CHAPTER - I

INTRODUCTION

The broad area of this doctoral thesis was identified while working in the department of health and population studies of a research institute. The nature of work called for active involvement in the study of the health system in one of the States of India. The working as well as the decision making process at the various levels - the village, primary health centre and the district medical office - were studied in detail. It was observed during the study that at every stage of health care, extraneous factors like personal preferences and prejudices, caste background, political and professional connections and personality traits, were influencing the functioning of the health system. At a later point of time, we had an opportunity to observe the personnel of a hospital involved in a particular decision making process. It was obvious to us that the informal structure played a significant role in the overall decision making process in these organisations. "How could one study these?" was the natural question which followed this insight.
1.1 LITERATURE SURVEY:

As the focus of our study is identified as the analysis of informal structures in formal organisation, a hospital, the relevant literature has been scanned through. This included studies on formal and informal organisations both in the industrial and professional organisational settings. The major perspectives and certain important insights that emerged from the literature survey are presented below.

The study of organisations, viz., social, formal and informal, has been an integral part of the sociological discipline since one of the key concerns of sociology has been to understand the process of the emergence of structured social relations, shared world views and beliefs. Found alongside the traditional social organisations which are emergent in nature, are the formal organisations deliberately established to achieve certain goals. The social relations as well as the goals and aims of formal organisations are designed to anticipate and guide interaction. Max Weber, one of the pioneers in the field of sociology, has provided significant theoretical insight into the emergence and functioning
of formal organisations which continues to serve as a reference point to most of the studies even today. According to Weber, a distinguishing feature of formal organisations is their rational-legal orientation. Rational here indicates the control determined by specialised knowledge, calculability and functional efficiency based on finer divisions of labour, hierarchy and affective neutrality in the performance of the tasks. The term legal is used in a narrow sense to denote allegiance to impersonal rules and written procedures. (Beetham: 1974). According to Blau and Scott (1977), formal organisations provide an immediate environment for the emergence of parallel social organisations called informal organisations. They explain the unique characteristics of informal organisations as:

"Informal organisation' does not refer to all types of emergent patterns of social life but only to those that evolve within the framework of a formally established organisation. Excluded from our purview are social institutions that have evolved without explicit design; included are the informally emerging as well as the formally instituted patterns within formally established organisations".

(Blau and Scott : 1977 - 6-7)

Sociologists view the emergence of informal organisation as an outcome of (a) the need of the indi-
individual participants to gain rewards like prestige, social satisfaction, alleviation of boredom by interacting as complete individuals and not as segmented roles vis-a-vis the others, (b) the impossibility as well as inappropriateness of extending formalisation to each and every aspect of the organisation that leaves pockets of discretion where informal organisations appear and (c) employment of specialist professionals whose work cannot be straight jacketed into set rules, regulations and routines because they deal either with improperly defined tasks of providing new knowledge or deal with emergency services. The existing literature on informal organisation can thus be classified under the above three broad perspectives.

Studies which take the social psychological perspective are more pragmatic in their orientation. The earliest works on informal organisations are of this nature. They emphasise the implications to conformity to group norms, productivity, worker morale, feelings of alienation and solidarity and emergence of leadership. These determine, to a considerable extent, the efficiency of organisational functioning. Some of the significant studies which could be classified under this category

The second category of studies relate to the structural functional implications of the emergence of informal organisations for the formal organisations. The focus of these studies is on the subversion and modification of the rules and structures of the formal organisations by the informal organisations. Following are some of the important studies done from this perspective: Bendix (1947), Blau (1956 : 1971), Crozier (1964), Downs (1967), Faunce (1958), Gouldner (1964), Litwak (1961), Merton (1936:1952:1969:1972), Selznick (1943:1948), Stinchcombe (1965). In addition to the above, a large number of studies which concentrate on the emergence of informal groups in total institutions are included in this category. Owing to the negotiations and understandings that develop between the custodians and the inmates, informal organisations are found to operate in total institutions also, where there is total deper-

Finally, the studies which analyse informal organisations as a function of the predominance of certain specialist groups having strong group loyalties and being less amenable to routinisation and depersonalisation belong to the third category. Here, the focus is on professional organisations which pool various skills of the professionals as well as the technological and administrative capabilities of the non-professionals to provide comprehensive services to the clients. In terms of structure, professional service organisations are characterised by large pockets of discretion at various levels. Certain occupational groups as for instance the medical profession, receive a great deal of unquestioned compliance not only from the clients but also others such as nursing and the paramedical staff. In organisational contexts such as these, informal organisations come to play a significant role in the day to day functioning as well as in bringing about major changes in the goals, structure and functioning of the organisations.
The shifting power equations between the doctors and administrators, specialists and generalists, professionals and community leaders, etc., are perceived to be rooted in the informal organisation that exist in professional organisations. (Ben David (1958), Coe (1970:1978), Georgopoulos & Mann (1962:1972), Gordon & Becker (1964), Goss (1961:1963), Kornhauser (1962), Rosenberg (1970), Strauss et al (1963:1978), Tuckett (1976), Hillocks (1967), Zola (1972:1975)). Characterising the hospitals as fluid systems, Strauss et al (1963) identify informal understandings and 'negotiation' - "the process of give and take, of diplomacy and of bargain" - as the basis of social interaction. A structural basis is thus given for negotiation. They further proceed to state:

"There is a patterned variability of negotiation in the hospital pertaining to who contacts with whom, about what, as well as where these agreements are made. Influencing the variability are the hierarchic positions, ideological commitments as well as periodicity in the structure of ward relationship".

