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A STUDY OF HEALTH BEHAVIOUR IN VALLARPADOM ISLAND IN ERNAKULAM DISTRICT

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CERTIFICATE

This is to certify that the dissertation entitled - **'A Study of Health Behaviour in Vallarpodam Island in Ernakulam District'**, submitted by Rekha Sugathan is in partial fulfilment of the requirements for the award of the Degree of Master of Philosophy of this University. The dissertation has not been submitted for any other degree of this university or any other university, and is her own work.

We recommend that this dissertation be placed before the examiners for evaluation.

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CHAPTER I

INTRODUCTION

1. Health
2. Health Service Development
3. The Case of Kerala
4. Literature Review
5. Objectives

INTRODUCTION

1. Health

'Health has been defined by WHO as a state of complete physical,mental and social well-being and not just absence of disease and illness'. This definition tends to focus on the ideal rather than the actual ie. the complete well-being of an individual, rather than examineing the relationship of the individual with his social environment. On the other hand, if health is the well-being of human beings, then it can be said that to acquire the material basis and create conditions for well-being, human beings act upon nature, developing technology and social relations in the process, both of these in turn begin to influence heavily their well-being. In other words, health of individuals and groups is largely determined by the socio-economic, political and technological forces. According to Banerji (1978), interaction between the way of life of a community, its Culture and the environment in the widest sense of the term determines the state of health and disease in a community.

In a community, the cultural and social perception and meaning of health problems, the health institutions that are available and accessible to members of the community and health

behaviour of the community as a whole and of its individual members-all interact with one another to form a sub-cultural complex; one factor cannot be described or studied without having reference point for the other interacting factors. This sub-cultural complex has been termed by Banerji as the 'Health Culture' of a community.

2. Health Services Development

In the pre-industrial era of the history of man, different communities developed their health cultures in tune with their overall ways of life. At that stage of man's history, as the way of life was different from the present, so was its health culture. Historically, the concept of health has evolved from the magico-religious overtones of the eartier epochs in to a more scientific one in the present period. The initial multifactorial approach to health, got lost in the mechanical model of the industrial era. In such a model, the emphasis was not so much on the multiplicity of the determinants of health as on the biological perfection of the machine called 'body'. This naturally led to the individualistic and curative approach to health problems where medical technology alone was considered sufficient to handle health problems. The limitations of this approach brought back the environmental or the ecological approach to health. In spite of this, however, the emphasis on

the physical and biological basis of health continued with little effort to bring out the significance of its social basis. This conceptual framework, was the basis for reforms within the welfare services in the western capitalist countries and the growth of public health component of their health services, without actually allowing any changes in the social structure. Today the contradictions of the capitalist health service system have finally brought the social dimensions of health in to focus.

Health services system is a complex of research, education and delivery systems (for preventive, promotive and rehabilitative services) and is only one of the many inputs required to improve the health of the people. The present health service system is an outcome of the British effort to consolidate their position in their new found colony. The British introduced the western system of medicine in to India to serve their own community and a selected section of the native population. The health planners who took over after Indian Independence, had the challenge of changing this system in to one where everyone was to have access to services irrespective of his paying capacity. But they failed to respond to this challenge.

The recommendations of the National Planning Committee of the Indian National Congress proposed an integrated decentralised health service based on relevant research and training and having

adequate manpower. They also proposed self-sufficiency in drugs and equipment, integration of traditional systems in to the health delivery systems and use of health workers with short training to meet the urgent demands of manpowerss. This line of thinking assumed a broad base and was also reflected in the first ever effort of the British Government (Bhore Committee Report) to evolve a comprehensive plan for health service development. It recommended an integrated structure for curative and preventive services and free service to all. It emphasised on preventive services, maternal and child health, rural health and an infrastructural network for rural and urban areas with an adequate referral system. It also emphasised the need to prepare social physicians through socially oriented medical education and recommended abolition of the licentiates. These recommendations were manifested in the form of setting up Primary Health Centres for providing integrated health services as a part of the wider Community Development Programme, a social orientation of medical education and special attention to programmes for providing protected water supply. Other measures were improving nutrition promoting the indigenous systems of medicine, the rapid extension of network of rural health services with deployment of a large number of multi-purpose workers, culminating in the decision of the new rule who took over in 1977 to entrust 'peoples' health in people's hands by providing one community health worker for every 1000 rural population. But the negative social forces, which

emanated from the ruling class, have hampered the implementation of these very landable intentions.

Apart from the failure of the government to build a people-oriented health services structure, another failure in assisting in the improvement of people's health was the lack of concurrent change in the extent and degree of the poverty of the masses. The 1982 statement on National Health Policy of the government of India states that the demographic and health picture of the country still constituted a cause for serious and urgent concern. The high rate of population growth continued to have an adverse effect on the health of the people and the quality of their lives. The mortality rates for women and children were still distressingly high. The extent and severity of malnutrition continue to be exceptionally high. Communicable and non-communicable diseases were still to be brought under effective control and eradicated. Blindness, leprosy and tuberculosis continued to have a high incidence. Only 31% of the rural population had access to potable water supply and 5% enjoy basic sanitation. The statement noted that high incidence of diarrhoeal diseases and other preventable and infectious diseases, especially amongst infants and children, lack of safe drinking water and poor environmental sanitation, poverty and ignorance as the major contributory causes of the high incidence of morbidity and mortality.

In comparision to the demographic and health picture of the country, Kerala stands far ahead of other states of India with regard to the health indices like death rate, birth rate, infant mortality rate, etc. In certain respects, the state has already achieved the targets set to be achieved by 2000 AD. by the government of India. These achievements should not give room for complacency, because the foundation is very weak. On the one hand the death rate is very low. But on the other, morbidity rates owing to poverty-related diseases are on the rise.

3. The Case of Kerala

Table 1

General Socio-Economic Indicators

Area	38864	sq km
Districts	14	
Taluks	61	
Panchayats	999	
Municpalities	44	
Villages	1450	
Townships	3	
Municipal Corporations	3	
Population (81 census)	25453680	
Density of Population	655	
Male Population (81 census)	12527767	
Female Population	12925913	
Sex Ratio (Famale per 1000 Males)	1032	
Total Literacy Rate (%)	70.42	
Male Literacy	75.36	
Female Literacy	65.73	

Source: Health Profile of Kerala 1989. Department of Health & Family Welfare. Government of Kerala.

Table 2

Important Health Parameters

	Kerala	India
Birth rate	22.4	33.6
Death rate	6.2	11.9
Infant mortality rate	27	96
Maternal mortality rate	1.34	3.5
Expectation of life at birth (in years of age)		
Male	67	55
Female	70	54
Couple protection rate	52.6	37.5

Source: Health Profile of Kerala 1989. Department of Health and Family Welfare. Government of Kerala.

Table 3

Health Indicators

	Period	Kerala	India
Hospitals	1.1.87	327	7764
No. of beds	1.1.87	52074	555246
Population served per bed	1.1.87	544	1398
Hospitals per 1000 sq km	1.1.87	8.0	2.3
Dispensaries	1.1.87	1491	25871
No. of doctors (registered with medical council)	1985	14208	306966

Source: Health Profile of Kerala 1989. Department of Health and Family Welfare. Government of Kerala.,

The progress made in the health care in Kerala has brought in a health profile which is comparable with that of the

developed world. The population which live as long as any population group in the west or in the socialist countries are far less healthier and sturdy. This is evident from the fact that Kerala probably has a population which frequents the hospital more than anywhere else in the country and that the state has a hospital bed occupancy ratio which is the miximum. Thus, what has been achieved by providing an accessible health care system is enhancing the life expectancy of a population which is farless healthy for all practical purposes. This is because of poor nutrition standards and the non-availability of the infrastructure for healthy living.

In order to understand the present health status in the state, it is essential to analyse the socio-economic conditions and the health indicators.

Kerala was formed in 1956 out of three separate administrative units. Travancore state in the south, Cochin state in the middle and the Malabar region of the Madras province in the north. Travancore and Cochin were ruled by local Maharajas, while Malabar was part of British India.

From the very beginning of its history, Kerala had extensive contact with other cultures, both within and outside India. These contacts have played a significant part in the

socio-economic development of the state. The health states of a population is but a reflection of the socio-economic development of the country.

Social Inequalities

The traditional Kerala society in the past was characterised by unequal distribution in both the means of subsistence and privileges. Kerala used to be one of the most caste-ridden parts of India.

The social reform movements, spread of modern education, increasing rural-urban migration, improvements in transport and com-munication leading to greater social contacts, weakening of the traditional institutions like the temple and joint family which constituted the major props of the caste system are some of the developments which undermined it.

Due to the spread of education, social reform movements and organisations among the socially and economically backward classes, the worst forms of social discrimination and economic exploitation have been eliminated. These changes have also favourably affected occupational pattern and vertical mobility. However, the employment situation has worsened keeping down the level of income and standard of living.

Land reforms was the principal means used to bring about a major redistribution of wealth. The first post-independence legislative measure on land reform was adopted in 1957 and passed in 1963. It sought to assure permanent tenure to all tenants, to give tenants the right to purchase their land and to impose a ceiling on the total acreage a primary family unit could own. The land reforms created a large middle class of owner cultivators. These people gained only in some aspects by the reforms as aggression reforms simultaneously raised the wages and other benefits of farm workers.

Mencher (1980) observes that agricultural labour unions started first in Kuttanad and the wage rate there is one of the highest in India. With significant decrease in the amount of work available, the only way most labourers could stay on even ground was to demand higher wages. Though the statutory minimum wage rates are high in Kerala, the number of days of employment for male agricultural workers was 187 for Kerala, the lowest for any state.

Education

The contrast between Kerala and India is striking with respect to educational attainment. According to the 1981 census, the literacy rate in Kerala was 70.4% as against 36.2% in India.

The female literacy in Kerala was about 66% as against 25% in India.

The development of education in the state owes much to the importance given to it in the Kerala culture and to the work done by the European missionaries. Historically, education was provided using temples as centres, with non-formal lessons imparted to both men and women through puranic stories and devotional songs. More recently the rulers of both Travancore and Cochin gave considerable impetus to education by having the state pay the entire cost of primary education. These official efforts were supplemented by private efforts which began with the foreign Christian missionaries' establishment of church managed schools and colleges.

Besides promoting education at the school and university level, the recent trends of the state government has been in making the entire state fully literate by launching Adult Education Programmes. The Kottayam town is already in the Guiness Book of World Records for being the first town to attain cent per cent literacy. A massive adult education campaign was launched in the Ernakulam District in 1989 with the aim of attaining cent per cent literacy and the programme has been successful in attaining its target.

Mencher observes that education in Kerala has not meant better employment especially for most of those in the lower economic strata. Thus, this shows that sending a child to school need not be an indication of a lessening of poverty. Free schooling and inadequate growth of employment opportunities have however led to prolongation of the period of education with no significant gains for those concerned in the labour market.

Education is so widespread in the state that there are very few illiterate men or women in the prime childbearing ages. Raman Kutty (1989b) conducted a study on the influence of women's education on attitudes to aspects of child care in a village community in the Trichur District. In this study, 78 rural mothers of pre-schoolers in the age group 6 months - 6 years were taken. Half the sample of mothers were those with less than 10 years of schooling and half with 10 years of schooling or more. The impact of schooling was checked on their attitude to 5 important aspects of child care such as (1) awareness of child health status (2) breast feeding and proper care during child birth (3) care of sick children, including need for hospitalization (4) concepts about the appropriateness or otherwise of artificial feeding and (5) immunization. The women were also cross-categorised as to whether or not their husbands had 10 years of schooling.

The study revealed that 10 years of schooling did not produce a marked difference in attitudes. In case of immunization, it suggests that education of the women by itself is not a sufficient condition to bring about a change in attitudes. Education of the husband, which could be interpreted to mean a different life style had a stronger influence in shaping the attitudes of women to immunization.

Poverty and Nutritional Status

Poverty it reflected mainly in the inadequacy of food in take and the consequent undernourishment. Poverty is thus related to the lack of access to minimally adequate food which is lack of access to two-square meals a day. Under such conditions, a poor is unable to meet his hunger satisfaction.

Kerala has been identified as the state with the lowest food intake and therefore, by this criterion, as the one with the highest incidence of poverty in the entire country. The calorie intake in the state was only 1620 which is the lowest in the country according to the National Sample Survey Draft Report 1961-62.

Rice constituted the main staple of the population for centuries. Since the late 19th century, Cassava also found a

place in the diet, particularly among the poor people. The other ingredients of the diet are vegetables, coconut and coconut oil, the chief source of animal protein being fish. The war years brought about near famine conditions in the coastal areas of Travancore and Cochin, where food shortage and spiralling prices were aggravated by unemployment consequent on the failure of traditional industries like Coir and Copra.

