CHAPTER IV

COMPLEMENTARY MEDICINE: LOCAL HEALTH TRADITION

EXTENT ACCESS AND USE

The chapter looks at the extent, access and use of the LHT as complementary to modern medicine along with other systems of medicine. It assesses the changes in use of the LHT and modern medicine over time and gradually peeps into the present patterns of preference. The pattern of the LHT use is examined during the various stages of one’s life as also with various gender groups. Also, the links between awareness and use of the LHT is discussed in detail. From the preference pattern emerging from the study, and with great prominence of modern medicine, the chapter discusses the possible reasons for the decline of the LHT and the higher use of modern medicine. The chapter concludes with an attempt has been made to understand the criteria for choosing a particular medical system during an illness episode.

INTRODUCTION

Human urge to lead a healthy life made human search for preventives and cures from their surrounding environment. Human beings discovered over time, through trial and error, effective cures for the illnesses afflicting them. Nature was their classroom where they observed, learned, discovered and reflected on the health problems afflicting them. The human-nature relationship was crucial to the development of medicine. The LHTs are the result of the age old interactions between human beings and nature and this system of medicine is still dependent on nature and its abundance of flora and fauna. All forms of medicine, including the allopathic medicine (modern medicine) evolved from the LHT and are in fact indebted to the LHT for their initial strides. The link to nature in modern medicine is at present limited to bio-prospecting. Modern medicine concentrates more on extracting the active elements from the herbs for preparing new medicines in the laboratories.
The history of human development stands witness to the alienation of human beings from nature. Nature was exploited and continues to be destroyed for the selfish gains of human beings. This has led to deterioration of biodiversity which forms the pedestal for the LHTs. This is true especially of the developed world. With technical advancements, allopathic medicine made tremendous strides through the inventions which helped to contain many of the chronic ailments. The success of the modern medicine lies in its ability to offer quicker relief from the symptoms of illness. But still, modern medicine does not offer complete solutions for all the human health problems. This has kept traditional medicine alive and has revived an interest in the LHTs and other forms of traditional medicines as well. The use and extent of access to the LHTs has deteriorated tremendously owing to the resource and knowledge degeneration, though it is used now as complementary to modern medicine by a few. This is reaffirmed by the study, through its findings on the access, extent and use of the LHT and the modern medicine.

**ON ACCESS USE AND EXTENT OF THE LHT AND MODERN MEDICINE**

From the study carried out, it became evident that:

1. Modern medicine is widely preferred (by 80.8 per cent) over other systems of medicine.
2. Modern medicine has recorded tremendous strides in a few decades and LHT declined during the same period.
3. Nearly 38 per cent of the population who opt for modern medicine, prefer other systems of medicine alongside modern medicine. This shows that complementary medicine exists.
4. LHT is preferred in small number of households (15.9 per cent) in the study area.
5. The LHTs were used more frequently in the past than in the present.
6. There is no considerable variation in the use of LHTs among the various gender groups, though children are significant users.
7. A significant relationship exists between the awareness and use of the LHT.
8. Capability of the practitioner, quickness of relief, nature of illness and overall quality of care are important criteria for choosing a medical system.
PREFERRED SYSTEMS OF MEDICINE

Modern Medicine is preferred in 198 (80.8 percent) households and Ayurveda in 83 (33.9 percent) households, homeopathy in 58 (23.7 percent) and the LHT in 39 (15.9 percent) households. The preferred systems of the people and the number of people preferring it is presented here (Table 4.1).

<table>
<thead>
<tr>
<th>Medical System</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modern medicine</td>
<td>198</td>
<td>80.8</td>
</tr>
<tr>
<td>Ayurveda</td>
<td>83</td>
<td>33.9</td>
</tr>
<tr>
<td>LHT</td>
<td>39</td>
<td>23.7</td>
</tr>
<tr>
<td>Homeopathy</td>
<td>58</td>
<td>15.9</td>
</tr>
</tbody>
</table>

Table 4.1: Preferred Medical Systems - Kanjoor

This dominance of the modern medicine over other medical systems and the lower level of preference for LHT are explicitly brought out in the study. The other systems of medicine, popularly used include ayurveda and homeopathy.

Are Medical Systems Complementary?

Of the 198 households which chose modern medicine 105 (42.9 percent of the total 245 households) solely preferred modern medicine and did not prefer any other medical systems alongside. The remaining households (37.9 percent of the total 245 households) preferred one or more systems along with modern medicine. Ayurveda was the preferred complementary to modern medicine in 58 households (23.7 per cent). Homeopathy is preferred widely after ayurveda and was preferred along with the modern medicine in 41 (16.7 per cent) households. The LHT was less preferred and put to limited use and was preferred along with modern medicine in 25 households (10.2 per cent).

Of the 83 households which preferred ayurveda, 17 preferred ayurveda alone and of the 39 households which prefer LHT, 6 prefer the LHT alone. There are households which prefer all forms of medicine and others which go for a combination of three forms of medicine. The various combinations of preferences and the number of people who opt for the various combinations are represented in the graph given below (Figure 4.1). From the figure, it is evident that modern medicine is the top-notch preference of the people, followed by ayurveda, homeopathy and the LHT. However there are a significant number
of respondents who look for treatment outside the realm of the dominant medical system. It is obvious that alternate medical systems are used to complement modern medicine mainly because of its ineffectiveness in ensuring complete health.