(Strauss et al: 1963:148)

In the Indian context, however, there are not many studies which look into the dynamics of formal and informal organisations in professional institutions. Some of the major studies on professional organisations in India are: Aurora (1973:1976), Chitnis (1979), Dubey

The above studies deal with established professionals working in predominantly professional organisations, i.e., organisations which are established to further the goals of professions as for example hospitals, research and development departments, universities, etc. The main emphasis of the various studies is on (i) the organisational structure and its influence on recruitment, role perception and performance (Madan: 1980, Oomen: 1978, Venkataratnam: 1979) (id) organisational structure and its influence on social-psychological satisfaction (Aurora:1974, George:1981, Srichandra:1979) and (iii) professional client relationships (Srivastava: 1979).

In all these studies, we find discussion on the bureaucratic and parochial influences that determine the functioning of the organisation such as over emphasis on rules and regulations, nepotism, favouritism, etc.
Passing references to inter-personal linkages are also made by some of the authors (Aurora: 1976, Nagpaul & Pruthi: 1930) but no comprehensive analysis, as such, of the informal organisation has been done in the Indian context.

Theoretically, sociologists belonging to various schools have contributed significantly to the understanding of patterned social interaction. While Simmel (1902) has abstracted the forms of sociation - dyads, triads and isolates; Cooley (1902:1909) and Mead (1934) have gone into the process of identification with a group and emergence of 'self and 'we' feelings. Apart from such general theoretical understandings, there are various models presented by sociologists belonging to different schools such as structural-functional (Heinicke and Bales : 1953) symbolic interactionist (Bales 1950:1957: Luft: 1969) social exchange (Blau: 1964 : Homans: 1950, 1958) ethnomethodological (Weider: 1970) and communication networks. (Bavelas: 1948, Leavith: 1951, Newcombe: 1956, Shaw:1954).

An emerging methodology which has great potential for the understanding of informal organisations is the

The units of network analysis are the 'social individuals' who have patterned social interaction with each other. A complex chain of interlinkages connect different social individuals, also called 'nodes' in network studies. Each mode is connected to some individuals and through them to many others. Thus a node has a far greater reachability than its immediate linkages. Those which are directly linked are called 'primary linkages' and those to which a node is linked indirectly are called 'secondary linkages'. To activate a network, a node need not necessarily have direct linkages with the other node but may establish contact through the secondary linkages. The positioning of a node in the network has great implications for its behaviour. Yet, it enjoys considerable degree of main-
pulability and is integrated into a complex network of relationships which can be activated or left inoperative depending on the situationally specific requirements of the node. (Banck: 1973, Jain: 1987, Micardo: 1983)

Several network analysts have laid considerable emphasis on the factors that determine the selection of network members. Fischer's (1977) choice constraint model, Earth's (1969) repertoire of interaction and Barney's (1982) concept of bounded rationality emphasise one point, i.e., each individual is constrained in his behaviour by the social situation in which he is placed and the potential of the others to serve his needs. A social individual is seen as a 'rational' being always assessing the social relations in terms of their 'usefulness' to him. This rationality does not limit itself to a particular instance at present but is retrospective as well as futuristic in its context.

Barney (1982) explains the process of networking using three concepts - bounded rationality, information impactedness and selective attention. According to him, it is neurologically impossible for an individual to store information on a very large number of individuals
in any given social situation. Similarly, it would be extremely difficult to interact with every other individual in a situation. Hence, one has to limit one's interaction and information based on certain rationally thought out priorities. For this purpose, the network members are identified based on certain priorities, information collected about them, and selected attention paid to a few depending on the situation specific requirements. Consequently, each individual builds up a definite stock of members to whom he keeps turning to gain certain ends. This determines the social structure as it emerges in a context.

Following Barney, it may be seen that although each individual chooses the network members from his specific situational requirements, it is possible to identify certain trends and patterns in their selection. The terms 'homophily' and 'heterophily' which have been dominating the analysis of social structure point to the attraction between 'like' individuals and association between the 'opposites' (Lazarsfeld : 1964, Tarde : 1906). It is argued that all things being constant, there would be preference for the 'like individuals' which requires lesser efforts to modify and adjust as well as more scope for sharing and understanding (Maguire : 1983).
However, such a simplistic conception does not explain the differentiation and stratification that characterise social organisations. Addressing himself to the above question, Blau (1977) identified the parameters of social structure. Parameters here may be defined as the aggregate attributes or distributional characteristics which influence social structures. Two types of parameters are identified by him; (a) nominal parameters which create heterogeneity in the organisation and are exclusive categories such as sex and religion and (b) graduated parameters which lead to stratification in social structures and have an intrinsic order as for example age and income. 'Strata' represent "classes of people who differ in the amounts they possess of 'a valued social resource'". About graduated parameters Blau says that "social associations are prevalent among persons in proximate than between those in distant social positions". (Blau: 1977:28) Central to his argument is the concept of 'salience' of a parameter or 'imbreeding bias' a more expressive term used by Mersden (1981) and Fararo (1981). It points to the tendency to associate with members belonging to the same category as one's own which has implications for social stratification, differentiation, mobility, integration and change. Inbreeding is more pronounced in emerging interactions
"wherein interpersonal sentiments are expressed in activities beyond those forming the institutional context requirements" (Fararo: 1981, 157).

Blau's parameters of social structure are successfully utilised by network analysts. (Fararo: 1981, Merden: 1981). The two questions which are raised by them relate to whether an attribute of individuals in a population serves to organise their social relations and if so, the manner in which it does the same. Fararo (1981:142) says that social structure may be seen as a "distributive package of 'software' i.e., it is a distributive set of images and programmes constituting types of knowledge internal to types of actors and activated in certain types of situations". Each actor recognises these elements, sometimes 'lumping' them together as in the images of stratification. In a special situation where there are cross-cutting multiple identities and loyalties, it is essential to club the parameters. This leads to 'multiform' heterogeneity since total overlap of parameters and exclusiveness are not possible.

