CHAPTER III

METHODS OF STUDY
1. In Sections II and III of Chapter I, the behavioural aspects of health and health behaviour have been discussed and some conceptual clarifications were also made. In order to study the effect of a number of variables upon our main dependent variable, i.e., medical-care seeking behaviour, which basically is an important part of total health behaviour, it is necessary not only to examine various influencing variables, but also to put them into a meaningful research design by employing suitable methods and techniques so that a clear-cut and effectual relationship is discernible. The purpose of this Chapter is therefore to properly delineate these details of methodology.

I. DEVELOPING THE BEHAVIOURAL PATTERN OF SEEKING MEDICAL-CARE

2. In the earlier two Chapters, specially while reviewing various studies, it was endeavoured to indicate with ample evidences that the variables such as the age, socio-economic status, caste, knowledge about causes of illness, practice of quackery, accessibility to health and medical-care, satisfaction with the existing institutional and non-institutional health and medical-care services, role of primary group in decision-making, etc., etc., influence the medical-care seeking behaviour. These variables are embedded in the social system and for the purposes of this study, these may be called as social variables which may be treated as independent variables in the present study. Similarly, there are certain factors which operate at individual level and sometimes so vitally affect and change the colour and the nature of social variables that independent variables may sometimes apparently lose their importance in
influencing the dependent variable, i.e., medical-care seeking behaviour directly. The variables which operate in this way at individual level and which appear to be important in this study are: (a) the concept of perceived health; (b) self-assessment of health; (c) perceived health aspirations; (d) dependency behaviour; and (e) scepticism about modern medical-care. These variables are to be treated as intervening variables in the present study. These intervening variables have been measured by obtaining the knowledge about individual perceptions and from these measures the degree of the influence of social factors upon dependent variable have been assessed. In other words, through this research design it is envisaged to examine, on the one hand, the relationship between the variables emanating from the social system and the characteristics of curative services and, on the other hand, to analyse the characteristics of the respondent-users and non-users — largely based upon their individual perceptions. Thus, the social variables through interaction with individual perception give rise to a pattern which is reflected in the actual behaviour of seeking medical-care. In developing such a paradigm, due attention has been given to a number of theories postulated in different disciplines of epidemiology, sociology, social psychology and anthropology which appear to be most appropriate for the present study.

3. Amongst several endeavours made so far, Suchman's (1965 a) attempt to assess the influence of social group factors upon individual's illness behaviour seems most relevant here. His fundamental postulate was that behaviour is constrained by the expectations and the directions of the social groups which bear significance for man. As a consequence, group
norms and mores have evolved which strongly influence individual attitudes and behaviour in health area. Suchman's major hypothesis was that those individuals who belong to relatively more homogenous and cohesive groups were more likely to react to illness and medical care in terms of the social group's definitions and interpretations of appropriate medical behaviour rather than the more formal and impersonalised prescriptions of the official medical care system. Suchman's thesis in a diagrammatic form may be represented in Figure 1 below:

**FIGURE 1**

**SHOWING SUCHMAN'S ORIGINAL MODEL**


While 'Social Status' describes the individual's class position, 'Social Group Structure' seems to refer to the nature of social network in which he participates. This model was later revised by Suchman himself (1965 b) to establish a direct relationship between socio-demographic (ethnicity and socio-economic status) factors and medical orientation. He further made an assumption that cohesive social groups are basically lower-class phenomena and by definition incompatible with a favourable orientation towards official medical services. The diagrammatic form of his revised model is presented in Figure 2.
In consonance with the above models, a major part of the paradigm in the present study has been taken from Suchman (1965a, 1965b) with appropriate modifications (such as ethnicity has been substituted by caste, etc.), and systematic attempt has been made in the present study to assess the workability of the variables as well as the viability of the model in Indian conditions, specially in the Indian rural-setting where the problem of underutilization of the existing health and medical resources is very acute. It may, however, be mentioned here that the placement of/in the two upper Blocks of the model (Fig.3) is only tentative and the exact inter-relationships between them have not so far been examined adequately in relation to health in this country under any scientific or systematic investigation. Considered from this angle, the present study is supposed to make an important contribution to the sociology of health in rural India.
CONCEPTUAL MODEL OF CURATIVE BEHAVIOUR