**Figure 4.1**

**PREFERRED MEDICAL SYSTEMS - KANJOOR**

![Diagram showing preferred medical systems]

**Figure 4.2**

**MEDICAL SYSTEMS EMPLOYED**

![Bar chart showing medical systems employed]

The preference pattern when compared to the pattern of medical systems employed during an illness episode gives a slightly different picture (Figure 4.2). Women from 36
and men from 32 households used LHT during an illness episode. The number of households where women employed Ayurveda is 30. Men used ayurveda only in 13 households. Only very few households have used homeopathy during an illness episode. It is 10 for women and 6 for men. Interestingly however these numbers do not reflect the preferences of the people. There is difference in the preference and use of the systems. In the case of modern medicine, the patterns of preference and use are similar. Though very few prefer LHT the number of people who have employed it for treating the illnesses is more than the number of people employing other alternate systems of medicine. This is indeed a positive trend.

The findings reiterate the findings of an earlier study (Kunnhikkannan et al, 2000) that modern medicine monopolizes the health care sector in Kerala. It can be argued that this preference pattern results from

- An increased level of awareness on the advantages of modern medicine and lack of awareness on the side effects, which are essentially harmful;
- A lifestyle which demands faster relief and which looks for easier health care options;
- Availability of qualified practitioners of modern medicine nearby;
- Ignorance of the local health traditions and the herbs which support it; and
- Decline of the knowledge base which supports the LHT.

During the post-independence period there was a steep rise in the use of allopathic or modern medicine. Modern medicine offered cures to many serious epidemics and pandemics which made it very popular. This popularity may have also resulted from:

- the awareness campaigns for the immunization programmes to prevent communicable diseases; and
- the high scale promotion of modern medicine by the Government.

One might argue that steps were taken to preserve and promote the use of the traditional medicine. Though this is true, the initial years after independence saw a marginalization of traditional medicine and its practitioners, with the Government offering little or no support to them. The damage was already done, before the Government of India took steps to preserve and conserve the classical Indian medicine.
Here again, the LHTs were left out of the picture, so were the local health practitioners and the traditional practitioners of the classical Indian medicine. The classical medicines were formalized and undergraduate programmes were run to train the meritorious to become Ayurvedic Doctors (Official Website of the Department of Ayush; http://indianmedicine.nic.in/). Ayurveda was till then taught and passed on to the next generation by the traditional vaidyas. It can be maintained on one hand that these steps promoted ayurveda, by formalizing it. At the same time, the negative aspects that resulted from the steps adopted by the Government needs to be underlined. Traditional medicine was passed on only to those practitioners found capable of learning and was not taught necessarily to the people from their own lineage.

The traditional practitioners who underwent training informally for a long period can never be compared to the formally graduated practitioners who study ayurveda for a period of four and a half years. For the traditional practitioner, the knowledge they attain is through many years of training; spent in observing, treating and recording the treatment patterns for specific illnesses. Thus formalization might have resulted in the loss of much of the traditional knowledge and prevented the people who possessed it to pass it on to the future generations.

In the state of Kerala, Ayurveda and the LHT are interlinked and they do co-exist. Ayurveda was used alongside only during critical illnesses. But even in the case of ayurveda, medicines were prepared by the kin of the patients as guided by the physician. The use of ayurveda also declined during the post-independence period though of late it has picked up. This was mainly because:

- ayurveda offers complete cure to many illnesses without side effects;
- high scale commercialization of Ayurveda which has made it easier to use for a majority of the people; and
- the existence of traditional treatises.

These may be the factors which have led to the revival of Ayurveda and better prospects for its future. At the same time, the LHTs are declining fast due to the factors mentioned above. There is need to bridge the gap between the traditional and modern medical systems and make the best use of both. Mutual acceptance of the western and local knowledge systems as effective in solving the present day problems will help towards achieving this goal (Reijntjes, 2004).
AWARENESS AND USE OF LHT

From the household survey (Table 4.2) for checking the awareness and use of the LHT, it was found that most of the households are aware of the LHT, though it is put to only limited use by the majority who are aware. It also needs to be noted that there is a category of people which is not aware of the LHTs but is using them under the guidance of others. Of the total 41 samples (16.7 per cent) who are not aware of the LHT, 10 (4.08 per cent) belong to this category. And of the 204 samples (83.3 per cent) who are aware of the LHT 178 (76.7 per cent) puts it to limited use whereas 15 (6.1 per cent) do not use it and 11 (4.5 per cent) use it very often. It is indeed a good sign that the LHTs are used though not extensively for all the illnesses.

Table 4.2: Use of Local Health Traditions and Awareness of Local Health Traditions

<table>
<thead>
<tr>
<th>Count</th>
<th>Use of Local Health Traditions</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Preventive 1</td>
<td>Curative 2</td>
</tr>
<tr>
<td>Not Aware of Local Health Traditions 0</td>
<td>31</td>
<td>10</td>
</tr>
<tr>
<td>Aware of Local Health Traditions 1</td>
<td>15</td>
<td>178</td>
</tr>
<tr>
<td>Total</td>
<td>46</td>
<td>188</td>
</tr>
</tbody>
</table>

Chi-square tests were conducted to find out the dependence between the awareness and use of the LHTs. There exists a significant dependence between the awareness of LHT and the use of LHT (Table 4.3). The high Pearson $\chi^2$ value of 104 is far higher than the table value is indicative that there is a significant association between the two variables.