Certain important theorems are derived by Blau (1977) based on the differences in the sizes of
the groups, rates of discrimination in the formation of ingroup and outgroup relations and levels of consolidation of parameters. The following are some of the significant observations taken into consideration while analysing our data.

1. "Whereas heterogeneity creates barriers to social intercourse, much heterogeneity weakens these barriers" (Blau: 1977:79) In other words, the tendency for 'inbreeding' diminishes with increasing heterogeneity (Fararo:1981).

2. "The more the division of labour intersects with other nominal parameters, the greater is the probability that inter group relations strengthen the society's integration" (Blau:1977:203). This may be interpreted as indicating that in any situation characterised with finer divisions of labour, criss-crossing identities, and overlapping sets of attributes, it becomes absolutely necessary to identify the individuals in terms of the sets to which they belong. This is similar to Blau's (1977) concept of "multiform heterogeneity" i.e., the heterogeneity computed over a cross-classification of characteristics. Finally,

3. "Established role relations are resistant to disruption" (Blau:1977:281). What is sought to be conveyed here is that certain role relations which are established over a period of time do not change along with the mobility aspirations of the participants.

With regard to the third observation, Fararo (1981) infers that there often occurs a situation where an individual tries to establish a relationship based on residual loyalties but is not reciprocated by the others. Thus, some interactions may not show any
definite tendency for either inbreeding or cross breeding bias in a conscious seeking of association with a member belonging to another category; for instance, pair relationship in marriage. Here, it would be necessary to go a little further and identify the basis for the third type of association mentioned above. Similarity and complementarity are at the root of inbreeding and cross breeding biases. However, in a situation without any inbuilt bias, it may be possible to identify a few motivational factors that are likely to influence the association relationships. Blau explicitly states that social-psychological factors are not a part of his model as they are only deviations and are not significant as parameters of social structure. We argue that in certain situationally specific contexts, certain social-psychological factors may predominated and need to be explicitated. Especially when Blau's model is applied to network analysis, it becomes imperative to provide an explanation to those instances where an individual is motivated by social-psychological requirements. A complex web of network relationships may weave around him which could be of great significance in the analysis of structure over and above the distributional characteristics or parameters. Here, we identify two types of biases (a) reference group
bias where an individual chooses an associate not for his similarity or complementarity on any social structural attribute but because he constitutes a reference point for his social, career or any other aspirations and (b) situation specific bias which is a residual category based on individual idiosyncracies. These are significant in network analysis though not in Blau’s model.

A significant study on the informal networks in formal organisations has been conducted by Barney (1982) using the contingency model. According to him informal organisations, like the formal organisations, are influenced by the environment in which they emerge. The aggregate attributes of the participants, structural attributes of the network and the broader social structural factors are identified as determining influences on the informal structures. For the purpose of his study, Barney takes school children and identifies three variables - sex, size of the network and homogeneity and heterogeneity of the community background. It has been found in his analysis that boys with homogeneous background tend to have centralized hierarchic structures and also similar choice for school clubs. Girls coming from varied social backgrounds, on the other hand, are found to have hierarchically related symmetric groups and diverse choice of school clubs. Boys with divergent
social backgrounds and schools club preferences and girls with similar social backgrounds but different school club preferences are found to have multiple hierarchies. Regarding size, large groups are found to disintegrate into identical but independent groups, while smaller groups are close knit as compared to medium size networks which have a number of sub-groups connected with Liaison members. Barney observes that in formal organisations like production organisations, the formal structural variables are likely to be more pronounced than the Aggregate attributes or social structural variables. We would be reverting to these points later in our analytical discussions.

The adoption of network analysis in the study of informal organisations would shift the emphasis from informal organisations and groups to informal structures. An 'informal organisation' necessarily involves a shared base of identities, beliefs and attitudes which distinguishes its members from the others. Further, 'informal groups' involve a definite membership and clearly distinguishable boundaries. But, in the present day organisational context, where there are multiple loyalties, identities and cross-cutting interests of participants, it is likely that loose interaction structures are more dominant than close knit groups. There is a shift from 'primary group' type of
relationships to 'secondary group' relationships which are more efficient in the achievement of various goals based on certain commonly shared expectations and obligations rather than emotional identities. It is this acknowledgement of the shrinking space of intimate relationships and expanding space of situationally specific coalitions, which validates the use of networks in the analysis of informal structures.

Once again, scant attention appears to be paid by Indian sociologists to the use of network analysis as a theoretical and methodological model. Certain anthropological studies have identified the patterns of social networks as they exist in the Indian villages and their integration with the overall social, economic and political systems (Cohn & Harriot: 1958, Hockings: 1977, McKim Marriott: 1959, Srinivas & Beteille: 1964). Network analysis is also being used in analysing the diffusion of innovations in the Indian villages, (Rao & Rogers: 1980, Rao & Singh: 1980, Rao et al: 1980) family planning programmes (Chaudhuri: 1962) and opinion leadership (Sen 1969). In recent times, the significance of network analysis to the study of 'ethnicity' is being explored (Jain: 1987). It is interesting to note that there are no studies which provide a comprehensive analysis of informal networkings in professional organisations, in the Indian context.
The above survey of existing literature highlights the need to understand the interface and interaction of formal and informal structures by Indian sociologists. Studies conducted so far are found to be rudimentary in nature and a need has been felt to pioneer an attempt to fill this lacuna by systematically describing and analysing informal structures in the Indian organisational context. A modest attempt in this direction is made in this work.