IN RURAL SETTING

FIG. 3

SOCIAL VARIABLES

1. SOCIO-ECONOMIC STATUS
2. PREFERENCES FOR SYSTEM OF MEDICINE
3. ACCESSIBILITY & SATISFACTION WITH AVAILABLE CARE
4. PRIMARY GROUP INFLUENCES
5. CASTE

INDEPENDENT VARIABLES

INTERVENING VARIABLES

PERSONALITY VARIABLES

1. LEVEL OF ASPIRATIONS REGARDING HEALTH
2. SELF-ASSESSMENT OF HEALTH
3. DEPENDENCY IN SICKNESS
4. SKEPTICISM ABOUT MODERN MEDICAL CARE
5. FAITH IN FOLK-PRACTITIONERS

DEPENDENT VARIABLES

PATTERNS OF SEEKING MEDICAL CARE

MEDICAL CARE SEEKING BEHAVIOUR
The logical sequential steps resulting into the paradigm of the present study is presented in Figure 3. It may be seen that most of the factors in the first block are social variables whereas in the second block they represent the individual's personality variables. The interaction between the two helps in establishing a pattern which in turn would determine the nature and type of medical-care seeking behaviour. It is recognised that the choice of seeking medical care in rural areas is much limited as compared with that in urban areas, but since the purpose here is to examine the influence of social and individual (personality) variables upon the medical-care seeking behaviour right from the onset of symptom to the contact with a doctor, it may not be necessary to have a multiplicity of agencies providing medical care in the particular area. As a matter of fact, even within any two or more sources of medical-care, it should be possible to establish a pattern showing the medical-care seeking behaviour. For establishing such a pattern, a brief discussion of the measuring devices and tools employed in this study seems necessary.

II. TOOLS AND INSTRUMENTS

5. For the measurement of social and individual characteristics, the following scales, which were pre-tested in a pilot study, have been used in the present study besides, of course, a large Interview Schedule.

A. Socio-Economic Status Scale Questionnaire (Rural) by Kapoor and Singh (1978), briefly called SESSQ-R.

B. Self-Anchoring Scale (for measurement of aspirations regarding health) by Cantril (1965), briefly called SAS.
C. Perceived Scepticism of Medical Care Scale (Suchman, 1965 b), briefly called PSMCS.

D. Perceived Dependency in Illness (or sickness) Scale (Suchman, 1965 b), briefly called PDIS.

E. Interview Schedule.

A. SESSQ-R:

6. The SESSQ-R, developed and standardised by Kapoor and Singh (1978), includes most of the areas of SES which have been extensively tested by Pareek and Trivedi (1964). This scale was slightly modified and considered suitable for the purposes of this study as it not only covered the conventional items such as occupation, education, social participation, etc., but many other new variables such as the nature of dwelling units, material possession, etc. The 17-items scale included the following broad headings: Occupation, Land-wealth, Cattle-wealth, Housing, Domestic possessions, Agricultural equipment, Educational level, Number of family members, Type of offices held in village, Number of servants kept for domestic and agricultural work, Membership of different organisations, Radio-listening habit, Weightage given to the criteria for determining an individual’s social status, Usage of new and innovative devices, Providing advices to others, Time devoted to social work, (indicative of social participation), and finally, Use of family planning methods. As mentioned earlier, each category was divided into several items and each item was assigned a weightage score so that the summation of these scores would indicate the socio-economic status of an individual. This scale was pre-tested on a small sample and was found suitable with no major change in items except a minor change of animal wealth from camels to pigs and horses.
In order to measure the socio-economic status of the villagers in rural Haryana, separate norms had to be developed, as those laid down by Kapoor & Singh (1978) are based on U.P. villages which are in many ways different from Haryana villages. By combining the entire sample, the distribution of total score of SESSQ-H was examined by the "Goodness of Fit" test which revealed the scores to be normally distributed. Therefore, taking the mean and the standard deviation of the total sample, three categories, viz. Lower, Middle and Upper Classes were formed on the basis of cutting point at 1.2 sigma. Thus, the range of minimum and maximum obtainable score of this scale was 0 and 112, respectively.