Table 4.3: Chi Square Values

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp.Sig. (2.sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>104.505</td>
<td>2</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>85.089</td>
<td>2</td>
<td>.000</td>
</tr>
<tr>
<td>Number of valid cases</td>
<td>245</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This is further proved by the Pearson’s correlation value of 0.59 (Table 4.4). The value indicates that there is a relation between the use and awareness of the LHT. They are positively correlated. So this study supports that the use of LHT is dependent on the awareness levels of the users.

This indicates that higher awareness levels lead to higher levels of use. The awareness levels however cannot be limited to the LHTs. It also indicates that higher awareness of the efficacy of the modern medicine has promoted its use among people. Also modern medical facilities are available nearby and it is tailor-made. Using LHTs however demand a lot of time and a willingness to use them. The LHTs are mainly employed not only for their curative qualities but for their preventive qualities as well.

From the graph (Figure 4.3) it is imminent that there are similar proportions of people who have used the LHTs for their preventive and curative qualities.

**Figure 4.3**

**LOCAL HEALTH TRADITIONS - PREVENTIVE AND CURATIVE USES**

![Bar chart showing use of LHTs for preventive and curative purposes.](chart.png)

While 80 out of the total sample have used the LHT for its preventive qualities only 77 used it for its curative abilities and 44 used it for both preventive and curative qualities and a remaining 44 have never used any form of the LHTs.

**LHT AND MODERN MEDICINE - CHANGES OVER TIME**

The use of the LHT and modern medicine over different periods of time were evaluated in the study. The timeline exercise and the group discussions served to provide a wider perspective on the popularity of the modern medicine and reduction in the use of the LHT
over time. The timeline was used mainly to bring out the aspects of use or disuse of LHT and modern medicine over a time frame.

The timeline supported the argument that the use of the LHTs declined due to:

- ignorance and lack of awareness of the LHT;
- decline in the resources which support the LHT;
- drastic change in the life styles and high scale promotion of the modern medicine; and
- non-availability of the traditional medical practitioners.

**Popularity of Modern Medicine and the LHT**

Though a common consensus could be reached on the effectiveness of the LHT, their future appeared bleak with the current declining trend. The use of the LHTs has declined from around 90 per cent in the past (during the pre-independence period) to nearly 25 per cent at present, in Kanjoor, the rural neighbourhood. The timeline prepared at Edapally and Muppatheradom showed that the use of the LHTs have fallen down even further, around 5 per cent, in those areas.

The statistics obtained for the use of the LHT during the different stages of one’s life supports the findings of the timeline. There has been a gradual decline of the LHT from a maximum use in the past to a minimum use in the present. Of the total samples, nearly 68 per cent remember using more of the LHT than any other medical systems during their childhood and nearly 48 per cent used it as youth which declined to 32 per cent in older persons. This high scale decline shows the decline in the use of the LHT over the past 60 to 70 years. With regard to the use of the LHT by gender, the results were quite interesting. There was not much difference in the use except that the children used it more often than not followed by women. The general belief held by many is that the elderly employ the LHT more than people of other age groups. However, the study suggested that most of the elderly were dependent on modern medicine since they provided quicker relief.

**Criteria For Choosing a Medical System**

The present preference patterns emerge out of the peoples’ expectations of good health. The choice of a medical system results from the interplay of a number of
factors or criteria. Depending upon the importance given to the criteria, the medical system used or preferred during an illness episode varies from person to person and disease to disease. As part of the survey, the relative importance given to the various criteria by the people were analysed. The criteria which influence the choice of a particular medical system were determined during the PRAs and group discussions. According to the majority who attended the PRAs, when they got sick, quick relief was what mattered. And also the capability of the doctors and the nature of illness governed the system opted for.

Based on the PRA, following criteria were identified as important for opting for a system of medicine. They include:

- Quick Relief;
- Capability of the practitioner;
- Nature of illnesses;
- Dietary restrictions;
- Side effects;
- Accessibility in terms of travel time and distance;
- Overall quality of care and the services obtained;
- Cost of medicines;
- Consultation fees; and
- Educational qualifications of the practitioner.

Likert’s Scale was employed for finding the importance of each factor, during the survey. The survey results showed that the capability of the practitioner is a very important criterion while choosing a medical system or health care service. The popularity of modern medicine in Kerala may be attributed to the availability of capable practitioners nearby. The result of the study has also indicated that the LHTs have fallen in use because of non-availability of practitioners.

Nearly 77 per cent of the (189) respondents rated the capability of the practitioner as very important, 15 as important, 18 as moderately important, 31 as slightly important and 20 as not at all important, while selecting a medical system (Figure 4.4). The high levels of use of the modern medicine assert that its preference levels are governed by the availability of capable practitioners. The LHTs have very few capable practitioners, and
their declining numbers might have affected the declining use of the LHTs. The decline in the number of the traditional practitioners can be attributed to the policies of the Government which not only fail to recognize their contributions as health care providers at the local level but also have tried to cut them off from the mainstream health care. This attitude of the Government has influenced the mindset of the majority of the people towards believing that the local health practitioners are incapable of curing or preventing illnesses. This attitude needs to be changed and the nattu vaidyas (traditional physicians), should be given due recognition. The findings affirm that the non-availability of capable practitioners have failed the LHTs, in many ways. The people are in many cases incapable to look for alternatives like the LHTs mainly due to the lack of efficient practitioners nearby.