Morbidity Pattern

The level of nultrition and the level of health of a population are generally considered to be closely related: the lower the level of nutrition, the poorer the health and vice-versa. A diet survey was conducted in the state during the period of second World War, when acute shortage of food was widespread in the state and in the rest of India. The survey indicated that anemia, diarrhoeas, wasting oedema, skin diseases and peripheral neuritis were encountered widely in the population living in the coastal areas.

The major diseases which are the hard core health problems of Kerala mainly found in rural areas are respiratory infections, diarrhoeal disorders, skin infections and intestinal parasites. Degenerative diseases like diabetes, hepertension, heart diseases and cancer have also begun to surface mainly in urban areas. The

three important diseases tuberculosis, leprosy and filariasis still remain major health problems in the state.

Mortality Rates

The mortality rates started their downward trend at a much earlier period in Kerala than in the rest of India. The crude death rate was estimated to be about 25 per 1000 population in the 1930s and about 7 in 1979. The largest gain over mortality was experienced in the infant ages. In 1979-80, a baby's chance of dying in India during the first years was almost three times as that of a baby born in Kerala.

The distinguishing feature of Kearala's health profile as compared to the rest of the country, is the lower mortality rate in the rural areas. Death rates in the rural and urban areas of Kerala at the beginning of the seventies came to 9.1 & 8.3 respectively, as against 16.1 & 8.3 respectively for India as a whole, the rural rate being almost twice as high as the urban one.

There has been great inter-regional differences in mortality rates within the state itself. The death rate for Travancore - Cochin in 1941 was 14.6. As against this, the death rate for Kerala as a whole during 1941-50 is placed at 22.3. This would

imply a significantly higher mortality rate in the Malabar districts. This is explained in terms of the differential levels of development of medical facilities and the consequent differences in accessibility to the system in the two regions.

Of the total number of 230 medical institutions in Kerala in 1951-62, only 30 institutions were located in the Malabar districts. While the availability of beds per 100,000 population was only 33 in the Malabar districts, it was as high as 67 in Travancore - Cochin. These disparities existed at the time of the formation of the Kerala state in 1956. Since then. greater attention has been paid to the development of medical facilities and public health facilities in Malabar. The number of beds per 100,000 population more than doubled in the Malabar area between 1956-57 & 1970-71. During the same period, death rate declined from about 23 to 10.4. In 1956-57, the number of beds per 100,000 population was 2.4 times larger in Travancore - Cochin than in Malabar, but this ratio declined to 1.5 times in 1970-71. In Travancore Cochin area, the death rate in 1970-71 was only 7.9. Thus, the differences in mortality rates still reflect the differences in the extent of and accessibility to medical care facilities in these two regions.

The health status of Kerala thus is a picture of low overall mortality co-existing with considerable morbidity, mostly caused by diseases linked to under-development and poverty.

Fertility Trends

The crude birth rate in Kerala was about 40 per thousand population before 1950 but it is only about 22 now. The birth rate started declining in the early 1950s, but this trend gathered momentum only in the second half of the 1960s.

The total fertility rate was about 5.2 in 1959 & 3.4 in 1976, a decline of about 35%. From 1959 to 1971, the largest fertility decline in the age-group 15-19 years, due largely to a decline in the proportion of this age-group that was married. The varying declines noted among other age groups would be in their utilisation of Family Planning methods.

The Family Planning Programme in Kerala began in 1955 with parallel Family Planning Clinics attached to Medical institutions. The course of progress since then falls in to four distinct phases: a period of slow growth (1955-64): a period of re-organisation and the establishment of statewide Family Planning Centres (1964-70), the years of mass sterilization camps

(1970-73) and a period of maternal and child health service (1973 onwards).

From the fertility study (Zachariah), it revealed that the most ambitious and impressive in terms of achievement was in the Ernakulam District where the target was 85,000 sterilizations and the actual total was 93,254 sterilizations (110% of the target).

Mencher (1980) observes that, traditionally in Kerala, among the landless, as long as there was enough work to go around, an extra child was usually able to begin earning his or her keep by the age of 10 or 11 years, sometimes even earlier. This is no longer true in Kerala as employment opportunities in agriculture and other sectors in the region have declined. Under such conditions, the author argues that while people still want children, they do not see any economic advantage in having large families and thus, coupled with the fact that with better medical facilities the children that they have are likely to live to adulthood, makes even agricultural labourers amenable to family planning. Thus, the decline in fertility among agricultural labourers need not be seen as an indication of an improvement in their quality of life. In Kerala context, it can equally well be seen as a sign of greater poverty. Panicker(1984) notes that the decrease in the benefits and increase in the costs of children motivate parents to adopt family planning leading to fall in

fertility. In Kerala, it is the change in parental attitudes and motivations which stimulated increasing acceptance of birth control resulting in the rather sharp and rapid fall in fertility. Moni Nag (1984) associates decline of fertility in Kerala with greater equity in education and health facilities than with greater equity in income and assets as seen in developed countries. Thus, he relates fertility decline with socio-economic factors like high female literacy rate, rapid decline of mortality rate, successful family planning programme and high minimum wage rate among agricultural labours.

Medical Care Delivery

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Kerala has a wide network of medicare institutions under the public sector and belonging to the allopathic and indigenous systems of medicine. There also exists an equally extensive private sectors.

The state has a 5-tier health delivery system. At the grassroot level, a government dispensary caters to the needs of about 20-30,000 population in a Panchayat. The facilities presently available at this level are being made more wholesome by connecting it to PHCs, so as to cater to positive, preventive and promotive health care in addition to the curative services provided there. At the next tier, the block PHC/government

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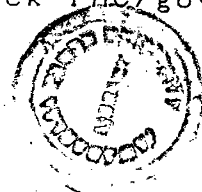


hospitals provide the same health facilities to a population of about one lakh with medical officer and para medical staff positioned on a pro-rate basis and beds for inpatient treatment.

As for curative services, taluk hospitals exist at the next level for rendering services to a population of about half a million, whereas the district hospitals which are also basically curative oriented, function at the fourth tier as a referral centre for all the peripheral units of the concerned districts. At the 5th tier, certain apex institutions, exclusively for specialised treatment of cases of leprosy, tuberculosis, mental diseases, etc., can be discerned along with the 5 medical colleges where curative services of a complex nature are rendered apart from medical education and research.

To provide health care services to the rural population, concentration is made on the development of the rural health infrastructure. This is in conformity with the stress given in the National Health Policy to provide preventive, promotive and rehabilitative health services to the people in the rural areas. In rural areas, services are provided through a network of 3874 sub-centres, 740 PHC & 29 community sub-centres. National programmes have been implemented for the control of communicable diseases like tuberculosis, leprosy, filariasis and malaria.

To supplement the activities of the Allopathic institutions, there are Ayurvedic and Homoeopathic institutions too. Ayurveda is accepted and resorted to by a wide segment of the population. The department of Homoeopathy has been making steady progress in the field of rendering medical relief to the public through Homoeo hospitals/dispensaries and in promoting Homoeo education in the state.

Every aspect of life in Kerala is politicized. Political awareness among the population in the state is very high. Newspaper reading and political discussions are principal pastimes of the average person. Protest marches, general strikes, hunger strikes, and other public demonstrations are as much a daily occurence in Kerala as the monsoon rain in July. Such politicizing has many disruptive consequences, but it is not without beneficial effect. Mencher (1980) writes that there is no question that politicization of people in Kerala has played a major part in affecting people's health. In Kerala, if a PHC was unmanned for a few days, there would be a massive demonstration at the nearest collectorate led by local leftists, who would demand to be given what they knew they were entitled to. This has had the effect of making health care much more readily available for the poor in Kerala.

Scrutinising the medical care delivery in Kerala, Raman Kutty (1989a) writes that if medical care is provided as a market good, only those who can afford the price can avail of the services, thus restricting the use of the product. The health service sector is mostly grossly inadequate to provide much needed care. Besides, health care competes with other priorities like sanitation, food production, immunisation, for scarce resources. There are mainly three devices which preferentially allocate medical care in favour of a section of the population in Kerala.

a) Money price, which acts as the most important factor in the case of private care and which favour the rich.

b) Travelling time: the component of travelling time becomes a large factor for rural dwellers especially when transportation facilities are scarce and health care providers are concentrated in urban areas.

c) Waiting time, which introduces a bias in favour of more influential members of the community in the allocation of health care. For them, waiting time is practically reduced to nought. The legitimisation of private practice of government doctors, as has been done in Kerala, encourages this 'jumping the queue', since it is difficult to deny

priority to those who have previously consulted the doctor. The effect of this 'jumping the queue' on the section which is not thus privileged is that it increases its price of obtaining medical care in terms of increased waiting time. The net result is that the general health care system in the state, government and private included, is generally skewed in favour of the elite classes in allocating its benefits.

This inefficient medical care coupled with poor socio-economic conditions in the state is clear from the diarrhoeal deaths that occured in Kerala in September 1987. Most deaths occured in the age group below 10 (24.2%) and above 50 (51.2%). The fact that two-third of the dead are women, indicates their low health status. 49% of the dead did not get water. Half of the victims were not given water supplements, in spite of the fact that preventing dehydration by ORS is the most vital aspect of diarrchoea care. 95% of the deaths took place in hospitals. It is alarming that so many died in spite of the fact that they may have been saved by rehydration alone. Besides these, several patients were shifted from one hospital to another. This shows that even simple rehydration therapy could not be handled in these places. Most of the patients had to buy medicines and drips from outside and 77% of them did so.

The socio-economic status of the patients revealed that most of the dead belonged to low income groups. The main culprit of diarrhoeal diseases is drinking water. 50% relied on well-water. 35% of the people relied on public taps or the so-called protected water supply. But here, the question rising is the level of faecal contamination creeping into this water supply due to broken pipes, permanently dry ones and the ones contaminated by drainage water, etc. 10% of the people depend on water brought in lorries by contractors. Nobody ever cares to know how this water is collected, processed and if it is ever potable. Sanitary latrines play a major role in preventing deirrhoeal diseases but only 5% of the dead had access to them.

Such findings reveal that despite major public investments in the health and non-health sectors in the state, the mass of the people continue to live in poor socio-economic conditions and for whom the medical care services are not easily accessible. Similar conditions prevail in the rest of the country.

With such conditions existing in the entire country, the social scientists were involved in the process of health service development at a very early stage. For more than three decades, social scientists have produced a large volume of literature in the course of their work in health fields in India.

4. Literature Review

Mckim Marriot and Morris Carstairs were among the first to carry out 'formal' social science studies in health in India. Marriot carried out his study in the village Kishan Garhi in Aligarh district of Uttar Pradesh in 1952. He attempted to analyse the cultural problems involved in introducing what was considered to be more effective medical techniques to a conservative village. The successful establishment of effective medicine here appears to the researcher to depend largely on the degree to which scientific medical practice can divest itself of certain western accertions and clothe itself in the social home spun of the Indian village.

Khwaja Arif Hasan (1967) has been among the first scholars to have carried out field work specifically to elaborate on cultural dimensions of health in an Indian village. He stayed in the village for one full year and conducted participant observations besides analysing available records and administering questionnaire to a purposive sample of 80 out of a total of 215 households. In the report, he describes the village environment, sanitary habits, personal hygiene, food habits and taboos, drinks and drugs, concepts of etiology and illness and doctor-patient relationship. He has pointed out that there are two types of social and cultural factors that affect the health

of any community. Firstly, there are factors that directly affect the health of the community because certain customs and practices, belief values and religious taboos, etc., create an environment that helps in the spread or control of certain diseases. Accordingly, factors that indirectly affect health of a community ie., factors related with problem of medical care of already sick and the invalid. Some cultural factors play a positive ròle ie. taboos helpful in the maintenance, promotion or preservation of health and some cultural factors play a negative role adversely affecting practices. A major limitation of Hasan's work is that it makes a value judgement that western medicine is always superior to traditional medicine and those who do not accept western medicine are culturally backward. Hasan has overlooked the mechanism through which services from practitioners of western medicine are made available and accessible and has gone on to pass judgement on the cultural response of the people to their health problems.

Djurfelt and Lindberg conducted a study of introduction of western medicine in the village Thaiyur in Tamil Nadu in 1969-70. While writing their case study of health and health policies in the village, they have attempted to demonstrate three thesis:

a) The health situation in the village is a consequence of the prevailing economic and political order.

b) The health problems cannot be studied by means of medical technology. It is intended to demonstrate the importance of western (allopathic) technology by comparing it with the already existing (indigenous) health services in the village.

c) Only a profound transformation of the economic and political structure can give the people of Thaiyur the means to improve their health.

Thaiyur village is 20 miles from Madras city. They spent about an year in the village. They combined several methods of data collection. An extensive census covering demographic and economic subjects; an ethnographic data collection covering several subjects and using several methods (series of unstructured interviews, specialist interviews, case-studies, intensive statistical studies of very small sample, participant observation, etc; and a conventional sociological sample survey of 200 households whereby relevant variables relating to economics, demography, health, politics, knowledge, attitude, etc were measured.