1.2 RESEARCH PROBLEM

Central to the functioning of an organisation is the structuring of relationships, formal and informal, which determine its work culture. Formal structures are based on relationships determined by rules, regulations, job requirements and hierarchy. Informal structures, on the other hand, emerge out of the mutual expectations and obligations, personal preferences, common identities and interests. In an organisational context, both formal and informal structures are mutually interdependent and complementary. Thus, while formal structures determine the overall context in which informal structures come into existence and function, the working of informal structures determines the change and continuance of formal structures.
Studies conducted abroad have raised the level of understanding of organisational phenomenon. The presence of informal groups is considered inevitable in all situations and types of formal organisations. It is recognized that informal structures balance the straight jacketing influence of the formal structure and modify, subvert and improve upon it. Network analysts, however, contend that studies on informal structures, as compared to those on formal structures, are inadequate. This is partly because the models developed for explanation of formal structuring and functioning are not applicable to the informal structures, which are considerably less conspicuous and less clearly defined. Informal structures, which are based on interpersonal interaction, also pose problems of size. Inclusion of every new member results in an exponential growth in the number of relationships. Though use of block models, distance matrices and concept of structural equivalence are enabling some meaningful inferences to be drawn from the data, the alternative statistical models are still inchoate. Thus, there is a felt need to conduct more research on informal structures in formal organisations developing useful theoretical and methodological models.

It is widely recognised that all informal structures have the principle of interaction among the members
their basis. The underlying patterns of interaction are uncovered by network analysis, which highlight the patterns of existing relationships among different individuals. Though networks reveal the process of structuring, they should not be confused with social structures. While social networks are based on the actual articulation of a relationship or linkage which may be transitory, social structure is the conceptual model based on enduring relationships. Through the networking of the individuals, the social categories are integrated into wider social structures. Thus, whenever networks are used to analyse the social structure, one necessarily refers to the operative structure and not the potential or ideal structure. If, however, one desires to understand the operation of informal structures, network analysis provides an appropriate theoretical as well as a methodological framework for the same.

An interesting sociological setting for the analysis of informal structures is found in the professional service organisations which pool the skills and services of a professional group to provide services to a clientele. These organisations are characterised by pockets of discretion which determine the day-to-day functioning. This is particularly so in the hospital context which allows its personnel multiple loyalties to their professional group, specialist group,
functional unit and the organisation. It also permits exercise of professional, bureaucratic and charismatic authority. Besides, like most other organisations, the hospital is open to extra organisational and parochial influences. The functioning of a hospital is greatly influenced by informal power structures, personal equations and negotiations, where the formal structure is often subverted or modified to various degrees to suit the particular interests of the professionals.

An analysis of the informal structures in a hospital set-up in India is significant for various reasons. Firstly, no studies on this particular aspect of a hospital organisation have so far been conducted. Secondly, in the Indian situation, even superspecialities hospitals are not autonomous and are run more on the lines of government bureaucracies. They are characterised by considerable resource constraints as well as routinisation of behaviour. Given this set up, it would be interesting to know the extent to which the doctors are able to evolve alternative social networks to counter resource constraints as well as routines. Thirdly, it is generally believed that Indian professionals are more vulnerable to the influence of extra organisational and parochial influences, at times to the detriment of the organisational goals and professional ethics. The veracity of this statement in the context of a superspecialities institute
which has in its ranks personnel who are supposedly better qualified and motivated needs to be examined. Further, the extent to which informal groupings exercise their influence on such an organisation requires to be probed. Finally, it is a worthwhile exercise to gauge the influence of the organisational context and the social situation of the individuals on the informal structuring in a hospital, as it has implications for organisational efficiency, spread of professionalism and the growth and pervasiveness of these organisational forms in India.

Consequent upon the above discussion, the aim of the study is identified as that of providing a systematic description and analysis of the informal structures and their interaction with formal structural and extra-organisational variables in the context of a superspecialities medical institution.

1.3 **OBJECTIVES OF THE STUDY:**

The main objectives of the study are the following:

1. To understand the influence of the professional, functional and specialist networks on the working of the hospital organisation.
2. To bring out the relationship between hierarchic position, professional and organisational requirements and patterns of networkings.
3. 'To highlight the relationship between the informal structures and the formal structures on the one hand and the extra-organisational variables on the other hand which are expected to miniaturise the broader social structures in the formal organisations.

4. To relate the empirical reality to the theoretical models presented by Barney (1982) and Blau (1977).

Thus, this study deals with three sets of variables, viz., informal structural, formal structural and extra-organisational variables which include (a) social demographic variables and (b) institutional background variables. While the informal structure is represented by social networks which are analysed in terms of friendship linkages, and to some extent by consultation on organisational, professional and familial matters, formal structural variables include the hierarchic relationships, functional linkages and departmentalisation. Participation in organisational committees is also included as it constitutes an important aspect of the reward system in the organisation. Under extra-organisational variables, we have included professional institutional background and professional productivity of an individual in terms of the number of journals subscribed, conferences attended, publications, participation in research projects, membership in social service organisations, clubs and professional associations. Economic and occupational background of the family, and sex and caste of the member, are the social demographic factors included under extra-organisational
variables. All these together, it is expected, would place individuals in their overall professional and social contexts and determine the common identities and affinities which make up the informal structures.

1.4 SCOPE AND LIMITATIONS:

This study deals with the structured relationships based on the expressed linkages and does not go into the shared beliefs, values and attitudes. Hence, the degree of intimacy as well as frequency of interaction are not taken into account. This is because our interest is in gaining an insight into the pattern of linkages and the factors that go into it rather than the actual interaction patterns in the organisation. Besides, only the formal structural and extra-organisational variables are included in our analysis while psychological factors are not elaborated upon as our interest is not on the idiosyncratic behaviour of individuals and groups but their social structural bases. Finally, the study includes only doctors and not the other groups, because they are the main service providers, and constitute a clearly distinguishable occupational group, which plays a decisive role in the organisational functioning.
1.5 UNIVERSE SELECTION:

The Institute Of Superspecialities (IOS) * has been chosen for conducting the study for two reasons. Firstly, though the IOS has all the characteristics of a government hospital in terms of personnel and financial policies, it has on its rolls a limited number of doctors which made an indepth and comprehensive study viable. Secondly, the specialisation orientation suggests a culture which is in contrast to its bureaucratic framework and provides an interesting backdrop for the analysis of informal structures. The profile of the institute is given below.