![Figure 4.4](image)

**Figure 4.4**
**PRACTITIONER'S CAPABILITY**

![Figure 4.5](image)

**Figure 4.5**
**QUICK RELIEF**
Quick relief is another significant criterion while choosing a medical system. In the survey conducted of the total 245 cases, 161 (65.7 per cent) ranked quick relief as a very important criterion for choosing a system of health care and 9 per cent ranked it as important while 19.6 per cent ranked it as a moderately important criterion (Figure 4.5).

This explains the top-notch preference the modern medicine enjoys over other systems. The argument that quick relief has made the modern medicine popular is in fact substantiated here. The LHTs, though capable of curing many illnesses, are in many instances unable to contain the symptoms of the illnesses quickly. For example, the high temperatures during fever can seldom be brought down by the LHTs with the quickness of allopathic medicine. Similar is the case with containing vomiting or providing instant relief during a heart attack or an accident.

The main advantage which the LHT has over the modern medicine is the absence of side-effects. It might seem incredulous that the modern medicines with their innumerable side-effects are widely preferred over the LHTs. In most cases, people are unaware or they give little thought on the effects of the medicine in the long-run.

The number of people who are not concerned about the side effects of a medicine supports this argument. Of the 245 respondents, 95 place no importance to side effects of medicines, as 53 find it very important and 32 find it important, 42 find it moderately important and 23 as slightly important (Figure 4.6).

The main aim of the ill person is to get relief at the earliest, even if the relief is only temporary. Most of them think little about the after-effects of the medicines when they are terribly ill and want to feel better at the earliest. This is a critical reality which often forces people to overlook the side-effects. In most cases people look for an alternate medical system only when modern medicine proves incapable.

The nature of the illness is another vital factor in the choice of a system of medicine or a health care service. It was rated as very important by 133 respondent (54.3 per cent), important by 30 (12.2 per cent), moderately important by 27 (11 per cent), slightly important by 17 (6.9 per cent) and not at all important by 38 (15.5 per cent) of the respondents in choosing a medical system (Figure 4.7).
A single medical system is incapable of catering to all the health needs of the people. Though modern medicine caters to most of the peoples’ needs, it seldom offers cures to all the illnesses. The growing number of researchers turning to traditional medicine for the cures it can offer supports the efficacy of the LHT. The nature of the illness therefore governs the medical system adopted. If the LHTs can provide effective cures for a particular illness and if the people are aware of this, they will definitely go for the LHTs. Overall quality of care and the cost of medicines are also crucial in choosing a medical system or a health care service. Of the 245 respondents, 118 gave high importance to the overall quality of care, 27 gave importance, and 47 gave moderate importance, 19 slight importance and 34 no importance (Figure 4.8). The costs of medicines were rated very important by 87, important by 23, moderately important by 21, slightly important by 27, and not important by 87 of the respondents. There are an equal number of people who rate the cost of medicines as important and an equal number as not important. It is astounding however that nearly 35 per cent of the population, gave no importance to the cost of the medicines. It has to be emphasized here that the cost of medicine and the overall health care costs are increasing in Kerala and in India.

What if the cost of medicine shoots up?

An increase in the health care costs has been reported in India, during the last two decades, making health care in the private sector inaccessible for the poor (Purohit, 2001). However, the medicines are affordable in India when compared to the developed world (Figure 4.10). But the cost of medicines is bound to rise following the changes made in the patent rules for drugs which came into force from January 2005.

Earlier the patent was for the process of developing a drug, but now it is for the product that is the drug. This means that the drug companies will have to give patents for the product and hence the price will shoot up. The country will not be able to produce generic drugs as it used to in the past, by slightly changing the process for producing a drug. The present affordability in terms of availability of low cost medicine is not a sustainable one. Once the price goes high the economic burden on the people will be more and they might look for alternatives in the future. The poor are often denied access to care owing to financial difficulties (Krishnan, 2000).
Figure 4.9
COST OF MEDICINES

Figure 4.10: Prices of Some Important Drugs

<table>
<thead>
<tr>
<th>Drugs</th>
<th>India</th>
<th>Pakistan</th>
<th>Indonesia</th>
<th>UK</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ciprofloxacain</td>
<td>29</td>
<td>424</td>
<td>393</td>
<td>1186</td>
<td>2353</td>
</tr>
<tr>
<td>HCL 50 mg 10’s tabs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Times Costlier</td>
<td>15</td>
<td>14</td>
<td>41</td>
<td>81</td>
<td></td>
</tr>
<tr>
<td>Diclofenac Sodium</td>
<td>4</td>
<td>85</td>
<td>60</td>
<td>61</td>
<td>675</td>
</tr>
<tr>
<td>59 mg 10’s tabs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Times Costlier</td>
<td>21</td>
<td>15</td>
<td>15</td>
<td>169</td>
<td></td>
</tr>
<tr>
<td>Ranitidine</td>
<td>6</td>
<td>74</td>
<td>178</td>
<td>247</td>
<td>864</td>
</tr>
<tr>
<td>150 mg 10’s tabs</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Times Costlier</td>
<td>12</td>
<td>30</td>
<td>41</td>
<td>144</td>
<td></td>
</tr>
</tbody>
</table>

B.K.Keayla, 2005

Figure 4.11
SERVICES OFFERED
Estimates indicate that every year nearly 2.2 per cent of the populations are pushed below the poverty line due to high medical bills (National Rural Health Mission, 2002). The LHTs are on the other hand not affected by the drug prices and are dependent mainly on the availability of the herbs. But it also needs to be noted that the resources which support the LHTs are declining fast, as a result of unsustainable practices. If steps are not taken to contain the loss of the resources and arrest the knowledge degeneration, the LHTs will not even exist as a cheaper and higher quality alternate medical system.