B. SAS:

The Cantril's Pictorial Self-Anchororing Ladder Scale (Kilpatrick and Cantril, 1960) consists of all steps (1 to 11). This scale was utilised for measuring the aspirational level of the respondents regarding their own health. In order to make the explanations meaningful, step 1 was indicated to be the weakest health and step 11 as very high status in health. Extra care was taken to ensure that the ladder scale was understood by the respondents, by relating it to their own health in a very simplified manner. It was decided to use three dimensions of time perspective, viz., present, past, and future, by asking "Where do you think you are now in regard to your health", "Where do you think you were five years before", and "Where would you expect to be in the next five years". Five-year period was considered as relevant time dimension of past, present and future as higher time span may serve as an obstacle for predicting, in view of the uncertainties that a
respondent may confront in his day-to-day activities of maintenance of health. It was noticed in pre-testing of the scale that the ladder method calls for greater tact and skill in administering, particularly to illiterate or semi-literate group of respondents who in the present study constituted about 49.1% of the total sample.

C. EDMCS:

9. In order to study the individual variations in response to sickness and medical care, a series of operational measures indicative of affective and behavioural aspects of sickness and medical care were employed. The affective aspect has been measured by developing a 3-point scale known as 'Scepticism about medical care' which dealt with the doubts the individual has about the claims of professional medicine and his desire to check on who the doctor is and what he is doing. This scale has three inter-related statements having the minimum and maximum obtainable score as 0 and 6, respectively. The higher score is indicative of greater scepticism about modern medical care.

D. PDIS:

10. Similarly, behavioural aspect of sickness was assessed by another scale known as 'Dependence in illness or sickness' which measured the need of the sick individual to rely upon other lay individuals for help and support during illness or sickness. The minimum and maximum obtainable score on this scale is 0 and 4, respectively, wherein maximum score is indicative of higher dependency in illness or sickness. Both these scales have been adapted from the Suchman's (1965) 'Medical Orientation Scale' after proper pre-testing in India.
E. Interview Schedule:

11. The entire Interview Schedule which included the above discussed scales is divided into three main parts in which Part I deals entirely with the Socio-Economic Status Scale Questionnaire (SESSQ-R) based more or less on the factual data recorded from the respondent. Part II of the Schedule is devoted to 'Modernity Scale' as developed by Sharma (1978). It also contains scales of Skepticism about modern medical care and Dependency in illness or sickness. Part III of the Schedule contains pre-coded and some open-ended questions regarding the concept of health, the self-assessment of health status, the perceived morbidity during one month prior to the date of interview, the availability and the extent of usage of institutional and non-institutional medical care, the preference of the particular system of medicine, the role of folk-practitioners in curing sickness, etc. The sub-section of Part III is exclusively devoted to an actual episode of sickness taken as a test case and thus contains questions from the onset of sickness episode to the actual medical care seeking behaviour. In this way, the Interview Schedule is fairly comprehensive to cover opinions, attitudes and even real episodes of sickness analysis built into it.

III. SAMPLE

12. Although the detailed background of the area of Haryana State, its districts, specially Rohtak district and the organizational structure of health and medical services from State level down to the block or Primary Health Centre (PHC) level, would be given in the next Chapter, it seems necessary to give an account of methods of drawing the sample for the
present study here.

13. The sample was drawn from the Beri Block which embraces a Primary Health Centre (PHC). This block has 32 villages out of which 14 fall within the radius of 5 kilometers. From these 32 villages, three villages were selected on the criteria of distance from the location of PHC, i.e., in terms of accessibility to curative services, or proximal distance and remote distance. One of the villages chosen is Digal in which the PHC itself is located. Two more small villages Shafipur and Malikpur, which were farthest from PHC, were also selected. These were the only two villages which were farthest from PHC and adjoining each other (and as such these two villages will hereinafter be designated in this study as Non-PHC villages for convenience). In Digal village, (PHC), there were 1865 households while in Malikpur and Shafipur (Non-PHC) there were only 315 households. It was initially decided to draw 50% of the households from the farthest villages (Non-PHC) and 10% of the households from the nearest, i.e., Digal village (PHC) which had the largest population in the block. In order to make meaningful comparison between near PHC and farthest from PHC villages (i.e., PHC versus Non-PHC), which was the main nerve of this comparative study, the plan was to undertake every alternate household from the farthest villages and every 10th household from Digal village. However, it could not materialise because the heads of 8 households were not available despite repeated visits in Malikpur and Shafipur villages. Therefore, the data could be collected from 149 households only. Similarly, out of 1865 households of Digal village, it was expected to obtain 156 respondents. However, due to the same reason as noted above, data could be obtained only from 124 respondents from this village. The loss of 32 households is negligible in view of
V. DATA ANALYSIS