1.6 A PROFILE OF THE INSTITUTE OF SUPERSPECIALITIES:

A profile of the institute’s structure and functioning should precede a discussion on its informal structures. This would provide an understanding of the milieu and the boundaries within which the process of networking takes place.

The IOS was originally established in the mid-sixties as an orthopaedic hospital by a philanthropist.*

* IOS is a pseudonym which is given to protect the identity of the institution. Individuals are also given pseudonyms to maintain their confidentiality.
In the late seventies, he leased it to the government owing to the huge financial commitments involved. Even under government control, it retained and improved its identity as a centre for specialities, with six more specialities, viz., cardiology, cardiothorasic surgery, neurology neurosurgery, clinical pharmacology and medical research (CPMR) and gastro enterology being included in its services. At the time of the research, the IOS was being transformed into an autonomous medical research institute.

Unlike the other government general hospitals, the IOS has always been providing specialist services instead of the general medical care. Trauma cases are not treated in the hospital. It is known for cold surgery and neurological and cardiac electives. Owing to its reputation as a specialities institution, it has been attracting the best talent in the above areas of medical care and is able to perform some rare surgical procedures, viz., (a) separation of twins (b) implanting a pace maker in the heart of a sixteen month old baby (c) treating paralysis of the heart (d) surgical operation on a blue baby (e) micro-vascular surgery of the brain (f) total hip replacement and (g) total knee joint replacement.

It may be stated that a superspecialities hospital requires infrastructural facilities and organisation of work
which facilitate greater specialisation and expert care. But, being a government hospital, the IOS is similar to any other government hospital as far as its linkage with the medical and health systems are concerned. Financial, personnel and managerial aspects of the hospital are directly under the control of the directorate of medical services which inturn is controlled by the health ministry. The contradiction between the professional autonomy embedded in superspecialist orientation and the bureaucratic organisational structure characteristic of a governmental set-up gives the IOS its specific structural and cultural characteristics which are described in some detail in the following paragraphs.

A superspecialities orientation calls for greater involvement of the doctor both in terms of the time spent as well as the degree of intervention through physical, social and psychological rehabilitation and monitoring. While specialisation orientation requires concentrated attention on a few professionally challenging and interesting cases, the aim of medical bureaucracy is to spread the services over as large a population as possible. Consequently, infrastructural facilities and organisational structures do not coincide. The lag between the two leaves scope for the emergence of informal understandings which alter the formal structure and goals considerably.
Financial Inputs: The financial inputs are significant in determining the infrastructural facilities available in a hospital. But they are considered inadequate for the IOS where all the departments are of highly specialised nature requiring sophisticated equipment involving huge financial outlays. However, the annual budgetary allocation for the hospital is only Rs.1.40 crores with Rs.6,000/- per bed per annum which includes electricity, water, purchase and maintenance of equipment, drugs and diet. This is felt grossly inadequate by the doctors, considering the fact that reallocations and shuffling of funds are not possible since for each specialist department, the allocated funds are much smaller than required.

Drugs and Equipment: For an institution which is engaged in advanced fields of medical technology and science, good accessibility to drugs and equipment is essential. But the rate contracts and the budgetary controls exercised by the State bureaucracy often restrict the infrastructural and development funds available to the departments. Purchase of drugs, according to administration, is dependent on their availability, cost and essentiality. Yet, some essential drugs are reported by the doctors to be unavailable. Similarly, accepting the lowest tender while purchasing equipment and drugs, the doctors felt, is counterproductive as they may not be of the same accuracy or efficiency as some
of the more expensive ones. Since the technology needed by the specialist hospital is generally expensive and beyond the discretionary powers of the superintendent, most of the requests have to be made to the directorate or the secretariat. This results in leaving the decision making to non-professionals who may not be competent enough to make an appropriate assessment, and who may be dominated by populistic and political rather than professional considerations. "Even while entering into contracts", the doctors opined, "sufficient attention is not being paid to maintenance and after sales service". For instance, it is pointed out that the cardiac monitors, intra-thoracic positive pressure respirators (ITPP) and balloon pumps which are essential in an intensive cardiac care unit (ICCU) are not available in sufficient numbers and are not properly maintained. From air conditioners to blood pressure (BP) apparatus, the maintenance falls short of expectations, the doctors complained.

There was a universal feeling among the doctors that if they had access to sophisticated equipment, they would have been able to improve their performance considerably. Some of these equipments are quite expensive and beyond the resources of a government hospital. The above attitudes may be considered as indicative of the technological and professional orientation of the doctors and also a pointer
to the underutilisation of the skills of the personnel.

**Personnel:** By and large, the hospital has sufficient number of doctors and nurses in the inpatient wards. The doctor patient ratio in these wards is 1:5 and the nurse-patient ratio 1:4. The doctor patient ratio in the outpatient (OP), however, is unfavourable due to lack of screening facilities. There is a deeply felt need for technical and secretarial assistance, since their shortage burdens the doctors with heavy load of paper work. The present technical staff is insufficient besides being inadequately trained. The doctors feel that they do not somehow get their co-operation and the expected level of commitment in their work. Consequently, the key area of maintenance of records is unsatisfactory which hampers academic work considerably. It hardly needs emphasis that in a specialist hospital like the IOS, the follow-up care is very essential both for the well being of the patient as well as for research purposes. But, in the existing set up, follow-up care is not being given due importance.