The services offered by a health care unit is very important for 20.8 per cent of the people surveyed, important for 7.8 per cent, moderately important for 14.7 per cent, important for 17.1 per cent and not at all important for 39.6 per cent (Figure 4.11). This shows that a significant percentage does not give much importance to the number of facilities or services that can be availed from health care unit. Dietary restrictions do not restrict a significant number of people from using a particular system of medicine. 114 (46.5 per cent) of the respondents gave no importance to the dietary restrictions in choosing a medical system. But for 46 (18.8 per cent) of the respondents, dietary restrictions are very important, in choosing a medical system. For 23 (9.4 per cent) it is important and for 35 (14.3 per cent) it is moderately important, and for 27 (11 per cent) it is slightly important (Figure 4.12). This means that a significant number of people opt out of many medical systems owing to the dietary restrictions placed by the practitioners. This is very true of the traditional medical systems like the ayurveda, which often keep the patients on diet. The practitioners’ formal qualifications do not matter much to the public. But the capability of a practitioner to efficiently diagnose and treat the illnesses is given importance.

From the survey (Figure 4.13), the number of respondents who consider the qualifications of the practitioner as very important is only 52 (21.2 per cent) and not at all important is 91 (37.1 per cent). In the light of these findings, it needs to be checked whether curbing the traditional medical practitioners from practising and taking their license off by the government is a good step or not. Most of the traditional practitioners who are now available are quite famous and offer good service to the people.
And it needs to be mentioned here that the formal system of ayurveda as it exists today originated from the informal training and the knowledge was passed down to those who were found capable of learning and practising by the older generation of vaidyas.

Though quacks have to be stopped from practising, it is not a wise step to put curbs on the practitioners who are good and are already licensed. No scale can apparently measure the capability of a practitioner, and this is in fact a very difficult issue. Though consultation expenses are not given any importance by 48.6 per cent of the respondents, it is given slight importance by 16.7 per cent, moderate importance by 13.1 per cent importance by 7.3 per cent and much importance by 14.3 per cent of the respondents (Figure 4.14). This is mainly because of the higher levels of awareness for the need of high quality health care. This trend may also be the result of the top priority given to health irrespective of the cost incurred. The desire for better health as the top most priority of the people is emphasized by this finding.

The study underlines the fact that distance rarely is a problem for majority of the people. Accessibility is not of much importance to a majority of the respondents, neither is the travel expense. Travel expense is given no importance by 141 respondents (57.6 per cent), slight importance by 31, moderate importance by 32, and importance by 18 respondents. It is a very important criterion only for 23 respondents, who account for less than 10 percent of the sample (Figure 4.15).

The accessibility to health centre is not important for 136 respondents (55.5 per cent), and important for a very small percentage of the population (Figure 4.16). An average Primary Health Centre (PHC) in Kerala caters to the needs of a population of 30,732 covering a radial distance of 3.4 km (FRHS, 1999). With a population share of 3.43 per cent, Kerala accounts for 4.11 per cent of PHCs and 3.84 per cent of sub-centers in the country. The Private Health Care providers are more accessible than the public providers and they serve a wider population. The higher utilization of private sector is associated with the perception that the public sector utilities are of low quality (Levesque, 2005). Distance is not a significant criterion for choosing a health care facility for the majority due to two reasons:

- a high rate of preference for modern medicine which is available nearby; and
- lower preference for the Local Health Traditions.
Since the most preferred medical system is available nearby, access in terms of distance is given no importance by the majority of the people. Since the LHT are not preferred by the people, their accessibility is not a concern for the majority. The LHT are inaccessible mainly in terms of their ignorance and non-availability of the herbal resources.

From the assessment made, it is coherent that the important criteria for choosing a particular system of medicine are:

- Capability of the practitioner;
- Quick relief;
- Nature of illness; and
• Overall quality of care given.

The relatively unimportant factors which exert influence on the choice of a medical system include:

• Side effects;
• Affordability in terms of cost of medicine, consultation expenses; and
• Accessibility in terms of travel expenses and distances.

It is these factors which have led to the popularity and higher use of modern systems of medicine. There are very few capable practitioners with regard to the LHT when compared to modern medicine. Also the quick relief offered by the modern medicine makes it still popular. It is only when the illness cannot be cured by modern medicine that many people opt for the LHT.

WHY REVITALISE LOCAL HEALTH TRADITIONS?

The present status of decline of the LHT needs to be arrested. The LHT need to be revitalized since they can serve as an alternate medical system complementing the modern medicine. The LHTs are significant because of their manifold advantages, which include:

• availability of medicines in the LHTs which have effective curative and preventive qualities;
• absence of side effects;
• makes use of locally available materials; and
• low cost incurred.