The two main implications of the existing health conditions of the people are that: firstly the health of the Thaiyur inhabitants is not a natural fact, but a social and historical

product. Their bad health is the result of impoverishment which started long ago and which continues as one of the results of the parasitic mode of production dominating independent India. Secondly, the Thaiyur people will improve their health not by consuming more allopathic medicine, but by improving their economic lot, which they can only do by getting rid of the parasitic system which oppresses them.

Banerji has undertaken a wide nation wide social science study spanning from 1972-81, of the health behaviour of rural populations covering 19 villages, located in 8 states. 'The villages were divided into 3 categories. (1) within the immediate vicinity of the PHC (2) a little away from the PHC (3) covered by the Sub-centre'. For this study, health behaviour has been considered in terms of: (a) the entire spectrum of health problems; (b) cultural perceptions and cultural meanings of these problems; (c) various curative, preventive, promotive and family planning measures implemented by the government and other agencies and (d) other health agencies that exist in villages as a part of the culture of the community. Findings from this study have shown how above mentioned four factors are integrated to the understanding of the health behaviour of rural population. Banerji maintains that the conventional, methodological and conceptual approaches to the study of rural life in India, which are usually based on western reference models, often lead the

presentation of a fragmented and materially distorted account of the social reality. He attempts to present the social reality as the stepping stone to develop an alternative approach.

By far the most important implication of this study is that it makes it possible to relate health problems of a community and its health culture with the question of poverty and the various social, economic and political forces in the community which influence the degree and the nature of poverty. There are four issues that emerge while considering the implications of the findings:

a) Because of wide differences in the environmental conditions and in access to health institutions, it can be concluded in general, the people in urban areas enjoy greater advantage over those living in rural areas. Similar differences exist even within the villages where a small privileged class lives in better environment with better access to health institutions than the vast majority of the village population.

b) As the bulk of the health problems among the poor is generated by the extreme poor environmental conditions in which they live, these problems can be dealt only by improving the living conditions. As this improvement is

essentially related to economic, political and social conditions, improvement of health status of a population is also essentially an economic, political and social issue. Under the existing conditions of social and economic relations, conventional health services can have only a marginal role. Struggle for better health thus becomes synonymous with struggle for economic, political and social justice.

c) Under the existing conditions of gross inequality in the access to health institutions, the privileged class, which has control over access of the underprivileged to health institutions, uses the access to health institutions as a weapon to control and exploit the underprivileged.

d) If the poor are organised enough to exploit the concessious that have already been made by the ruling classes in the fields of health, they can not only blunt the weapon of using access to health services to oppress them, but they can also use these concessions as a lever to join other forces in ushering in a more just social order.

In conclusion, it is contended that, in a community, perception of a health problem, meaning of the state of health and disease, response to various institutions that exist for

dealing with there health problems, all form an integrated, interdependent and interacting whole. It is a sub-cultural complex which can be termed as the health culture of the community. Health culture of a community is influenced by diffusion from other health cultures. In this context, implementation of government health programmes in a community can be considered as purposive interventions into the existing health culture of that community with the object of bringing about a desired change.in that (pre-existing) health culture. As health culture of the community, is the sub-culture of the overall culture of the community, it is intimately linked with changes in the overall culture that are mediated by various social, economic and political forces. The significant aspect of this sstudy is that its entire methodological edifice is built around this integrated and broad based concept of health culture.

Based on the similar methodology is the study conducted by Sahu (1980) which investigates the health culture of six Oraon tribal habitats living at varying distances from the sophisticated hospital at the steel plant at Rourkela. This study differs from earlier studies as this involves the study of a tribal community. Here, the concept of health culture as a dynamic entity, which is influenced by a number of factors, is used to explore how the health culture of a tribe undergoes change with changes related to the concerned factors.

The study investigates the health culture of Oraons in different ecological, social, economic and occupational contents. The Oraons living in Rourkela Steel Plant having free access to a very extensive network of health services built around the highly sophisticated Ispat General Hospital is taken as one of the Oraon habitats. The other habitat is the remote village of Kokerma which has no government health institution located in it. The village Karolega which has a sub-centre of a Primary Health Centre and another village which has the corresponding PHC located in it were selected as the two other villages. Four slum areas surrounding the RST and a resettlement colony located 10 kms away from RST were the other urban groups taken for the study.

It is observed from the study that during illness, the Oraons actively seek health services outside their culturally determined health institutions to get relief. A very large proportion of their felt needs for such services remain unmet because of limitations in their access to these health institutions. Social, religious, economic and political factors determine the access of Oraons to health institutions. Thus changes in the access of western medical services had profoundly changed the other components of their health culture. Even if they are not accessible to western style medical services even in the remotest Oraon village, when medical catastrophes strike

them, they are prepared to make great sacrifices to gain access to practitioners or institutions of western medicine.

Social scientists have covered an extensive field in the course of their work in the health fields in India. The community based health behaviour studies have mainly dealt with peasant communities. Sahu (1980)'s, study area is different as it deals with a tribal population in Orissa.

Kerala stands far ahead of other states of India with regard to the health indices (Table 2 &3). Kerala is today being pointed to by a number of economists and others as an exceptional instant when without either a radical revolution or a major increase in industrialization or production, things seem to be getting better in terms of quality of life of the common people. Eventhough the population is well advanced in its population transition with a low and slowly declining mortality rate, it has a very high rate of morbidity.

Kerala is a land of rivers and backwaters. The backwaters form a specially attractive and economically valuable feature of Kerala. The biggest backwater is the Vembanad lake, some 80 sq miles in area, which opens out in to the Arabian sea at Cochin port in the Ernakulam District. As the health status of a population is closely related to its physical environment and

socio-economic milieu, the present study probes into the health behaviour of an island population in these backwaters. As there has not been any island study conducted so far, there is need to study the health behaviour of such an isolated community. The island chosen for the study is the Vallarpadom island in the backwaters of Ernakulam District.

Objectives

The main objectives of the study are:

(1) To explore the socio-ecoinomic conditions in the island.

(2) To study the health behavour of the community within the given socio-economic conditions.

(3) To assess the availability and accessibility of the existing health services in the island.

CHAPTER II

THE DESIGN

1. Data Required for the Study

2. Methods used for Data Collection

3. Sequence of Data Collection

4. Reports and Records

5. Analysis and Presentation of Data

6. Limitations of the Study

The Design

1. Data Required for the Study

The bulk of the data needed for such a study was qualitative in nature. But some of this qualitative data were to be strengthened by means of a quantitative dimension. The qualitative data required for this study was collected on the following lines:

a) The physical aspects of the study area, ie., location, physical features, flora, settlement pattern, housing, environmental sanitation, water supply, markets, transport & communication system.

b) Social structure of the population ie., religion, caste, population & distribution of households, education, institutions & organisations.

c) The economic structure of the population ie., occupation, economic stratification, land holding pattern, cultivation, loan or other facilities from government or private charity organisations.

d) The political structure in the study area ie., political party affiliations, voting behaviour & functions of the Panchayat.

(e) The Health service system & health behaviour which include:

(i) the various health institutions available to the population in the study area & their functions.

(ii) the prevailing illnesses which include the communicable & non communicable diseases, childhood diseases, snake bite, dog bite, alcoholism, accidents & deaths.

(iii) The community participation.

(iv) Pregnancy & child rearing practices.

2. Methods Used for Data Collection

An initial survey was conducted to get a census:- total population, households & their composition, caste & religion, systematic, intensive, probing interviews, direct observations & recording of specific case reports were the techniques used to collect bulk of the data for the study.

Efforts have been made to standardize & repeatedly cross check the qualitative methods used in this investigation. An attempt was made to provide a quantitative dimension to the qualitative data. This was done by identifying specific issues that needed to be quantified on the basis of the study of the qualitative data already collected & developing a suitable mix of open & close ended interview schedule. This schedule was administered to a systematic random sample of 100 households, taking every fifteenth household from the study area.

3. Sequence of Data Collection

Due to certain limitations in settling down in the study area, the investigator used to commute to the island daily morning by boat & return in the evening. Nevertheless, this did not hinder in the establishment of rapport with the inhabitants as they were mainly cooperative & friendly.

The investigator started collecting information from different sections of the communityon the basis of a check-list. Initially, the work consisted in getting data concerning the physical features of the area, interview of informants,, interview of persons at the mini PHC, making direct observation to health behaviour of the population, of their response to visits of health personnel to the study area & of their visits to

health institutions, the formation of an interview schedule & their administration to the sample.

The preists of the Church in the island, social worker, school teachers, personnel of the mini PHC, members of the panchayat, retired officials, clan leaders, & some small scale traders were among those who were interviewed to gt their responses to the different questions relating to this study. Techniques of observation, depth interviews & case reports were used to study different segments of the population that were identified on the basis of strata & religion. For each of these segments, apart from those who were well informed about their group or stratum, some common members were included among the respondents when required. Findings on a segment as a whole were cross checked with common members & informants of other segments & from health workers.

4. Reports & Records

While collecting the qualitative data, two main types of records were kept. The field notes & daily dairy. The daily dairy was written on the basis of field notes. The local language Malayalam was used for communication. Both in making notes of interviews, case reports & observations & in filling the schedules, attempts were made to record them on the spot. If,

however, the investigator felt that in specific situations such on the spot recordings might inhibit the free response of the respondents, the recordings were made afterwards.

5. Analysis & Presentation of Data

All the different types of the qualitative data as mentioned earlier were first divided into the following categories:

(a) description of the island under study

(b) the social structure of the population

(c) the economic structure of the population by breaking them in to different economic groups.

(d) the political structure & the functions of the panchayat

(e) the health service system & the health behaviour which includes the various health institutions available, the prevailing illnesses, the community participation & the pregnancy & child rearing practices.

For the purpose of analysis, the questions included in the schedule were identified in the form of specific parameters. A

code list was then prepared on the basis of each of the parameters. This code list listed the variables for each parameter. Tables were prepared to present the distribution of the variables. The quantitative profile of the parameters came in very handy in elaborating some of the qualitative data obtained in the course of the fieldwork. On such occasions, the qualitative and the quantitative data were brought together & organised systematically. With the help of such organised data, an integrated account of the community & its health behaviour was presented.

6. Limitations of the Study

1. Due to time constraints only a sample of 100 households were taken for the study.

2. Due to personal reasons, the investigator could not settle down in the island. Instead, had to commute daily to the study area. Therefore, observations could not be made on daily events in the evenings & early mornings, especially on the menace arising from alcoholism as reported by some respondents.

3. Questions on alcoholism, when asked to a female respondent gave different answers than when asked to a male respondent.