**Reward System:** There is considerable dis-satisfaction about the economic rewards. Most of the doctors confessed that it is their private practice which takes care of their economic requirements. There is a certain disapproval about the
personnel policies also. It is opined that the transfer policies are not rational and career mobility is limited. Significantly, a high degree of satisfaction is expressed by most about colleague recognition, co-operation of administration and interpersonal environment.

**Division of Tasks:** The division of tasks is carried out through the departments. There are seven clinical departments, viz., cardiology, cardio-thorasic surgery, neurology, neurosurgery, orthopaedics, CPMR and gastro-enterology. Besides, there are six support departments, viz., radiology, pathology, bio-
chemistry, physiotherapy, blood bank and anaesthesiology. The administrative matters are looked into by the superintendent assisted by two resident medical officers (RMO) who are non-practising physicians. There are also administrative officers looking after the routine administrative functions such as accounts, indenting, stores, etc. A large number of nurses, paramedical and technical staff provide support services to the doctors. Organisational chart of the IOS is given on page 34.

The above chart shows a predominantly lateral structure rather than a vertical one. The superintendent is the head of the hospital though here we also have a director to ensue the smooth transition of the hospital from government control to an autonomous status. Administratively, the superintendent is responsible for the running of the hospital. The post of superintendent is a practising post. The advantage of this arrangement is that he works in close collaboration with clinicians and is thus able to appreciate their problems. But his powers to determine the personnel policy are limited. Pie is merely the recommending authority on matters relating to appointments, transfers, dismissals, etc., and the actual decisions are taken at the directorate and the secretariat levels. The superintendent feels that the high militancy of some
categories like the class-IV employees and nurses and their links with certain political groups further curtail him from exercising his authority to enforce discipline among the subordinates. The routine administrative matters are looked after by the non-practising RMOs and the lay secretaries. The technical and class-IV employees are under the control of the RMOs.

Besides the superintendent and the RMOs, we have the chiefs of the medical departments who also carry out the administrative work at the departmental level such as indenting for drugs, attending important meetings, etc. Working under the chief are the medical and technical personnel of the department.

The nursing services are co-ordinated by the matrons. But in rare cases the superintendent also exercises direct control over the nurses.

Routine Management of Work: The routine management may be divided into three services. The outpatient, inpatient and emergency services. in the IOS, the OP services are less structured. They are usually held on three days of a week in each department and are open from 8.30 A.M. to 11.30 A.M. There are no screening facilities
available either by a general physician or a general surgeon. The patients are controlled by an attender who issues tokens and calls out their names. Inside the OP room, a team of doctors from the department concerned screens, prescribes medicines and admits some of the patients. Due to the lack of screening facilities, there is considerable workload on the doctors. Each doctor examines about 40 to 50 patients a day. Patients are given medicines for two days to prevent their misuse. But this arrangement causes considerable redundancy of work for the doctors who have to examine the patient every two days. Diagnostic tests such as x-rays, blood, stool and urine analysis, etc., are also conducted in the OP. The doctor-patient ratio in the OP is adverse which at times is as high as 1:60. This ratio is calculated as the number of patients per doctor. Since the bed strength of the hospital has remained unchanged for the past several years, there has not been an increase in the number of doctors employed. But the OP attendance has increased owing to the enhanced reputation of the hospital as a centre for superspecialities resulting in an adverse doctor-patient ratio.
Inpatient services include diagnostic, curative and after care services. Members from various departments work together in small teams and carry out the different tasks. The working hours for doctors are from 8.30 A.M. to 3.00 P.M. Early in the morning, ward rounds are taken to, decide about the shifting and discharge of patients. After attending to the outpatient clinic, doctors visit the wards once again to examine in detail the new admissions and old patients, and decide on the course of treatment.

Surgical operations are done on five days of the week. While on three days major surgery is performed, minor surgical procedures are done on the remaining two days. Surgery and OP days are alternated for each team of doctors.

For emergency services, two doctors are placed on 24 hours duty. Besides these, each department has a doctor on call duty who could be contacted in case of an emergency.

To facilitate co-ordination and exchange of notes between the doctors and the main and support departments, weekly seminars are conducted. Apart from this, on most of the days there are departmental seminars in the mornings.
where certain treatment procedures are discussed with regard to difficult cases in the wards.

Thus, the bureaucratic set-up involves fixed timings for hospital and call duty, depersonalised services, i.e., absence of any doctor patient identification, routine management of wards and emergencies.

The organisational milieu is characterised by a distinct contradiction between the superspecialist orientation and the bureaucratic structure of a government hospital. This contradiction is manifest in two spheres. Firstly, the formal routines, structures, etc., are modified by the medical personnel to suit their convenience, interests and social obligations. Secondly, the very aims of a specialist institution and a government hospital are modified to strike a balance between the two.

Modifications in Routine Management: Firstly, we find that time schedules are not seriously enforced. Doctors are required to work from 8.30 A.M. to 3.00 P.M. However, depending upon the pressure of work, most of them spend longer hours in the hospital. What is said by a cardiologist is shared by many others. According to him:
"The department is known for its diagnostic tests - echo, stress, catheterisation - which are in great demand. Apart from this, there are obligations - patients who are referred to us by our colleagues, fellow professionals, family friends, VIPs and others. They are given prior appointments and are accommodated along with the routine cases. So, a doctor who can see only three cases a day works overtime and accommodates eight patients”.

Secondly, consequent upon the above obligations, some patients tend to be identified as the responsibility of particular doctors. Usually, patients are found to attend OP on those days when they are sure of meeting their doctor. Even the other doctors tend to accept this special situation as a matter of course.