15. The entire data was initially scrutinized and certain questions of Schedule, where qualitative responses on open-ended questions were obtained, were put into meaningful categories and coded afresh. The data so coded were transferred to 80-column IBM master sheets which were put on punch cards for computerisation. The detailed analyses testing out the relationships between variables were then obtained. However, it was not possible to synthesize the entire individual relationships and the analyses. Therefore, the analytical findings were clustered around only those variables which were selected under independent, intervening and dependent variables as referred to in Section 1.4 (Fig. 3) above. These grouped data have been discussed in terms of percentages, means or averages, standard deviations, t-ratios or tests of significance, correlations, chi-squares, etc, wherever found relevant.

16. The findings of such analyses of certain portions of the Interview Schedule have deliberately been omitted from discussion in the study where higher positive correlations, obtained in the inter-correlations through computer analysis, revealed that two measuring devices were measuring the same property, characteristic or attribute. For example, between the socio-economic status and the individual modernity scores, the obtained $r^*$ was +0.92 and therefore the two scales were found to be overlapping. However, since the socio-economic status has relationships with other variables included in the present study, it had to be retained for further analysis and discussion and the individual modernity scale was dropped. (The
the techniques of randomness employed in drawing sample households. Thus, eventually a total of 273 households were drawn from these three villages. For drawing a reliable sample, a complete Census of all the three villages was undertaken and the details of nature of dwelling units, availability of electricity, source of water supply to the household, etc., were some of the main features of this Census.

IV. DATA COLLECTION

14. A self-contained, pre-coded and columned Interview Schedule (Appendix A), fully pre-tested through a pilot study and finally printed into 16 pages, was administered individually to 273 respondents (Heads of the Households) at their residences. It took, on an average, 2 hours for the investigator for each interview which also included sometimes interviewing other family members for verification of the actual medical care seeking behaviour wherever access was available to the investigator. In about 15% of the total respondents, the investigator had to attempt more than three visits. Generally, the respondents were found to be cooperative with only few exceptions where the non-cooperative behaviour of the respondents compelled the investigator to terminate the interview. The respondents took great interest in certain sections of Interview Schedule such as the concept of health, Ladder Scale, etc. After the interview, each Schedule was checked personally by the investigator before transferring the data to the master sheets. It was noteworthy that the interest of the respondents belonging to the farthest PHC area was much greater because they assumed that due to such an enquiry they might stand to greater medical benefits and facilities.
investigator has of course the basic data on each item and variable of the Interview Schedule and as and when further facilities are made available, the data would be utilised for sophisticated statistical analyses, e.g., multi-variate analysis, multiple-regression analysis, discriminate functional analysis and factor analysis, etc.

17. In view of the findings obtained on the basis of the paradigm discussed in the beginning of this Chapter, an attempt has also been made, in the subsequent Chapters, to discuss in detail the "Perceptions of Health in Rural Population", and "Responses to Sickness". These two Chapters delineate the influence of personality factors on seeking medical care. Finally, in the Chapter on "Patterns and Preferences for Medical Care Seeking Behaviour", an attempt has been made at an exploratory level to discuss the role of independent variables as referred to earlier. This scheme fits into the sequence of paradigm (Fig.3). However, before they are presented and finally concluded with the development of pattern of seeking medical care, it is necessary to delineate the characteristics of the area and the sample of respondents, constituting the setting of the study, which are undertaken in the next Chapter.