In spite of the above advantages which the LHTs have, their use is relatively low. The timelines explicitly prove that the use of the LHTs has declined much and this limited use has possibly resulted from:

• Loss of biodiversity;
• Loss of traditional knowledge, its practitioners and lack of knowledge transfer;
• Ignorance of the LHT; and
• Lifestyle changes and nearness to modern medical practitioners.

There has been a tremendous loss of biodiversity, owing to the higher pressure exerted on land by the high scale urbanisation. The urban neighbourhoods are devoid of any but a
few herbs. The absence of biodiversity reserves stands out as an important constraint in the use of the LHTs in the urban areas (Gollin, 1999). In short, most of the LHTs are inaccessible to the people living in the urban neighbourhood owing to their lack of access to the raw materials, which are necessarily herbs. To quote E. O. Wilson, *useful products cannot be harvested from extinct species*. On the other hand, modern medical facilities are available at a shorter distance.

Traditional knowledge is virtually non-existent except for a few of the older generation who has shifted recently from the rural areas. Most of the urban dwellers are fairly ignorant about the LHTs and this has also limited the use. The use of the LHTs demands time, for locating and collecting the needed herbs, and preparing the medicines. The lifestyles of the people are quite fast and there are very few to look after the ill and prepare the medicines with patience. According to an old couple at Kaloor (an urban neighbourhood):

*We have been living here for a long time. My son is employed and is staying in another city. We stay here alone and we are too old to go and search for the herbs in this concrete jungle. The easier option is to use the modern medicine or Ayurveda, for which we get ready-made medicines from the pharmacies. We are too old now to even have a herbal garden and maintain it. There are a lot of people like us in this city – old couples who are alone and who do not have their children living with them. We depend on each other and it is always easier to consult an allopathic practitioner and treat our diseases.*

Some of the major arguments for the present preference patterns in terms of use and access of the various health systems, especially in Kanjoor, are:

- **The change in life style**

Life has become faster and people are becoming poor managers of time moving through a busy schedule. Everyone is looking for quick relief, but is not much concerned with the side effects. Quick relief as offered by the allopathic or modern systems is seldom offered by the LHT. Besides, it is a time consuming process to collect the herbs and prepare the decoctions at home.

Looking into the diseases, the most common diseases are associated with the food habits which have tremendously changed over the years along with the lifestyle. It is clearly evident from the high rate of people affected by blood pressure (BP) and diabetes. At least 80 per cent of the households reported the incidence of BP and diabetes along with common ailments like cold and cough, which are generally seasonal.
And also there is a tremendous decrease in the number of people using preventive LHT like the *Karkadaka kanji*, *uluva kanji* and kozhi *marunnu* which were generally taken by all family during the monsoon onset. These gruels using a mix of herbs made the humans resistant to many illnesses which inflict them during monsoon. But now very few take such preventives which used to make them resistant against common ailments. *Karkadaka kanji* is now sold in many ayurvedic clinics and the number of people who use it is also increasing. Even the mix for instant *karkadaka kanji* is sold in the market which can be carried home and prepared easily. Though it makes easier for people to use this traditional preventive medicine, the high scale commercialization will lead to a loss of this knowledge which was once possessed by the lay man to vested commercial ayurvedic pharmaceutical groups. The decoction which was made at home besides being cheap, was of high quality and economical, had a role in passing on this tradition to the future generation. This mode of use helps increase the know-how of the LHTs and facilitates conservation of the herbs which form part of the particular tradition. The current trend of commercialization will lead ultimately to a total dependence on the commercial pharmaceuticals, be it ayurvedic or allopathic. A similar trend can also be observed with instant mixes available for the very common *chukku kaappi* and *thulasi kaappi*, which are the most common LHTs used widely in all households for common cold and cough. The lifestyle changes have thus to a large extent influenced the preference patterns of the LHTs and modern medicine as well and the trend if not redirected may result in commercialization making even the LHTs unaffordable.

- **Lack of knowledge transfer from the older to the younger generation**

As mentioned earlier there is a lack of knowledge transfer, being largely the result of the current life style which looks for faster solutions. From the timelines which were drawn out during the various participatory workshops, it was evident that there had been a decline in the popularity, use and the role of LHTs in improving health.

According to the groups the health was highly dependent on the LHTs in the past (as far as a century ago) and partly on ayurveda. For 90 per cent of the illnesses people were dependent on the locally available herbs, the knowledge of which was passed down to them over generations and at times through the ayurvedic practitioners. The system of actively involving the people in the process of collecting the herbs and preparing the
concoctions, led to a greater awareness of these invaluable treasures found in their immediate environment. This knowledge of utility led to the conservation of the herbs and led to the transfer of this knowledge from person to person and over generations. But they found that the sharing of information was confined only to a limited number of herbs and panaceas were almost excluded from this. This reluctance to share information was one reason why much of it died with the older generation.

According to an old gentleman:

There is a belief that the remedial property of the herb will be lost if the patient comes to know about the herb which is being used in his treatment. This might sound like a superstition, but has got a very valid reason of being kept under the covers. Many a times, the panaceas used for treating certain diseases will be a very common herb found in his immediate environment and the person would hardly value and might scorn the practitioner if he comes to know what is being used. And this mental block may affect the cure of the illness. And panaceas should be used only during certain stages of an illness and using it during the other stages may prove to be detrimental to the patient. So if it is passed on to lay man who is not good at diagnosing the stage of the illness, it will do more harm than good. Though the practitioner may have a vested interest for being the health provider, these reasons are to be noted when the reluctance to pass on the information is taken into consideration.