"While the interview with Dr. Mahesh was underway, a very interesting interaction came up. One lady has come to the doctor seeking his advice if the recommended angiogram should or should not be taken by her mother. She had earlier taken her mother during OP to Dr. Kishore, who was the head of the department and he had advised her to undergo the stress test. The test was done by Dr. Mahesh who, on the basis of the test, advised an angiogram. But when the patient had gone to Dr. Kishore with the report of the stress test he had not suggested an angiogram, but had instead asked her to continue the medicines for another fortnight. Now there arose a delicate situation, for Dr. Mahesh as well as the patient since they had to decide as to whether they should go ahead with the angiogram or not. Dr. Mahesh advised her to follow the instructions of Dr. Kishore since he was the one looking after the case”.

(a note from the field diary)
Thirdly, even in the management of emergencies, we find deviations from the formal arrangements. Though emergencies are expected to be tackled by contacting the doctor on the call duty, in some departments like cardiology and cardio-thorasic surgery, one doctor remains on night duty. As there are no post-graduate students in these departments, even senior doctors have to be on duty at night when their turn comes. This is an informal arrangement made by the doctors themselves to take care of the critical patients.

Finally, rules and regulations are bypassed in most of the day to day activities of the hospital whether in seeing a patient at odd hours, procuring medicines, equipment, or an extra table in the room. These accommodations are usually done for mutual obligations and understandings. There is a high degree of personal discretion in the day to day functioning which lends the organisation greater flexibility.

Modification in the Aims of the Hospital: The inherent contradiction between the orientation of a superspecialist hospital and the bureaucratic set up of a government hospital has, on the one hand, led to the underutilisation
of the skills of the personnel and, on the other hand, undermined the aim of the government to provide free and equal services to all strata of people. Specialist services involve expenditure. However, it is obvious that the very poor are getting excluded from the services rendered by this hospital. For instance, in the OP itself, those patients who cannot visit the hospital for medicines every two days are asked to buy from the market. Apart from this, most of the procedures are expensive, as for example a catheter, which costs Rs.2,800/-. Some of the medicines are very costly and not available in the hospital. Hence, the patient is forced to buy them himself. Also, major surgery involves prolonged stay in the hospital and the patients are appraised of this before being admitted. The expenses involved in keeping a patient in the hospital in terms of the conveyance charges for the attendants, their stay in the city in case of outstation patients as well as financial loss due to absence from work in case of very poor patients discourage them from seeking the services of the hospital. Though doctors use their networks to get certain tests done and medicines made available free of cost, this is an extremely rare phenomenon and happens only in the case of the very poor. Thus, some of the bureaucratic controls such as unanticipated budget cuts, rate contracts.
etc., undermine the spelt objectives of the organisations. Inefficiencies due to lack of equipment, at the same time, cause underutilisation of professional skills and manpower.

It is, therefore, significant to observe here that whenever there is a lag between technology and organisational structure,- apart from underutilisation of technology there is yet another possibility, a change in the organisational structure. It is this option which is being tried at the time of the research in the institute. Given the limited resources of the government and the pressing demands on it, it has not been found possible to liberalise the financial position to provide free and equal service to all in a superspecialities hospital. Thus, the anomalies are sought to be resolved by making it an autonomous institution with private investments and non-resident Indian participation both technical and financial. It is sought to be converted into a paying hospital with the poor being exempted from payment of fees or from whom nominal charges would be collected. The personnel are to be delinked from government service. The personnel and managerial practices would be reformulated with absolute powers to the director and the administrators. It is being hoped that these changes would enable
the hospital to emerge as a pioneer institution in medical sciences in the State.

In conclusion, it can be said that the IOS presents a work milieu which is having contradictory pressures, to excel in a professional sphere and to provide the best possible services to as large a population as possible, within the given resource constraints.

1.7 NATURE OF THE STUDY:

The present thesis is exploratory, descriptive, and analytical in nature. Hence, the case study method has been chosen as it enables us to gain an indepth understanding of the phenomenon of informal networking. More appropriately, this study may be classified as an 'embedded single case study' (Yin:1984) which is defined as a case study of a single institution, phenomenon or occurrence with special attention to the sub-units. Though the focus of the present study is on the organisation and its informal networks, we consider the specific situational and socio-demographic characteristics of the 'nodes' significant. These need to be highlighted in descriptive accounts to gain a better understanding of the dynamics of informal networkings. Thus, in this
thesis, we find the focus shifting from the organisational level analysis to specific individuals in the organisation, often interspersed with biographical, impressionistic and descriptive notes. Though somewhat unconventional, the above approach has great potential as a rigorous methodology in exploratory studies.

1.8 SOURCES OF DATA:

Considering the nature of the study, it was felt necessary to collect data using various techniques and from varied sources. Background information about the respondents and their sociometric preferences were gathered through a questionnaire. This was supplemented by indepth interviews with the doctors. These interviews were focussed on the functioning of the doctors within the overall formal context. Usually they were unplanned conversations and discussions and yet they provided valuable information about the informal mechanisms that operate in the hospital. Significant information from the point of view of this study could be gathered through these interviews though we were not able to present all of it in this thesis. We also maintained a field diary in which some of our observations about the individual respondents and the developments in the hospital were noted down. Even though done sketchily, the comments
and information thus jotted down proved valuable during data analysis. A questionnaire was administered to the patients to explore the possibility of extra-organisational and inter-organisational networks influencing the utilisation of hospital services. However, very little information from this questionnaire is used as it has not yielded any significant data.