CHAPTER III

DATA ANALYSIS

1. Introduction

2. Physical Structure

3. Social Structure

4. Economic Structure

5. Political Structure

6. Health Service System and Health Behaviour

DATA ANALYSIS

1. Introduction

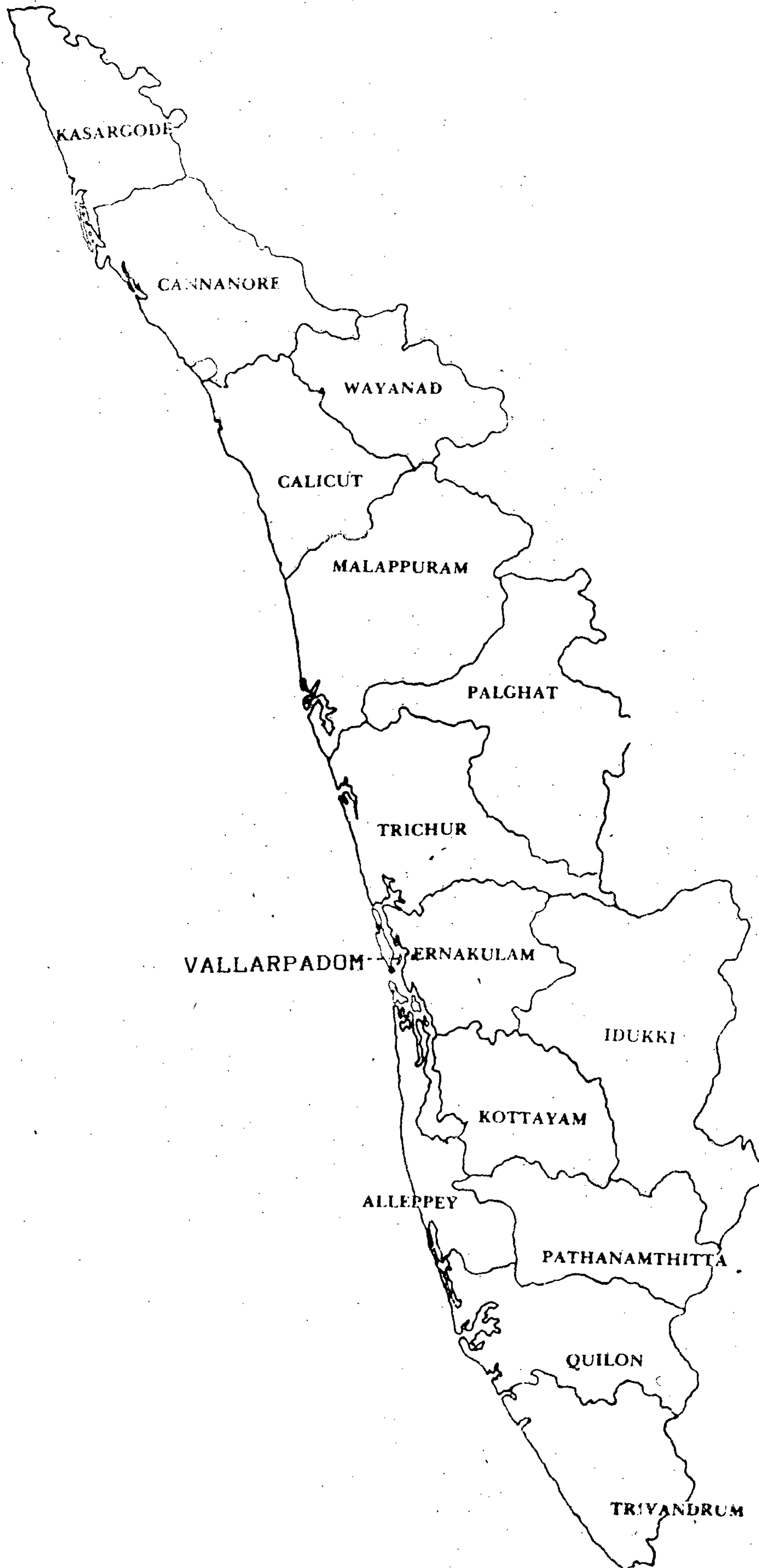
Fringing the Arabian sea and touching Spicy Sahya Hills, Kerala the land of coconut palms is unique for its scenic beauty, high literacy rate, cleanliness, rich cultural heritage and political consciousness. The state has a long coastline of about 600 kms along with the Arabian sea on the west and is bordered on the east by mountains. About 40 rivers flow from the Ghats to the sea and a chain of backwaters connected by man-made canals run parallel to the sea. It is in these backwaters within the Ernakulam district of the state that the island under study is located. According to the 1981 census, of the total area of 38864 sq kms of the state, the Ernakulam district covers an area of 2408 sq kms, of which, 2030.4 sq kms fall under rural Ernakulam. As against the state population of 25453680 persons, the total population of the Ernakulam district is 2535294 persons, of which, 1,532,402 persons are in the rural area. The district has a density of population as high as 729 against the state's figure of 655.

The island Vallarpadom is located at about 6 kms away from the Ernakulam city. Eventhough the distance is not much, it is totally cut off from the mainland. There is regular day time

boat service from the island to Ernakulam. No boat services at night. The islanders are thus put to great inconveniences. The island is stretched out length wise and is 4 kms in length and 1.5 kms in breadth. The northern side of the island is called Vallarpadom and the southern side Panambukad. The island consists of 4 wards under the Mulavucad Panchayat. Ward no. 7&8 are in Vallarpadom and ward no. 9 & 10 in Panambukad.

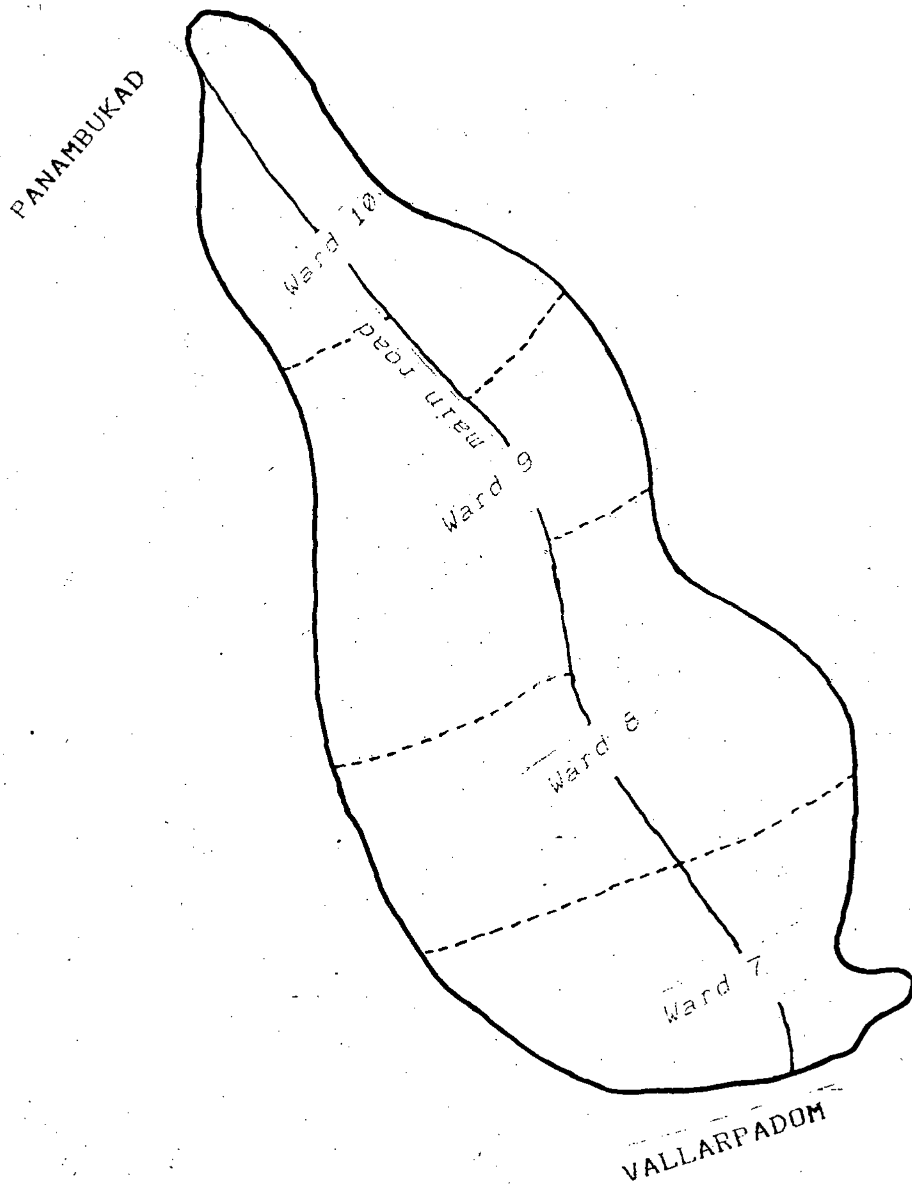
The total population of the island is 9468 persons with 1578 households. There are only Christians and Hindus living there. There are three groups of Christians mainly the Anglo Indians, Roman Latin Catholics and Penthecostes. There are four Hindu caste groups. They are the Dheevaras, Pulayas, Ezhavas and Nairs. The different categories of occupation held by the people in the island are skilled labour, unskilled labour, fishermen, government servants, jobs in private firms, small scale business, and big business. Majority work in the mainland, as there are not enough organisations or institutions in the island which can absorb these workers. The islanders are dependent on the mainland for most of their needs including the health needs. It has been widely recognised that the geographical, social, economic and political conditions under which a community lives greatly influence its growth and development. For a proper understanding of the cultural practices of a community, including its health practices, it is therefore, necessary to relate its

KERALA



VALLARPADOM ISLAND

KAAYAL (BACKWATERS)



culture to the social, economic, and political forces which maintain the ecological settings.

2. Physical Structure

Housing

There is no proper pattern of housing in the whole island. In some areas there is concentration of houses whereby a linear pattern of housing is observed. In some places there is concentration of houses in a disorderly manner with some houses facing north, some south, east, west, some with fences, some without. In some areas, there are so many water canals and water logged patches of land that houses are seen a few furlongs away from each other, beside water canals or water logged areas in between concentrations of 4-5 houses.

Three main categories of houses are the Kacha, Mixed and the Pacca type. Majority of the people own some land whereby they have made their own houses be it Kacha, Pucca or Mixed. The government has constructed some houses for the very poor. The government also has a scheme of giving loan to the poor such that they can buy plots and construct houses themselves. The church too constructs 2-3 houses every year as charity for the very poor Catholics. Thus, 96% of the households stay in their own houses.

Table 4

Percentage of Kacha & Pucca Mixed Houses

Housing	Percentage
Kacha	4%
Pucca	13%
Mixed	83%

Kacha houses constitute just 4% of all the houses in the island. The walls of these houses are made out of rough wooden planks nailed to each other. The floor is raised by bricks. Very rarely is the front portion cemented. If not, then it is just a muddy platform. The ceiling is made of tiles. These houses mostly have just two rooms. The furnitures are a bench or a couple of chairs in the verandah (where there is one) or in the sitting room and just one cot inside. The kitchen is in the corner portion of the house. Majority use earthen ports for cooking. Cooking is done on chula. They have no latrines constructed in their houses. Those staying near the common latrine make use of them. Those whose houses are near water canals use the banks of these canals. Those with not even water canals nearby use boreholes. Some have just enough area to make

their Kacha houses. Some have as much land as 150 sq yards. But they have no plantations in their campuses. Fences of some houses are made from straw.

The most common type of houses found are of the mixed type which constitute 83% of all the houses in the island. These houses have walls made of bricks which may be cemented or not cemented, though majority of the houses have plastered and painted walls. The floor is cemented too but the roof is made of tiles. These are the traditional type of houses there. These type of houses are owned by both the economically backward and the well off. Eventhough the basic pattern remains the same, the well-off have better maintained houses with many amenities.

The Pucca houses constitute 13% of all the houses in the island. These have concrete roof and strong cemented floor and walls. People have big courtyards, but many have not made fences or constructed compound walls. Majority of the houses have front verandahs.

Table 5 (a)

Availability of Latrines

Latrines	Percentage
Yes	56%
No	44%
Total	100

Table 5 (b)

Latrine	Number
Common	10 (22.7%)
Banks of canal	25 (56.8%)
Borehole	9 (20.4%)
Total	44

56% of all the houses have constructed latrines. Out of the rest 44% who have no latrines in their houses, 22.7% of them use common latrines. These are those whose houses are near these common latrines. 56.8% use the banks of canals. These people have houses on the banks of water canals. 20.4% use boreholes. Such people are those who have houses neither on the banks of canals nor near common latrines. In the houses with latrines, the latrines are constructed in the backyard detached from the main house. Only the new Pucca houses have attached bathrooms. It is fascinating to see that even if it is a small house of the poor, it is daily swept and swopped in the morning. Even their courtyards are swept daily. Houses with compound walls have well maintained gardens. Most houses have coconut trees but all do not give good yield. People who are well off have well furnished houses. Even a well off family uses earthen pots for cooking as dishes cooked in there are considered tasty. They also use steel and aluminium. Chula is used by the well-off too. Kerosene stove is also used.

Electricity

Table 6

Availability of Electricity Connection

Electricity	Percentage
Yes	74
No	26

The entire island is electrified 74% of the houses have electricity. The houses provided by the government to the very poor have been provided with electricity. Houses with no electricity are of those poor who have made their houses & haven't been able to afford electricity. Many houses have no ceiling fans. Instead some of them use table fans. In some areas, fans are not very much essential as houses on the coast get enough breeze throughout day & night.

Table 7

Ownership of Television

Television	Percentage
Yes	26
No.	74

26% of the households own television. The rest watch television programmes in the houses in their neighbourhood which have television. 57% of the households own radios. But some are old and non-functional as they cannot afford to get it repaired often.

General Sanitation

The General sanitation of the island is not quite well. For those without latrines & whose houses are near or on the banks of water canals or water logged fields, make a shed out of matted coconut leaves on these banks. Such people use this as their latrine with the idea that the canal water may take the excreta along with the flow. Common latrines are provided for such

people. These are built at Vallarpadom. These are used by only those who stay nearby. But these too are not fully utilised due to non-availability of water there. This is not due to water scarcity in the locality but there is no water tank constructed in the vicinity such that pipe water can be supplied in these latrines. There is no septic tank for common latrines. The excreta flow into the canals. People whose houses are not on the banks of water canals use boreholes in their backyards. There boreholes can be very destructive during rainy seasons as there is water logging.

Many houses have enough space in the courtyards. Thus, the garbage is dumped in a corner and burnt later. Many people dump it in to these water canals or water logged fields. Therefore such places have a terrible stink. Such places breed mosquitoes and other infectants. No sanitary arrangements are made for this.