From the survey conducted, it was found that only limited people were passing on the information to the younger generation. Those who passed it down often told about the disinterest of the younger generation who was hardly interested to listen or to try any of these. A middle aged man during the questionnaire survey told about the declining health of the younger generation. In his words:

The younger generation is highly prone to getting ill. And they do not have the physical strength the older generation had. Most of the young are getting affected by chronic ailments at young age and they are unable to do any work which demands physical exertion. I am around 50 years old and I do a lot of work at home and outside. But I find that my children are not able to work the way I do. This might probably be due to the change in health seeking behaviour. I remember my mother giving me a lot of home made health drinks and concoctions which were largely meant to improve my health. And maybe that is the reason why I am still able to work. My children were never
given such care though they were all dependent on the English medicine for prevention and cure of diseases. I am not an expert but this is what my experience has shown me.

- High level of commercialization of the health sector

As brought out earlier in the discussions, commercialization has come through in all sectors relating to health. Being a society highly concerned about health and education, there has been an increasing amount of commercialization in both these sectors. It started with a high scale of privatization of the hospitals, which are more sought after for the quality of health care provided by them. From the survey it was evident that people frequented private hospitals more than government hospitals.

There was a time when people knew about the local home-made medicines for curing common ailments. At present, however, they know more about tablets that can cure diseases. But this is not promising because most of the people who get into self – medication hardly know about the side effects of the medicine, nor do they know the
proper dosage. According to Santhosh, a Literacy Mission worker, who attended the PRA at Kanjoor:

_The media has a detrimental role in directing the people through the right path. With numerous advertisements of allopathic and ayurvedic medicines hitting television screens, coming with attractive captions promising cure instantaneously, a generation which is glued to the television sets, get drawn to these medicines and start using it without even consulting a doctor, which in the long run proves detrimental. The motive of the pharmaceutical company is to promote its medicines and earn profit._

_But if the media decide to promote the LHT, then I feel that the people will start using it. That is, the power of media is thrusting a viewpoint and changing the lifestyle of an entire population. The present generation tries to follow that idol which is projected by the media as an ideal role model. This power of the media can go either way to construct a healthy or unhealthy society._

Another disturbing commercialization is the commercialization of Ayurveda, with numerous _panchakarma_ clinics coming up just with the intention to woo the foreign tourists. Many of these do not know even the basics of _panchakarma_ or any such practices.

During the interactions, with the local healers, they expressed their dissent on the existence of such clinics which are nothing but farce and profit-motivated and aimed at tourists. As indicated earlier about the availability of instant mixes of many home remedies, the quality of these mixes are never put to test for their quality. As with many ayurvedic practitioners they feel that the quality of the medicine goes down and also the cost increases. On the one hand commercialization definitely proves to be an income and employment generating means for a population group while on the other hand its implications in the long run are never taken into account.

- **Loss of biodiversity from the abrupt changes in land use and change in biodiversity**

The scale of land use change in Kerala is enormous. There is an increasing trend of changing forest and agricultural land for purely residential or commercial land uses in the villages. And the study area is no exception. Land Use has tremendously changed and much of the paddy fields have been converted to plantation crops or houses. This has led to a tremendous loss of biodiversity. In the Kanjoor panchayat, there has been a high level of change in land use after the coming of the Kochi International Airport, areas
which supported mixed crops in the past, has been converted into a runway. And also the employment pattern has also changed accordingly and is typical of any village in Kerala with very few people available to work in paddy fields. A vast majority of these workers go for construction work which offers them a better remuneration. And the movement of people to the Middle East countries have made the state least productive and the worst consumer. The majority of the people in Kanjoor are businessmen who trade in spices and are also a part involved in business relating to construction materials. There is a high concentration of daily wage labourers also in the panchayat, who find it hard to find a job throughout the year.

The other side of green revolution which was popularized in the mid-1970s has also led to a high level of concentration of harmful chemicals in the herbs which were chiefly found near plantation farms and paddy fields. According to a middle aged woman from Arankavu:

*There was a time when all these herbs used to be highly effective in curing illness. Now I read in the newspapers that the vegetables and even the fruits have a high amount of concentration of dangerous chemicals. And I know the herbs and the plants which we used in the past as remedies for cold and cough are also affected. For example, we were guided by one of the social workers not to use *muyal cheviyan* a common herb used for cough. *Muyal cheviyan* is found especially near the banana plantations and the amount of chemical fertilizers and pesticides used here is tremendous and this herb absorbs all this chemicals which has changed the property of the herb itself. Instead of doing well it does more harm. So I do not use *muyal cheviyan* which is collected from the banana plantations.*

This opinion was also passed on to me during my household surveys, especially by the women folk and was pointed out as one of the reasons for not looking for local herbal remedies. They feel that the properties of many herbs have changed due to the high levels of water, air and land pollution. Also many of the herbs are difficult to look out for.