1.9 **SAMPLE**

Attempts were made to cover all the fifty six doctors in the hospital with a view to gaining an insight into the overall organisational network as well as the individual personal networks. All except three doctors were interviewed and some background information about the three doctors who refused an interview was gathered informally.

1.10 **DATA ANALYSIS:**

A comprehensive network analysis takes into consideration every individual in the organisation and his intimacy and frequency of interaction with all the other individuals. Such an approach results in voluminous data which could be processed and analysed with advanced computer packages alone. Considering the resource cons-
traits of the researcher, the scope of the study has been limited to the response patterns to the four questions on networkings; viz., "With whom do you discuss your (1) organisational problems (2) professional matters (3) family and personal matters and (4) whom do you consider as your close friends in this organisation". No restriction was placed on the number of choices that could be made by the respondents.

The response to all the questions, excepting the third, was good. The poor response could probably be because of the misconstruing of our query as an intrusion into their privacy. It is also likely that this may be indicative of the shallow level of intimacy in relationships. Our analysis is, hence, limited to the responses to the first, second and fourth questions.

1.11 DEFINITIONS AND EXPLANATION OF THE TERMS USED:

Network: It may be defined as a pattern of linkages between various members of a particular organisation. More elaborately, it is "that set of personal contacts through which the individual maintains social identity and receives emotional support, material aid and services, information and new social contacts".

Functional networks: These are pattern of linkages based on relationships among members who are involved in the performance of a particular task. They cut across departments, specialisations and hierarchy.

Professional networks: These denote the pattern of linkages among a group of individuals by virtue of their being members of a particular professional occupation.

Specialist networks: These exist among a small number of specialists whose linkages are based on similar or complementary specialisations.

Social networks: These are based on linkages that exist among groups of individuals with pre-existing personal, traditional, charismatic and emotional ties.

Size or expanse of a network: The two terms are used interchangeably to denote the number of individuals included in a particular network.

Cohesiveness in networks: The relationship between two individuals is not always of equal intensity. A relationship where the intensity of interaction and feeling is reciprocal is called a cohesive relationship. Apart from this, we have unilateral linkages which are of
two types: (a) an individual 'A' is chosen by others but has not chosen them. This denotes 'popularity' of the chosen individual and (b) an individual 'A' has chosen another 'B', but is not chosen by him. This denotes 'sociability' of the individual 'A'. Though both of these are unreciprocated relationships, this distinction is significant as it highlights the desirability of an individual or a group as a sociometric preference. Besides these, we also have absolute lack of relationships of any kind. All of these together constitute cohesiveness in networks.

Density of networks: Density is generally defined as the ratio of actual number of relationships to the total number of possible relationships. This definition, however, does not reflect the actual linkages between the individuals. For instance, a network with highly dense subunits and a few isolates would indicate a low density figure while a loosely linked small group may show a high density figure. For a proper understanding of the density of relationships, one needs to take into consideration the strength of the ties binding the individuals. Hence, we define density as the total number of actual linkage to the total number of possible linkages. Nevertheless,
as the unilateral linkages are being distinguished from the reciprocal relationships which vary in their strength, we consider for computation purposes the reciprocal relationships as two linkages. The maximum number of relationships, thus refers to the total possible unilateral linkages in a network. For a correct evaluation of density the maximum number of unilateral linkages need to be calculated separately for ingroup network density and inter group network density. The formulae are as below:

**Ingroup density:**

\[ \frac{n \times n - 1}{2} \]

\[ \frac{3 \times 2}{2} = 3 \]

**Inter group density:**

\[ n \times n \]

\[ 2 \times 2 = 4 \]

If density is calculated based on the above formulae, the scores may sometimes be more than one because we are treating a reciprocal relationship as constituting two linkages. For example, if A B and C are all reciprocally linked, the number of linkages would be 6, whereas the maximum possible linkages are only 3, so the density score
would be \( \frac{6}{3} = 2 \) which is the maximum possible score. Consequently, any group having a score between 1 and 2 may be treated as a dense and cohesive group.

**Direction of network linkages:** Direction of network linkage indicates the direction of preferences in the discussion on graduated parameters like centrality. A horizontal choice indicates selection of an individual from one's own level. Upward and downward choices indicate preferences for persons from higher and lower levels respectively.

**Centrality:** Centrality is the term used to denote the hierarchic position of an individual in the organisation. In our study, three hierarchic levels have been identified based on the official designations of the doctors as it existed in the hospital. Heads of the departments, professors and associate professors are classified as senior level, assistant professors are considered as middle level and junior doctors and interns are categorised as constituting junior level personnel.

### 1.12 STRUCTURE OF THE THESIS:

The thesis is divided into four self-contained chapters pertaining to various aspects of the problem.
that is being studied. This introductory chapter is designed to provide a theoretical, conceptual, empirical and methodological background of the thesis. The second chapter includes a discussion and analysis of the relationship between the centrality of an individual, concommitant organisational and professional requirements and their influence on the networking patterns. The analysis of the data is related to Blau’s parameters of social structure. The third chapter contains a discussion on the network structures and the factors that influence the structuring of informal relationships. Both Barney’s contingency model and Blau’s parameters are related to the empirical reality that is being analysed. The fourth chapter is the concluding one. Here, the main findings of the thesis are summarised, their theoretical potential assessed and relevance to the understanding of professional organisations and informal structures highlighted. Some directions for future research are also identified.

1.13 CONCLUSION:

This study is exploratory in nature and has very few hypotheses derived from previous studies in the Indian context. Yet the subject matter is intuitively comprehensible to most of us who participate in
such organisations in our daily work life. Precisely for this reason, the data presented as well as the inferences drawn may appear simplistic at times. The value of this work lies not in its ability to make any major theoretical break-throughs but in providing a systematic description and analysis of a particular facet of human interaction - the informal structures.