The roads and pathways are quite clean. Some pathways which are low-lying become slushy only during rains.

In the fishermen's colony, as these people dry the fish on the sand in sunlight, there is a constant odour of dried fish. One of the unhygienic things observed is that many of the households own either ducks or hens. These are always let loose.

Therefore their excreta is strewn all over the place. All there become destructive during rainy season.

Transport & Communication

There is a post office in the island. There is one public telephone booth. Only one house and the church own telephone. There is no tarred road in the island. As there are no vehicles, except bicycles, the need for a pucca road hasn't been felt. All the roads are kacha. There is one main road from the Vallarpadom jetty to the Panambukad end. The other paths are all zig-zag with many curves and narrow paths. Also, there are many small bridges made of wooden planks to cross over water canals and streams. During rainy season, the low-lying pathways become very slushy.

There are frequent boat services to the Ernakulam city. There is a boat jetty at Vallarpadom from where there is a boat every forty minutes and takes 15 mts to reach Ernakulam city. The boat services available are from 7 am. to 9 pm. No boat service at night. There are two boat jettys at Panambukad. At one jetty, there is constant day service every 25 mts but takes 40 mts to reach Ernakulam. The boat jetty at the other end of Panambukad has very little service. Twice in the morning and twice in the afternoon. Some fishermen have bought rowing boats

which too are used by the locals for commuting. As motor boats are not always available, these become very useful. People living very far from the jetty use rowing boats to reach the jetty. The very poor who cannot afford motor boats, use rowing boats to reach the city.

Water Supply

Table 8

Sources of Drinking Water

Water supply	Percentage
Public pipe	58
House pipe	39
Well	2
Pond	1

There is one public pipe provided for 25 houses. From these pipes, those who can afford get connection to their houses.

These constitute 39% of the households. From Always river, water is pumped to Mulavucad tank and Panambukad tank. From these tanks, connection is given to these public pipes. There are also individual ponds and wells. Water from these public pipes are used for all the basic needs of the household like drinking, washing, cooking, etc. Some public pipes are under repair. The area Vallarpadom is at a higher level than Panambukad. Therefore, Vallarpadom experiences water scarcity sometimes during peak summers, whereas, Panambukad receives water supply constantly. People complain that sometimes, the water supplied is contaminated. During such problems, they seek shelter from ponds and wells nearby.

Mass - Media

Table 9 (a)

Newspaper Reading Habits

Newspaper reading	Percentage
No	12
Borrowed	50
Bought	38

Table 8 (b)

Reading habit	Percentage
Daily	56
Frequently	4
Sometimes	28
Never	12

12% of the households do not read newspaper at all. Newspapers are regularly bought by only those households who can afford them. These constitute 38%. The rest 50% borrow newspaper from the neighbourhood. 56% read newspaper daily, 4% read frequently and 28% read sometimes.

Markets

A proper market place is only of that selling fish and beef and buffalo. No vegetables or fruits are sold in the market. Amongst fruits, only banana is sold in small shops. Thus, people

are totally dependent on cities for such shopping. Fish selling is even done from door to door. The few shops that are there in the island are provision store, utensil store, cloth shop, tea stalls, tailoring shop, ration shop, dhabas and toddy shops. Besides licensed toddy shops, there are people selling liquor and toddy illegally in their houses. Many households own ducks and hens. Many of them give the eggs to the local shops for selling - some sell in their own houses. Those who own provision store, get all the stuff from the city in a boat. People complain that some items are more expensive in the island. Thus, whenever people go across to the city, they prefer shopping from there.

3. Social Structure

Religion & Caste

Table 10

Population of Different Caste Groups

Caste	Population
Roman Catholics	3912
Anglo Indian	906
Penthecostes	11

Table 10 (contd..2)

Population of Different Caste Groups

Caste	Population
Nair	47
Ezhava	92
Dheevara	2404
Pulaya	2096
Total	9468

There are only Christians and Hindus in the island. The three Christian groups are the Roman Latin Catholics, the Anglo Indians and the Penthecostes. The Hindu groups are the Nairs, Ezhavas, Dheevaras and Pulayas. There are only two Penthecoste families. Besides this, all the other caste groups have their own caste associations.

(a) The Christians

(i) The Roman Latin Catholics constitute the majority caste group. They believe in the existence of one and only one god, the creation of the world by him, the incarnation of Christ, the redemption of humanity by His death on the cross, resurrection and ascention of Christ, the ten commandments and seven sacraments, eternity of the soul, heaven, hell and purgatory, holy communion, primacy and infallibility of the Pope .... All of them are allegiance to the Holy See of Rome.

These Christians in the island comprise the economically dominant and the economically backward. These Christians form a great majority and there is great unity and mingling amongst each other but they do not mingle much with the Hindus especially Pulayas. The Catholics are all members of the Vallarpadom Church.

The Church is famous and attracts devotees from outside the island. The Church has an organisation of its own for helping the poor and the needy. The Church has divided the whole area into 24 units according to the number of households. They provide 25 ducks to the poorest family in each unit. The family in turn has to give Rs 2/- weekly to the Church. Many of these families are too poor to feed so many ducks. With the result,

many ducks have died or are not able to produce eggs. Only very few families have profitted from this scheme. Such families collect all the eggs daily and sell it in the market every week. In the housing scheme of the Church, it makes 2-3 houses as charity every year for the very poor landless Catholics.

In 1838 in Paris, St-De-Paul Society was formed with branches all over the world. One branch opened in Vallarpadom in 1937 called 'Our lady of ransom conference'. It's aim is to provide facilities within its financial capacity to all, irrespective of caste, creed or religion. They have performed several functions since then. Till now, 14 new houses have been given to the very poor. 18 very poor families are continuously helped by giving treatments, meals, education, cows, goats, ducks and hens to different families such that they become self-reliant. They also help in marriage and death ceremonies of the poor. Clashes and problems that arise in the locality are mediated by them. This society is formed by the Catholics in the island.

(ii) <u>The Anglo Indians</u> The race of Anglo Indians came in to being in the state after the British came to Kerala. One of the ancestral parents of the Anglo Indians is a Britisher. When the British left, many Anglo Indians left for other countries but some remained. Their life styles are different from the other

Christians as they are very anglicised. They do not have a Church of their own. The Anglo Indians in the island are all members of the Vallarpadom Church. But now, they have been adapting to Indian life styles thereby bringing in transformations in their group. Two thirds of the Anglo Indians in the island are quite well-off. Their association has been inactive as many have left for Ernakulam. The members donate to the association for conducting Christmas and New Year Celebrations.

(iii)The Penthecostes in the island are just two families. They are a group of Christians with different system of Church service and different beliefs. They have faith in the supreme power of god as he is the healer and everything.

(b) The Hindus

(i) The Nairs in the island are just 8 families. The Nairs were earlier a military body holding lands and serving as a militia. With the change of time, many people belonging to this community have shed their notions of superiority and privilege and resorted to all kinds of occupations. The Nairs in the island have a Nair Sabha and a temple of their own and hold temple festivals.

(ii) The Ezhavas Constitute 15 families in the island. Some 60-70 years ago, when the caste system was prevalent in the state

with all its rigidity, Ezhavas were considered untouchables. But the caste system had later begun to lose its hold on the people owing to the teachings of religious leaders and social reformers like Chattampi Swamikal and Sri. Narayanaguru. The latter, himself born of Ezhava parents contributed much through his teachings and reforms to the upliftment of the Ezhava community from the depth of humiliation to which it had fallen and placing it on an equal footing with the so-called high castes. Their occupation in older times was cultivation especially coconut cultivation and toddy tapping. But now, people of their community are engaged in various kinds of trade and commerce. In Vallarpadom, the Ezhavas have an SNDP Sabha but have not constructed a temple of their own.

(iii) The Dheevaras Belong to the 'Other Backward Castes'. Their caste occupation is fishing. But now, some of the families have cut themselves off from their caste occupation and attained other jobs. The Dheevaras in the island have two Sabhas and two temples. This community is concentrated in Panambukad. though there are quite a few families in Vallarpadom too. The Dheevaras in the island range from very poor fishermen to big businessmen.

(iv) The Pulayas are a division of the scheduled castes. According to N. Subramonia Iyer, 'Pulaya' is supposed to be derived from 'Pula' a word meaning pollution because of all the

indigenous castes and tribes of Malabar, they cause the greatest impurity from the standpoint of medical conventionalism. According to another interpretation, Pulaya is derived from the word 'Pulam' which means a corn field and the community was called Pulaya as their traditional occupation was agricultural labour. These people who were mere vassals of the landlords had orginally no permanent rights over the lands in which they had their huts, but were occupying the land at the will of the landlord. Thanks to the various land reform measures adopted by government from time to time, they got permanent occupancy rights.

The Pulayas have their own association. The members donate to the association. They hold temple festivals. During any deaths, the association gives Rs. 101/- to the bereaved. These Pulayas have become great gainers as the government has provided many landless with land for farming and fishing. With the result, they have improved their economic status. They work in their own land making farming profitable. The Pulayas complain that some landowners get labour from their own religion. Thus, the Pulayas are discriminated against.

Education and Community Development Programme

Of the total population, 74% are just primary school educated. The population of graduates in the island is only 31 &

345 are matrics. Total illiterates are very few which is a negligible number. There are many school drop outs. It is observed that there are many jobless young boys loitering about or playing cards, etc. There are no colleges in the island. The various schools are:

1. St. Mary's Lower Primary School (1899)

2. Panambukad St. Joseph's LP School (1900)

3. St. Mary's Upper Primary School (1957)

4. St. Mary's High School (1966)

5. Anglo Indian LP School

There is no regular adult education programme as a part of community development programme. But one took place lately as per the state government's programme of meeting the target of cent per cent literacy. With the result, 300 illiterates learnt to read and write. There are volunteers of the Shastra Sahitya Parishad in the island. They helped in organising adult education in the area. Besides this, they had held seminars for women, street plays depicting gender discrimination, making them

aware of the evils and act against them. With the result, some women had come forward and participated in these camps.

Another programme is the ICDS given in the Anganvadis. There are total six anganvadis in the island. The anganvadi admits children from 3-6 years. Timing 9.30 am. - 4 pm. Here, food is supplied to the children daily, i.e., lunch and tea snacks. The pregnant and lactating mothers till 6 months are double fed. For lactating mothers from 6 months - 3 years, there is single feeding. The food supply is Bulgar wheat and vegetable oil supplied by UNICEF. A meeting is called once a month for women in the age group 15-45 years. Lady health inspector takes classes. Once a month, the Jr. PHN gives vaccination to the children in the anganvadi.

4. Economic Structure

Occupation

Table 11

Occupation

Main Occupation	Percentage
Skilled Labour	26
Unskilled Labour	12
Fishermen	17
Government Job	27

Table 11 (contd..2)

Occupation

Main Occupation	Percentage
Small Scale Business	2
Big Business	6
Others	10

The different categories of occupation held by the people in the island are skilled and unskilled labour, fishermen, government servants, small scale business and big business. Majority of the people are those working in the city.

(i) <u>Government Servants</u>: These constitute 27% of the population. They include those working in the Cochin Port, Naval Base, Cochin Dock Labour Board (DLB), as mainly skilled and unskilled labourers. There are also some working in the telephone exchange, Kerala state electricity board, Kerala state transport corporation, etc. These government servants comparatively get a higher pay plus various other amenities. These mainly constitute one-fourth of the Dheevara community, Catholics and Pulayas too.

(ii) <u>Skilled Labour</u>: These constitute 26% of the population. They are mainly carpenters, painters, masons, welders, etc. Some of them work in private companies in the mainland and some work in the island when any work is available. Such people sometimes stay without work for periods depending on the availability of work. About one-third of the Catholics, one-fourth of the Pulayas and about half of the Anglo Indians form this category of workers.

(iii) <u>Unskilled Labour</u>: These constitute only 12% of the population. They are always in a pathetic condition. When work is available, they work either in the mainland or in the island. When there is no work, they starve. The work of the daily wage earner is seasonal. Usually he has work for 5-6 months. After this, if he gets any type of work, he works. If not, he is jobless and has no earning. This group is mainly constituted of one-fourth of the Pulaya community and a few Catholics.

(iv) <u>Fishermen</u>: They constitute 17% of the population. Their work is seasonal. The season lasts for 5-6 months. Out of these, there are those who go fishing on their own in their boats and those who go fishing for the landlords. Just half of the Dheevara community and about one-tenth of the Catholics are involved in fishing.

(v) Small Scale Business: A mere 2% of the population run small scale business as their main occupation. These are in the form of tea stalls, dhabas, provision store, etc. Only Catholics are engaged in this business.

