>
<td>Sitamarhi</td>
<td>50</td>
<td>25</td>
<td>25</td>
<td>100</td>
</tr>
<tr>
<td>Delhi</td>
<td>50</td>
<td>25</td>
<td>25</td>
<td>100</td>
</tr>
<tr>
<td>Aligarh</td>
<td>50</td>
<td>25</td>
<td>25</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>200</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td><strong>400</strong></td>
</tr>
</tbody>
</table>

This type of stratified sampling is on the one hand, expected to allow representation of all segments of the population in sufficient number and on the other hand facilitate using statistical tests to study the behavioral patterns of the different strata.

**Questionnaire Design**

To collect information from the sample members, we require designing a questionnaire that may either be filled up by the respondents, if they are literate ones or may be filled up by the investigators who interview them, if they are illiterate ones. The kind of questionnaire needed is a simple and straightforward one, in a get-up that may retain their interest till the end, a
style that may not irritate them and its contents that may not lead to a non-
response from them.

A good questionnaire is easy to understand, simple to answer, interesting to complete and enjoyable to return. If one wants to design it he needs to know the respondents, their tastes and preferences and their culture. The final drafts of the questionnaires, as used in the main survey have been included in the annexure.

This whole analysis only ensures that the questionnaires are such that respondents can answer the questions correctly, but another equally important aspect is whether they will answer the questions correctly. This aspect calls for an attention to the field work exercise in the process of data collection.

**Field Work**

Conducting a survey in four cities of two zones requires making a team for the fieldwork. Investigators were required who may be familiar with these cities and who may personally visit these to interview the respondents and get the questionnaire filled up.

There was no difficulty in getting a number of students belonging to these places, residing in the hostels of A.M.U. Aligarh. This was a favorable factor in the conduct of the survey. Many of them were contacted and 12 of them were finally selected for the purpose. They all were graduates who consented to cooperate in the work. Each one of them belonged to a district or a near-by district where he was supposed to conduct the survey.

Time set for the survey was the coming vacations when those students were expected to pay a visit to their homes. This way the traveling expenses to be paid to investigators were saved.

Now the most challenging task of training and motivation to these field workers was ahead. They were given detailed instructions about the purpose of the study, how to locate and approach respondents, to establish rapport, to
ask questions and to obtain and record accurate answers. They were motivated, without any financial reward, for obtaining reliable data, and in no stage of work were they found to be under-motivated.

The instructions given to the field workers were relating to the following aspects:

1. Selection of a respondent.
2. Approaching the respondent.
4. Method of administering the questionnaire.

The selection procedure was explained to them as per the sample design. To some of the respondents, who were literate, the questionnaire was given along with the pen for immediate completion. But for others it was read along with the alternatives given for the answers and their answers were recorded instantly. If a question was not easily understood by respondents, interviewers rephrased it in a way which caused less confusion. Since the questionnaire was mostly structured one with very few open-ended questions, the possibility of variation in their perception and in that of the interviewers were the least.

During the fieldwork, a contact was maintained mainly through e-mails and phone. Instructions were send from time to time to remove difficulties of the field workers. On the return of the investigators, the whole work was evaluated and it was felt that another vacations are required to complete the work which is undone or done unsatisfactorily.

Another plan was prepared for the next vacations and the whole process was repeated once again. Some investigators were replaced by others because of the lack of cooperation from them and many of the old investigators were requested to administer some more questionnaires to replace the incomplete, defective or irrelevant responses in some of the questionnaires.
The field work was finally completed but only after taking up the third phase of work. The whole exercise proved that the realities are different from theories.

**Analysis and Testing of Results**

The analysis involves converting a series of recorded responses in the questionnaires into descriptive statements and inferences about relationships. The important steps followed in the analysis of this survey are:

1. Editing
2. Coding
3. Tabulation
4. Use of Statistical Tests

The purpose of editing was to ensure that the data requested was present, readable and accurate. Since the questionnaires were fully structured ones, with a very few open-ended questions, the editing was not a very difficult task. The questionnaires found incomplete or illegible were rejected and were replaced by others, arranged in the next phase of the survey.

In the process of coding, a numeric code was assigned to each of the question pertaining to age group, sex, occupation, income group, monthly income group and marital status. Same was done for the answers to these questions.

In the tabulation stage, the responses were recorded from the questionnaires to the “Master Chart”. Each row of it showed responses to one questionnaire and the different columns were meant for different questions. Three different master charts were prepared, one for each i.e. consumers, doctors and dealers/ retailers. This information was further condensed on three charts called summarized tabulation sheets. This is a frequency chart showing the frequency of different answers by different segments of the market. Different columns represent the question number and the rows represent the codes of alternative answers, segment-wise.
This is followed by making individual tables for each aspect of the study and a few for cross analysis relating those aspects with background factors like profession, income, sex etc.

For the purpose of drawing conclusions and testing of hypothesis, the following methods were used in the process of data analysis:

1. Frequency and percentage calculation for different parameters
2. Rank coefficient using the ranks and multiplying them with the appropriate weightage-coefficients rank wise
3. Correlation coefficient for comparing the two sets of similar data obtained from different groups of respondents
4. Rating scores for Likert scale analysis by multiplying the frequencies with the appropriate weightage-coefficients
5. Chi square test for independence / significance test

In the above analyses SPSS package was used for calculating the values.

REFERENCE