- **Easy access to the organized and formal health care providers**

Kerala has a wide formally organized health care network of ayurvedic homeopathic and allopathic medicines. There are PHCs widely distributed in the state which provide immediate health care. Along with this, there are a lot of private clinics and hospitals which cater to the health needs of the people. The people in the Kanjoor panchayat are mostly dependent on the private hospital in Kanjoor and partly on the PHCs which work
in Kanjoor and also in the neighbouring panchayat of Sreemoolanagaram. A very small percentage of people visit traditional practitioners in and outside the panchayat. Also a significant number of them visit the private homeopathic clinic in Kanjoor. For chronic ailments, people travel as far as the district headquarters and in very few cases to Thiruvananthapuram.

So Kanjoor is typical of any village in Kerala with high accessibility in terms of distance to health care facilities for immediate relief and is highly dependent on the private practitioners. The primary health centre in the panchayat deals with at least 120 to 150 patients a day who come for curative purposes. The doctor at the PHC is hard pressed for time almost all days. But the doctor feels that though there is not much problem with the availability of essential medicines, the basic infrastructure is not proper and there are a lot of vacancies which need to be filled in. The PHC however, complies with its function of fulfilling the immediate health needs of the people in the panchayat.

In general, the villages have got health care facilities, for all systems of medicine, ayurveda, allopathy and homeopathy in the formal sector and traditional practitioners in the informal sector.

And due to this reason, there are very few people who look for LHT as the sole remedy though they are used along with the other systems of medicine and also in the initial stages of diseases in a large number of cases. This easy accessibility is one of the reasons for the people to use more of modern medicine and less of LHT in their day-to-day life. The accessibility to LHT have been hindered by the high rate of ignorance about this health traditions and a scarcity of many herbs which were earlier available in plenty. So there has been a reversal in the accessibility to the modern medicine and LHT over the turn of a century, with modern medicine becoming more accessible and LHT becoming less accessible.

The accessibility in the future and the sustainability of the present trend of a high dependence on modern medicine has to be addressed carefully. Though a considerable number of people are aware of the side effects and has moved for safer options, there is still a high number who are quite unaware of the dangerous consequences. Increase in the prices of medicines may prove detrimental to the people who are dependent on modern medicine, making it less accessible economically. The financial accessibility is a serious
problem for ayurvedic medicines, the prices of which are quite high. So, it is necessary to strike a balance in the use of modern medicine, using it only under highly inevitable circumstances, for serious ailments and using the LHT for common ailments. This has three-fold advantage:

1. Conservation of this community resource;
2. Proper Utilisation of the LHT; and
3. Reducing the economic burden on the families for health care.

Before the laws of patent make these resources, foreign to the community, it is better to identify the significance of these resources and create a database for these traditions, the first step of which was the creation of a community biodiversity register. Of late, nothing has been done to move forward from this step to the next. This is when the *companies and institutions from developed countries are using intellectual property rights (IPRs) to misappropriate the IK of local communities* (Khore, 2002).

- **Ignorance of LHT and many herbs which are locally available**

One of the major reasons for the low scale use of the LHT is the ignorance of this knowledge base and a lack of knowledge transfer to the new generation. Ignorance has become a grave problem with only very few members of the former generation left behind to pass on the traditions to a disinterested young generation. The herbs which are found in the immediate environment are hardly used today since the people remain unaware of the herbs and their utilities. This has resulted from the disuse of the LHT. Many of the LHTs have moved into oblivion with the practitioners and the members of the older generation. Though Ayurveda was preserved and propagated, very little has been done for the LHT which have a dying future. According to a young man who participated in the PRA,

*If we are given a chance to learn these traditions, many will be ready to use it and propagate it at the community level and household level. Though there might not be a total participation there will be reasonable amount of people participating. If people know the use of a particular plant they will definitely use it. And awareness can be given through the Self-help Groups initially and then to the wider community.*

*The role of schools has to be underlined. We, who are sitting here, had some form of formal education, for at least 5 to 10 years. But during these years of education we were rarely given any exposure to the traditional*
knowledge systems or the traditional health practices. And the lacunae lie there.

But now the educational system in the state concentrates more on applications. I can see students looking for the various herbal plants and their uses as part of their curriculum. We did not have an opportunity like that. All the knowledge we gathered was bookish. So may be in the future the ignorance may decline and more people might start using the LHT.

There is an urgent need for education to move out of the four walls of a classroom and the limited knowledge which is provided in the textbooks. And if the present trends are to continue, there is little hope for the LHT and in the near future it would have become extinct.

**CONCLUSIONS**

The study draws attention to the increase in the use of modern medicine over time in comparison to the LHT. The major reason for this as highlighted by the findings is the increased accessibility to modern medicine in contrast to the LHT, as also the quick relief offered by the modern medicine. Another significant aspect, as found to have an impact on the decline of the LHT, is the ignorance and lack of knowledge transfer between the generations. The use of LHT is highly subjected to the awareness levels. There has been a decline in the number of efficient local health practitioners, partly due to the governmental policies curtailing the practitioners in the informal sector. At the same time, modern medical practitioners are available in the immediate neighbourhood, making modern medicine more accessible in terms of distance. If the LHT still prevails it has to be attributed to the nature of the illness and the incapability of the modern medicine in providing cures to many illnesses. LHT offers effective cures to many illnesses without side-effects which modern medicine is seldom able to provide. It is this feature of the LHTs which makes it a possible alternative to the modern medicine, where it fails. But at the same time the changing environment leading to loss of biodiversity poses a threat towards sustainable use of the LHT. This problem has to be addressed realistically and steps should be taken to preserve the herbal wealth.
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