(vi) Big Business: 6% of the population is constituted of them. They are in the form of construction contractor, an acre or more of paddy fields and fishing boats or those who have prawn cultivation. Agriculture has proved to be a great loss as it is a gamble in the monsoon. Therefore, have been discouraged. In some low-lying fields, there is constant water logging which hampers agriculture. The air and water is saltish which prevents cultivation of any kind of crops. As majority of the people have other occupations, it is difficult to get labourers. Those available demand high rates. Therefore, people have to get labour from the mainland which turns out to be very expensive and therefore a great loss. Thus, from agriculture, many have turned to prawn cultivation which is profitable comparatively. This group is mainly constituted of the Dheevaras, Catholics, Anglo Indians and some Pulayas too as a result of the land reform measures of the state government.

(vii) Others: This group is that of the pensioners which constitute 10% of the population. In some families with a

pensioner as the head of the family, may have other earning members.

Besides main occupation, 42% of the households are engaged in subsidiary occupation. This may be in the form of a side business or there be more than one earning member in the family. It may be in the form of a skilled or unskilled labourer, fishermen or someone with a government or private job. There are many unemployed youths in the island. The unemployed educated in the island number 250.

Economic Stratification

Against the background of such wide variations in the occupations and difficulties in estimating the incomes of the different groups of the population, the criteria whether they get enough food to eat everyday all round the year turns out to be a convenient way of economic stratification of the population in the island. This criteria divides the population in to the poor and the rest. Those poor who do not get enough to eat for more than six months in a year are called the 'abjectly poor' or 'very poor'. Of those who get two square meals all round the year, those whose diet contain substantial amounts of additional nourishment in the form of milk, curd, meat, eggs and vegetables, etc., are designated as 'well-off'. The population is thus

divided in to four categories: 'well-off', not poor, 'poor' and 'very poor'.

Table 12

Degree of Hunger Satisfaction

Hunger satisfaction	Percentage
Not for 6 months	28
Just meet	27
Satisfied	29
Fully satisfied	16

The Very Poor

28% of the households in the island constitute 'the very poor' or 'abjectly poor'. In this category fall more than half of the fishermen community and the skilled and unskilled labourers as their work is seasonal. They live in Kacha houses with no electricity. Many live in mixed type of houses provided by the state government under its scheme of providing houses to the abjectly poor. Two-thirds of these houses have no latrines constructed. As water is not a scarcity in the island, they get water from the public pipes. Majority are in debt. Some have

taken government loans. Majority have pawned their jewellery and have other personal debts too.

Vegetables are a luxury in the island which they cannot afford. They make do with the ration. Small fish from the water logged areas and canals are in abundance. Amongst the fishermen, fish constitute their daily diet. Therefore, a poor man's diet is Kanzhi and fish. No other nourishments. Their children are sent to primary schools nearby but many do not clear examinations and drop out at an early age. They are given no coaching at home. Their main passtime is catching fish from canals and dirty water logged areas. This group constitutes one-fourth of the Pulayas, Dheevaras, a few Anglo Indians and almost one-third of the Catholics.

Mr. Job, a Catholic is a fisherman. There is no other earning member in their family of seven. Fishing is seasonal which lasts for less than 6 months. During the rest of the period, there is no money earned. The family lives in a Kacha house with hardly any furnitures and no electricity or latrine. They utilize the common latrine. Their diet consists of Kanzhi with only fish when available. Sometimes, not even this. They have large personal debts and the little bit of gold too is pawned. A great deal of his earning is spent on alocohol. When

there is no earning, he borrows and spends it on alocohol and he ends up beating his wife almost daily.

The Poor

Those who manage to just meet the requirement of two-square meals a day all round the year are 'the poor'. 27% of the households in the island constitute the poor. One-fourth of the government servants and skilled labourers, one-third of the fishermen community, half of the pensioners and less than half of the unskilled labourers fall in this category. These also include half of the Pulaya community, almost one-fourth of the Dheevaras and Catholics and few Anglo Indians. Their living conditions are not very much different from the very poor. Thus, more than half of the population in the island taken together are categorised as 'poor' or 'very poor'.

Mr.Antony, an Anglo Indian is a fabricator by profession. He has been without a job for many months now. He lives with his wife and two small sons. His wife is not working and he doesn't go for any other kind of work. Thus, they have been living in debt all this time. She somehow manages to feed the family twice daily from the debt money. The food would be just Kanzhi and nothing else. The jewellery is pawned. To make things worse

Mr.Antony plays cards daily with his friends and he drinks daily too. They are totally drowned in debts.

The not so Poor

Those who are able to have enough food to satisfy their hunger all round the year are not categorised as poor. Their children do not get milk daily but are able to have it sometimes. Their diet includes vegetables or pulses along with rice and fish and an occasional dish of meat or eggs. 29% of the households in the island fall in this category. Half of the pensioners and businessmen, less than half of the government servants and one-third of the skilled labourers fall in this category. They also include one-third of the Dheevaras, Catholics, Anglo Indians, some Ezhavas and a few Pulayas.

They live in mixed type of houses and some government servants have constructed pucca houses after getting loan from their offices. This loan amount is automatically cut off from their salaries. About one-third have pawned their jewelleries. About two-third of these houses have constructed latrines. Their children are sent to the schools in the island. But the drop out rate is high. Few reach university level.

The Well-Off

Those who get all the food they need throughout the year are the 'well-off'. These constitute 16% of the households. They are mainly government servants and big businessmen. They constitute a few Dheevaras, Ezhavas, Catholics and Anglo Indians.

They live in pucca houses, also some in mixed houses with latrines, private water taps and well furnished with sofas, TV. fridge, etc. Those who have large landholdings employ labourers to work in their fields and in their houses. They too have taken loans but repayment is not difficult for them. Their children are sent to schools in the island. Some even send them to schools in the city for better education. Coaching is given at home. Majority reach university level.

Loan

Table 13 (a)

Government Loan

Government loan	Percentage
Yes	39
No	61

Table 13 (b)

Private Loan

Private loan	Percentage
Yes	53
No	47

39% of the households have taken government loans. These are in the form of: IRDP loan given to farmers mainly Pulayas; loan is also given for cow's cultivation and shops; the fishermen get loan from the bank; the fishermen of low income group get loan from the fisheries department; those in services take loan from their respective offices for their needs like construction of their houses, etc; some have taken loan from Banks. Besides these loans, as much as 53% of the households have taken loan from private parties which include moneylenders. Majority have indulged in pawning their jewellery. Also, they have personal debts too. With large debts, repayment becomes difficult and the poor are further drowned in to them.

5. Political Structure

The two main parties in the island are the CPI(M) and the Congress. CPI(M) is a minority in the island, consisting of less than 5% of the population and it is mainly formed by the Pulayas. The Congress is the majority consisting of the Christians and other Hindus. It has less than 5% of the Pulayas in it. Another minority party in the island is the BJP formed by Hindus mainly from the Dheevara community. The political party actions are mainly during the elections. Party clashes do take place usually between the Pulayas and the Christians. Due to these clashes there are some who hesitate to join the party politics. Some small scale businessmen who are dependent on all the locals, avoid getting identified with any party. During the last elections, there were three polling booths with 80% polling.

Panchayat

The four wards (7,8,9,10) of the island are under the Mulavucad Panchayat. Mulavucad is in between Vallarpadom and Ernakulam but the Panchayat is not well connected with the island. There is boat service only from Ernakulam to reach the Panchayat.

The Panchayat president is a Pulaya from Vallarpadom. The main functions of the Panchayat has been in increasing the height of Kacha roads in Vallarpadom and Panambukad. During rains, the Kacha roads in the island become almost submerged in water and are unable to walk through. The Panchayat in its programme has raised many of these pathways bringing relief to the people. They have started a new Ayurvedic dispensary in Panambukad. The rent of the mini PHC is given by the Panchayat. Some water canals in the island, which is the property of the Panchayat s auctioned every year for the purpose of prawn cultivation. Thus, people who get these areas, pay the amount they bid, to the Panchayat and do prawn cultivation for one year. The amount they get from the cultivation is their own. After one year, the area has to be given back to the Panchayat. Again, the following year, Panchayat auctions these very canals. Thus, this takes place every year.

Liquor and toddy are brought from Ernakulam and sold in the island. The licensed liquor and toddy contractors have to pay Rs.250/- each per year to the Panchayat as provision tax. Several activities of the Panchayat have benefitted Pulayas. Many have been provided with paddy fields thereby raising their financial status.

6. Health Service System and Health Behaviour

Health Institutions and their Functions

(i) There is one mini PHC formed in 1984 in Vallarpadom. The main PHC is at Maalipuram which can be reached from the island only by boat. The staff pattern in the mini PHC is under the non-plan head and the plan head. Under the non-plan head there are:

1. One Assistant Surgeon Medical Officer
2. One Pharmacist
3. One Nursing Assistant
4. One Hospital Attender, Gr.II

Under the plan head:

1. One Jr. Public Health Nurse (PHN)
2. One Jr. PHN from main PHC

3. One Lower Division Clerk

4. One Peon

5. One Daily Wages Part Time Cleaner

The mini PHC has no bed facilities. It has an average attendance of 100 patients per day. It holds monthly camps like well-baby clinic, ante-natal clinic and immunisation programme. The drugs they get from Ernakulam DMO store and vaccine from the main PHC. They get drugs once in 6 months which are stored in the fridge in other houses. People are provided with contraceptives like copper-T, nirodh and pill. The drugs available are not enough for the treatment of all kinds of illness. Therefore, only limited type of ailment are treated.

The doctor in the mini PHC comes from the mainland 6 days working from 9 am. to 12 noon. His home is 15 kms away from Ernakulam city. If he misses his usual boat, then the next boat reaches him to the island by 9.30 am. By then he is greeted by a crowd of patients. The doctor himself is not satisfied with his job as he says that the drugs required for treatment are not sometimes available. With large crowd waiting to meet the doctor, not much time is devoted to a single patient. Before a patient can explain his illness completely, the doctor already

prescribes medicines. These are the general complaints of the patients.

The role of the pharmacist is purely to deliver medicines. In the absence of the doctor, he checks minor ailments of the patients and prescribes medicines.

There is one female nursing assistant. She takes injections and provides first aid to the patients. She stays in the island itself and is the only regular staff of the mini PHC. The post of hospital attender is vacant.

There is one junior Public Health Nurse (PHN) in the mini PHC. She too takes injections and attends to giving first aids besides making field visits. She only visits ward nos. 7 & 8. She takes the family data of individual households and takes cases for immunisation and family planning. In the absence of the pharmacist, she distributes medicines for the patients.

One Jr.PHN comes from the main PHC. She makes field visits covering all the four wards in the island. She takes household data and propagates family planning and immunisation and takes cases from both. The result is encouraging.

The clerk only keeps records and accounts. The post of a peon is vacant.

There is one daily wages female part time cleaner from the island itself. She is not very regular. Whenever she does come, she does the sweeping and swopping of the place keeping it clean though it never looks clean.

(ii) There is one private dispensary run by Lion's Club. Here too, there are no bed facilities. A doctor from the city comes thrice weekly working from 4 pm to 6 pm. As this place is slightly expensive, it is not very popular in the island.

(iii) There is one government Homoeo dispensary. The doctor here is a resident of the island. This is popular specially for treatment for children.

(iv) A non-qualified Homoeo Practitioner has started practice in his house lately. It has yet to pick up. He is basically a retired government servant.

(v) Very recently a new Ayurvedic dispensary was started by the Panchayat. This has yet to show results.

(vi) There is an allopathic resident doctor working in DLB. He shifted to the island lately. After office hours, he practices

at home from 6 pm. on wards. Therefore, those in need visit him in the evenings.

(vii) For delivery attendance, there is a trained mid-wife and an untrained mid-wife in the island. But they are almost jobless now as people prefer visiting hospitals. The emergency cases are taken up by them. Sometimes, the very poor also approach them.

The Prevailing Illnesses

Mosquitoes are innumerable in the island. there is no DDT spraying for mosquitoes. The individual households spray phenol for disinfecting the place. But it is not of much effect. Cases of Malaria are rare. One-fourth of the population are totally ignorant about this disease. Cases of Filariasis and Leprosy are very few. Yet, all are aware of these diseases. Tuberculosis cases are common. Other common illness among adults is Bronchial asthma, hypertension, diabetics, heart attack and amoebic dysentry. Treatment for all these are not provided in the local dispensaries.

The main childhood diseases are measles and scabies. Diarrhoea is not seen much. Asthmatic Bronchitis is rampant. Due to lack of facilities, there is no supply of drugs for these diseases. Therefore, such illnesses are not treated in the mini

PHC. The other illness among children are viral fever, vomiting, hermintiasis, round worms and hook worms.

Snake bites are very few. These cases are taken to the city hospital. There are many dogs in the island and therefore, many cases of dog bites too. Such cases are treated in the mini PHC.

Table 14

Consumption of Alcohol

Alcohol Consumption	Percentage
Daily	13
Frequently	13
Sometimes	38
Never	36

Alcoholism is a great menace in the island. The table shows that 64% consume alcohol sold legally or illegally in the island. The licensed liquor and toddy contractors usually close their shops by 8 pm. as they have to return to Ernakulam by the last

boat. Besides these, liquor and toddy are sold illegally in some houses. Therefore, some drink in secrecy. The table shows the daily consumers of alcohol to be only 13%. This would be much lower than the actual figures as the female respondents do not give the right answers to such questions. Mr.Mrityumjayan, a retired non-working journalist points out that, at night, there is no peace in the neighbourhood. He stays with his wife in a house just next to another house that sells liquor illegally. Therefore, specially for an old couple, there is no peace at night. The daily alcohol consumers are found among the poor and the very poor and a few well-off too. There is not much difference in the consumption pattern among different caste groups. All drink equally well. The government servants get comparatively high salary and can afford to spend on alcohol. The poor with no money, borrow and spend it all on alcohol. With the result, there is family disruption, demoralisation and deaths too.

As there are no vehicles plying in the island, there are no traffic accidents. Minor accidents are given first aid in the mini PHC. The major accidents found are among the coconut tree climbers. Mr.Krishnan, 45 years, is a coconut tree climber by profession. he fell off from a tall coconut tree and fractured his hipbone. He was admitted at the city hospital for a few months. Now he is recovering. But he can never go back to his

profession. He now works as an unskilled labourer in the island itself. His wife works as a labourer. He doesn't get much work as he cannot strain himself much. He has three children to feed. Their economic condition is very poor.

Community Participation

Table 15

Visits to Health Agencies

Health Agency	Percentage
Government Homoeo Dispensary	24
Mini PHC	27
Lion's Club Clinic	3
City Hospital	36
Any other	3
Government Homoeo Dispensary & Mini PHC	7

The whole island is stretched out length wise. The mini PHC and the Lion's Club Clinic are situated in one end of the island. The government homoeo dispensary too is not very far away from there. Therefore, patients staying at the other end of the island find it difficult to walk long distances to these local dispensaries. It is easier for them to go across to the city in a rowing boat. The popularity of the local dispensaries is very poor. This is because of the very limited facilities. There are no medicine shops in the island. Due to the limitations, all kinds of illnesses are not treated in the local dispensaries. The doctor too, is not always available. Therefore, majority are dependent on the city hospitals.

Mrs.Rozario, 50 year old Anglo Indian, complained that she developed some skin reaction on her face after she had a medicine given by the doctor in the mini PHC. As the doctor keeps changing often, they are unable to depend on any one of them. After this incident she has never been to the mini PHC, instead, always goes to city hospital. This particular case can at least afford to go to the city hospital whenever required.

One of the fishermen had complained that the mini PHC has just four tins of medicines. For all kinds of diseases, they give these same medicines to all. These people, eventhough they are aware of the shortcomings, have to remain content with those

available. Thus, majority of the poor visit the mini PHC. A few visit the Homoeo Dispensary as they say that allopathy doesn't suit and is expensive. But for major ailments, they are totally dependent on city hospitals. Even if they have no money, they borrow and collect money to visit the city hospitals. This way, they are indebted more and more. The well-off visit the city hospitals and take the best treatments. The not-so-poor also visit the city hospitals mainly. Very few of them visit the mini PHC. Some of them use Homoeo for children and allopathy for adults.

People working in Cochin Port, Naval Base and DLB get free treatment in the hospitals of their respective place of work. For them, the financial aspect is not a problem, but the great problem is that of commuting to the city. Boat service is available only in the day time and not always at the required time. About 70% of the population are not satisfied with the local dispensaries. But for them, commuting to the city is always a problem. Now, a boat is available at night only after paying Rs.150/-. This was introduced after complaints from the inhabitants as there were two cases of heart attack deaths a year back. Those days, due to non-availability of motor boats at night, the patients had to be taken to the city hospital in rowing boats. As rowing boats take a long time to reach, the patients could not reach the hospital alive. Even these days,

the poor use the rowing boats as they cannot afford to pay for the night service. Another difficulty is sitting for long duration in the boat for a very ill patient.

Mr.Madhavan, an asthmatic patient along with cardiac problems died due to these inconveniences. He was 62 years at the time of death. He was an employee at the Cochin Port working as a labourer. His ailments started at the age of 40. He took allopathic treatment then, but had to stop working at the age of 55. During early May '89, he had acute asthmatic and cardiac problems for which he was admitted to the city hospital. He was discharged on 13th May without fully recovering. After his journey back home, he became serious again. Since he was then discharged from the hospital and because of the problem of taking a patient back to the mainland, his folks were confused and waited. But on 17th May, early morning, his condition became critical. He could be taken to the city hospital only by 8 am. It took him one hour to reach the hospital. By then his condition had deteriorated further. He was administered with glucose and medicine. But by 5 pm. he died after struggling for breath for sometime.

Pregnancy and Child Rearing Practices

Family Planning Camps are held every month in the mini PHC and in different anganvadis. All the contraceptives are provided

in the mini PHC. The result has been encouraging. People are well aware of the family planning methods and utilise the contraceptives provided, irrespective of their economic status. More than half the population of the Hindus and less than half the population of Catholics and a few Anglo Indians have undergone tubectomy. A few Dheevaras, Pulayas and Catholics have undergone vasectomy. Copper-T is used by only some Anglo Indians and Catholics. One-third of the population of couples haven't felt the need to utilise any family planning methods. This includes Penthecostes as they do not follow medical treatments.

Table 16

Method of Child Birth

Child Birth	Number
Untrained midwife (UTM)	2 (3%)
Trained midwife (TM)	4 (6%)
Junior PHN	-
Doctor	-
Hospital	58 (91%)
Total	64

In the initial stages of pregnancy, many consult the local doctor. The well-off go to the city doctor. The daughters-in-law staying in the island go to their respective home towns at the stage of seven months of pregnancy. The others use the option of calling either a local midwife or going to the city hospital. 91% visit the city hospital for delivery cases. 6% call the trained midwife and only 3% the untrained midwife. Due to the fear of not getting a boat at the required time, everyone gets admitted in the hospital many days before the due date. This turns out to be very expensive. The trained and untrained midwife in the island used to take up many local delivery cases till a few years back. But now even the poor go to hospitals. At present, it is a few very poor cases or some emergency cases or the Penthecostes' delivery that are taken up by local midwives.

One of the most emergency cases is that of Mrs.Mary Augustin, 24 year old Anglo Indian from Vallarpadom. Her home town is Vallarpadom. Her husband is a skilled labourer. This was her second delivery. Her eldest son is 5 years old. Her first delivery was in the city hospital. That time she got admitted in the hospital 5-6 days earlier. During her second pregnancy, she used to go for check ups to the city hospital every fortnight. Her due date was 24th January 1989 and she planned to get admitted on 20th January. But on the 19th at 2

am. pain started. They then called upon the trained midwife staying nearby. She checked the patient and told them that there was enough time to reach the city hospital. The midwife provided a wheelchair as the patient could not walk. The patient's house is 15-20 mts walk to the Vallarpadom boat jetty. Mrs.Mary's husband and brother wheeled her to the jetty. As the road was uneven, she experienced a lot of jerks. By the time she reached the jetty, her condition had deteriorated. At the jetty, there was no boat available. The midwife was called for immediately. She came after 20 mts and took the delivery at the jetty at 4-30 pm. When checked with the midwife, she said that the chord was twirled around the baby's neck. She untwirled it. She hadn't cut the umbilical chord yet as she had no tools then. The midwife held the baby close to the mother and the mother was brought in a stretcher to her house. On the way, the midwife took her tools from home. In the patient's house, the midwife cut the chord and bathed the baby. The next day, the doctor from mini PHC was called. He prescribed tonic. Now the mother and the child are both keeping well.

The diet of a pregnant woman from a well-off family consists of a full meal of rice with vegetables and pulses and fish and meat with daily milk and fruits besides the doctor's prescription of vitamin tablets. This is taken by one-third of the population of pregnant women from the Catholic and Anglo Indian families and

very few from the Dheevara and Pulaya community. The Penthecostes and some Ezhavas also take a healthy diet.

The diet of the non-so-poor pregnant women consists of full meals of rice with vegetables and fish. Extra nourishments like milk, meat and fruits are occasional. Very few take milk daily. Majority take the doctor's prescription of vitamin tablets. This is mainly taken by one-third of the Catholic and Dheevara pregnant women.

The ordinary diet of a poor and the very poor consists of just Kanzhi and fish. Fish is readily available. Fish from the water logged areas and canals are in abundance. During pregnancy too, they take no special diet. Majority take vitamin tablets too. Majority of the Dheevaras and Pulayas and some Catholics and Anglo Indians take a poor diet. Some of them don't even take vitamin tablets.

Eventhough there has been no Ayurvedic dispensary in the island, besides the one which opened lately, Ayurveda is accepted and resorted to by a wide segment of the population especially for delivery cases. After delivery, almost all mothers take a bottle or two of Ayurvedic tonic. The tonic taken is 'Dasamulam Arishtam and Panchajeera-goodam lehiam. This is bought from the mainland as nothing is available in the island. Only a few very

poor do not take any tonics after delivery. Their diet is purely restricted to Kanzhi alone. The well-off, on the other extreme, have a full meal with Ayurvedic and English tonic along with milk.

Table 17

Immunisation of Children

Children	Number
No	3 (4.7%)
Yes youngest	2 (3%)
Few	-
Most	5 (7.8%)
All	54 (84.4%)
Total	64

Table 18

Vaccination Taken for Children

Vaccination	Number
BCG only	4 (6.5%)
Triple only	-
Polio only	1 (1.6%)
Measles only	-
All	47 (77%)
BCG, Triple and Polio	8 (13%)
Triple, Polio and Measles	1 (1.6%)
Total	61

Immunisation is provided every month in the mini PHC. 84.4% have immunised all their children. Only 4.7% of mothers of infants haven't utilised the immunisation facility. Table 18

shows that 77% have been given all the required vaccination. But the children of the poor keep getting ill with ailments like fever, cold, stomach upsets and worms. The treatment for which are usually taken at the mini PHC.

Table 19

Oral Rehydration Therapy

ORT	Percentage
Know	27
Know and use	40
Don't know	33

The oral rehydration therapy is utilised by 40% of the mothers. Besides this, certain small home remedies for stomach upsets are used. These are in the form of crushed ginger juice, lime, etc. The poor too are well aware of ORT and utilise it. 33% are totally ignorant about it. But they are aware and utilise the traditional home remedies.

The poor women, despite poor diets and poor nutritional status are able to breast feed their infants for prolonged periods, unlike women of the affluent group. Majority of the poor feed their babies for more than 2 years. The maximum period was 5 years. the maximum period of breast feeding by the well-off and the not so well-off was about 2 years.

Table 20

Period of Starting Supplement

Period	Number
≤ 4 months	34 (54%)
> 4 months - 8 months	23 (36.5%)
> 8 months	6 (9.5%)
Total	63

In 54% of the cases, supplements have been introduced to the infants before 4 months. 36.5% introduce supplements between 4-8 months. The well-off give rich supplement of commercial baby foods like Cerelac, Farex, Amul, etc along with cow's milk, eggs,

bananas, biscuit, soup, etc. The not-so-poor too give baby foods and some give cow's milk and kanzhi. Majority give Ragi. This is given by the poor too. Some poor, as they are not able to afford baby foods, somehow feed one tin of Farex, Cerelac or Amul to the infant as per the doctor's prescription. Otherwise they give only Kanzhi. According to Table 20, in 9.5% of the cases of the very poor, the infant is given no supplements during the lactating period of up to 2 years. Only after this period, the child is fed on Kanzhi alone.

After 3 years, usually the child is sent to anganvadis where they are given mid-day meals. The illness observed among the children in the anganvadis are mumps, cold and mostly worms. The worms if infected are not usually tested but are treated by observing the symptoms like no food in-take and vomitting. As a child grows up, he fails to observe cleanliness. This is especially so amongst the economically backward. As there isn't much water problem, daily bathing is observed but this cleanliness is shortlived among children. They are constantly out in the mud after which they do not wash their hands with soap before eating. With the result, they often get stomach problems and worms. It is observed that children from poor families often jump in to the dirty waters in the water logged areas in order to catch small fish for their daily diet. This is very unhygienic.

CHAPTER IV

DISCUSSION

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DISCUSSION

Health behaviour is considered to be a component of a wider cultural complex, Health Culture, which includes the various health problems generated by the prevailing ecological conditions and cultural response to these problems in the form of their perception and meaning and in the form of practices and institutions that are developed by the people themselves to cope with the problems. Community health services that are made available from outside are considered as purposive intervention in the health culture of the community with a view to more effectively alleviate the suffering of the people due to health problems. Thus, in the context of the socio-economic life conditions prevailing in the island, the corresponding health behaviour becomes a dependent variable.

Kerala has been identified as the state with the lowest food intake and highest incidence of poverty in the country. Such poverty is projected in the island under study. As a result, more than half the population is unable to meet the minimum dietic calorie needs. The diet of the poor mainly constitute of Kanzhi. Fish is quiet easily available as the island is located in the backwaters, an economically valuable feature of the state.

This location has attracted a concentration of the Dheevara community whose caste occupation is fishing. The poor, besides the fishermen, can afford to have only small fish locally available from water logged fields in the island. The fishermen, on the other hand, have good fish in their daily diet.

The island has many paddy fields which are water logged. There are also water canals and water logged areas. These are usually sources for dumping the garbage and also used for defecation by the poor without latrines in their houses. These places breed mosquitoes and other infectants for which no sanitary arrangements are made. The fishermen's colony too project poor conditions of sanitation. They dry fish in front of their houses and their colony always has a false odour. In contrast to the fact that Kerala has great water scarcity, the island under study has adequate water supply. Yet, the problem faced sometimes, is the supply of contaminated water. Adequate water supply is no indication of cleanliness specially amongst the poor children who are mostly found catching small fish from dirty water logged areas. The poor living conditions of the economically backward expose them to various health problems as compared to the well off with better living conditions.

The island is famous for its Church which attracts devotees from outside the island. Catholics constitute the majority caste

group in the island. The inhabitants are dependent on the mainland for their various needs. The only way to commute to the mainland is by boats which are available only at specific times during the day. This is the major inconvenience faced by the inhabitants.

The island has many primary schools and one high school which is attended by majority of the local children. Besides this, under the state government's programme of launching adult education programme in the Ernakulam District to attain cent per cent literacy, volunteers of Kerala Shastra Sahitya Parishad conducted the programme in the island. With the result, 300 illiterates learnt to read and write. The island can be regarded as fully literate. Even if there is full literacy, there are many school drop outs. Many do not reach high school and majority do not reach university level. There are no local industries too, in the island, which could absorb the youngsters. As a result, unemployment is high among them.

More than one-third of the population constitute skilled and unskilled labourers. As their job is seasonal, when there is no work, they face starvation. Along with this is also faced various other poverty related problems like debts, alcoholism, etc. The land reform of the state government has benefitted the Pulayas a great deal. Thus, the Pulayas in the island have now

become owners of their land and work in their own land making agriculture profitable. As the paddy fields in the island are low lying and the wage rates are very high, agriculture is non-profitable for other land owners. Therefore, many have turned to prawn cultivation. Around one-fourth of the population are government servants working in the Cochin Port, DLB, Naval Base, etc. As they get higher pay, they are better off than the rest of the working population in the island.

Kerala is famous for its wide network of medical institutions under the public sector and private sector and belonging to the allopathic and indigenous systems of medicine. Ernakulam District has the highest concentration of hospitals in the state. The island too has several medicare institutions, both government and private. Yet, none of these are able to fully satisfy the needs of the people. The facilities are limited. With the result, the inhabitants are forced to depend on bigger hospitals in the mainland to satisfy their needs. In order to reach then city hospitals, the inhabitants have to overcome the difficulties of finance and commuting.

The mini PHC is visited mostly by the poor. The Lion's Club Clinic is unpopular as it is expensive. Due to the non-availability of medical equipments, inadequate supply of drugs and non-availability of doctors at any required time in

these local dispensaries, people are dependent on city hospitals. The well-off approach the city hospitals for most of their health problems. In contrast, the poor have to mainly depend on the mini PHC. But during very serious ailments, they have no choice but to visit city hospitals. People working in Cochin Port, Naval Base and Cochin Dock Labour Board take treatment from the hospital of their respective companies. Their main problem and also the problem of all the inhabitants of the island is that of commuting to the mainland due to limited boat facilities. The very poor are not even able to afford a boat ticket. As the island is stretched out length wise, a patient staying at one end of the island finds it difficult to walk to the mini PHC situated at the other end. During such circumstances, they use rowing boats and visit city hospitals. Thus, for the poor and the well off in the island, the local dispensaries are inaccessible mainly in terms of the distance. Besides these allopathic health services, as much as one-fourth of the population visit the local Homoeo Dispensary. Of these majority take Homoeo treatment for children. Some of the poor find allopathic medicines too expensive and thus prefer Homoeo. But here too, for a very serious ailment, they are dependent on city hospitals. Lately, a doctor from DLB shifted to the island and now practices western medicine in the evening. He is the only qualified allopathic doctor staying in the island.

In Kerala, the Family Planning Programme has been very successful. According to Zachariah's study, the Ernakulam District showed the best results by achieving 110% of the target in terms of sterilisation. The island under study too shows encouraging results with respect to utilization of family planning methods. People are well aware of the family planning methods and utilize the contraceptives provided. The local midwives are are unpopular. People are totally dependent on city hospital for delivery cases. Such dependence turns out to be very expensive. Due to the commuting problem, pregnant women get admitted in the city hospitals many days before the due date. This is mainly in order to avoid problems like that faced by Mrs.Mary Augustin (page.93). Even the poor somehow borrow money and visit city hospitals for a safe delivery service. Only a very few of the poor call local midwives. As the Penthecoste religion is against medical treatment, they call the local midwives.

The poor pregnant women take a poor diet with low calories which mainly consists of Kanzhi and fish whenever available. Extra nourishments are rare. After delivery too, the same diet is followed. Eventhough there was no Ayurvedic health care system in the island, majority have taken Ayurvedic tonic after birth delivery as is the usual practice in the rest of the state. The poor women despite their poor diet and poor nutritional

status breast feed their infants for long periods unlike women of the affluent group. A top feed of Kanzhi is introduced to the infant mainly by the time of 4 months. The study shows that about 84.4% of the mothers have immunised all their children. Yet, their children are undernourished and keep falling ill with ailments like fever, cold, stomach upsets and worms, the treatment for which is taken at the mini PHC and Homoeo Dispensary. These mainly belong to the poor families of skilled and unskilled labourers, fishermen, etc. The degree of such ailments among children from well-off families are lower.

Amongst the communicable diseases, only tuberculosis is common, the treatment for which is provided at the mini PHC. In spite of this, it is seen that the patients seek help from the city hospitals. After treatment from the mini PHC, their illness has not improved. Cases of leprosy and filariasis are rare. Treatment for these diseases are not provided at the mini PHC. There are no cases of Malaria in the island. Almost one-fourth of the population are even ignorant of the disease.

Besides these diseases, another health problem and also a social problem is the menace of alcoholism. Alcohol is brought from Ernakulam and sold here. Besides licensed toddy and liquor contractors, there are sold illegally in some houses too. Even the poor who cannot afford, borrow and spend everything on

alcohol, thereby adding to the misery of their family members. There is chaos and clashes providing inconvenience in the neighbourhood.

This study shows that people from different strata of the population in the island have great felt need for health services which are unmet by the local dispensaries. There is great need for western medical care. On the basis of this study, it can be asserted that the health behaviour of the islanders is in many ways similar to what was observed by Banerji (1982) in peasant societies. The main difference and one of the significant features observed in the island is the encouraging family planning results which is in conformity with the rest of the state. In terms of literacy too, the island is fully literate now. The main suffering of the islanders is their commuting problem and thereby their limited access to the main health services within and outside the island.

CHAPTER V

CONCLUSION

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CONCLUSION

The purpose of the study was to investigate the health behaviour of the islanders in different socio-economic conditions. As the island was completely isolated from the mainland and the islanders were dependent on the mainland for most of their needs, these provided very good conditions for conducting such investigation. The methodology used by Banerji (1982) for studying health behaviour was adopted for this study.

The main finding concerning the health behaviour of the islanders is that, with the availability of the various local health delivery systems, the limited facilities in these health institutions is unable to satisfy a very substantial proportion of the demand of the islanders for medical care services. Depending on the economic status of the individual and the gravity of his illness, these people actively seek help from government and private medical agencies in the city. The demand is for western medicine.

The greatest inconvenience faced by all the inhabitants is the commuting problem. The limited boat facilities in the island pose great inconvenience for a seriously ill patient to reach the

city hospital. There have been cases of death in such situations. Due to the non-existence of vehicles within the island, a patient living in one-end of the island finds it impossible to walk the distance to a health agency situated at another end. Thus, their alternative is to take a rowing boat to the mainland which takes a much longer time. Such conditions restrict the access of the population to the health institutions within and outside the island.

These inconveniences have prompted majority of the pregnant women, irrespective of their economic status, to get admitted in the city hospitals much in advance for a safe delivery. In spite of it, there has been a case of birth delivery at the boat jetty.

Majority of the children have been immunized. In spite of it, the children of the poor are prone to various illnesses for which they take treatment at the mini PHC. The local Homoeo doctor is approached by some specially for the treatment of children.. Besides these, general home remedies like using ginger and lime are resorted to by the population. In spite of the isolation, no specific health practices of their own were found among the islanders. They were totally dependent on western medicine. This may probably be due to the proximity of the island to the Ernakulam city.

The study thus provides enough data to assert that improvement in the access of the islanders to health services is the prime need in the field of health in Vallarpadom island.

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&

INTERVIEW SCHEDULE

APPENDIX A

APPENDIX B

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Appendix A

Check - List

General Sanitation

Water Supply

Drainage System

Medicine Shops

Other Shops

Market

Local Industries

Bank

Co-operative Society

Loan

Radio

T.V.

Telephone

Pump Sets

Schools

Cinema Halls - Other Entertainments - Fairs

Panchayat

Temples

Church

Transport and Communication

Total Population and its Distribution

Land and Crops

Occupation and Economic Stratification

Appendix A (Contd..2)

Dais

Indigenous Medical Practitioners

Modern Medical Practitioners

Homoeo Practitioners

Hospital Facilities and Health Care Systems

Community Development Programmes

Community Participation

Political Structure

Appendix B

Schedule for the Study of Health Behaviour

Ward No.: **House No.:**

1.	Name of the Head of the Family	:	
2.	Caste	:	
3.	Education	:	Primary/Matric/Graduate/ P.G./Professional.
4.	Occupation	:	a. Main-
			b. Subsidiary-
5.	Income	:	
6.	Family size	:	
7.	Housing	:	a. Kaccha/Pucca/Mixed.
			b. Rented/Own.
8.	Latrine	:	a. Yes/No.
			b. If No then Common latrine/River bank/In the open/ Borehole.
9.	Water	:	Public pipe/House pipe/ Well/pond/.
10.	Electricity	:	Yes/No.
11.	Radio	:	Yes/No.
12.	T.V.	:	Yes/No.
13.	Do you read newspaper	:	No/Borrowed/Bought
14.	How often read newspaper	:	Daily/Freq/Sometimes.
15.	Do you have any loan from	:	a. Govt- Yes/No.
			b. Pvt. - Yes/No.

16. Which health agency do you visit often : a. Govt. Homoeo Dispensary

b. Mini PHC

c. Lion's Club Clinic

d. City Hospital

e. Any other

17. Reasons :

18. Do the local dispensaries satisfy your needs : Yes/No.

19. If No, are you able to go across to the city hospital : Never/Rarely/Mostly/Always

20. Reasons :

21. Have MPWs visited during last month : Yes/No

22. Who is called for children birth : NA/UTM/TM/Jr.PHN/doctor/visit hospital.

23. Breast feeding : a. How long-

b. When start supplements-

c. Solid food-

d. NA.

24. Food habits of mother : a. During pregnancy-

b. After delivery-

25. Have you immunised your Children : NA/No/Yes youngest child/few/most/All.

26. For what diseases did you immunise your child : TB/Diphtheria/Tetanus/Whooping cough/Polio/Measles.

27. Hunger satisfaction- Two square meals a day : Often/Sometimes/Just meet/ Always.

28. Do you practice Family Planning : NA/No/Vasectomy/Tubectomy/ Pill/Cut/Nirodh/Any other.

29. Do you visit FP camps, Immunisation camp & well-baby clinic : NA/No/Sometimes/Always.

30. Do you take alcohol : Daily/Freq/Sometimes/Never.

31. Any death in the family during last two years : Yes/No

32. If Yes, Reasons :

33. Oral Rehydration Therapy : Know/Know & Use/Don't know

34. Do you know the disease TB : Yes/No

35. Do you know the disease Leprosy : Yes/No

36. Do you know the disease Filariasis : Yes/No

37. Do you know the disease Malaria : Yes/No

38. Are you a member of any club or political party : Yes/No

39. Did you vote in the last elections : Yes/No

40. To which party had you voted in the last elections : CPI(M)/Congress/Janatha/ Others/No comments.

41. Are you interested in Politics : Yes/No

42. Reasons :

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