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Decentralisation and Interventions in Health Sector: A Critical Inquiry into the Experience of Local Self Governments in Kerala

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DECENTRALISATION AND INTERVENTIONS IN HEALTH SECTOR: A CRITICAL INQUIRY INTO THE EXPERIENCE OF LOCAL SELF GOVERNMENTS IN KERALA

M Benson Thomas and K Rajesh*

Abstract

The Democratic decentralisation process was launched in Kerala with the Peoples Planning Campaign in 1996 followed by the 73rd and 74th Amendments to the Constitution of India and the passing of the Kerala Panchayat Raj Nagara Palika Act. One of the major objectives of the decentralisation process in Kerala was to strengthen the public healthcare network and improve the quality of public health service delivery. This paper attempts to analyse the transition in the healthcare sector during the last two decades linking it to the interventions of Local Self Governments (LSGs). It was found that decentralisation improved infrastructure facilities and equipment in primary and secondary healthcare institutions and widened healthcare delivery. It succeeded in providing safe drinking water and sanitation facilities to the local people. The accountability of the public healthcare system was also enhanced. However, it could not address the issues of nutritional imbalance, old age care, lifestyle diseases and the changing morbidity pattern in the state. This paper calls for a comprehensive health policy to ensure functional autonomy for LSGs to address the emerging healthcare needs in Kerala.

The peculiarity of Kerala, reflected in good indices in health and educational attainments with low per capita income, has led to the formation of a different path of development. The contributions of social reform movements, national movements, the Communist movements, a vibrant civil society and progressive state interventions underpinned this phenomenal achievement. A research team from the Centre for Development Studies (CDS) conducted a study on poverty and unemployment in Kerala in 1975. In its report, the team referred to the 'Kerala model of development', which became a widely used phrase in academic circles all over the world (CDS & UN 1975, Panikar and Soman 1984). Kerala's achievements in terms of good health with low per capita income encouraged the use of such terminology. Later, it was also observed that the educational and health achievements of Kerala became the stimulus for higher economic growth and increased per capita income in the state. This tendency became visible at the end of the 1980s (Kannan 2007).

The labour and political movements in Kerala ensured that the government implemented various welfare policies for the well-being of the people. It resulted in the implementation of favorable policies particularly in the health and education sectors. The first ministry of Kerala gave more prominence to social justice in the education sector and the universalisation of health services (Lieten 2003). The high literacy among women was a vital factor in raising their health awareness, which in turn contributed to the better health status of the society. Apart from this, the universalisation of healthcare services all over Kerala through the Primary Health Centers (PHCs), its sub-centers and

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Community Health Centers (CHCs) has been a prominent factor behind the achievements of the state. The 'Kerala Model', which evolved through this process, faced challenges in the mid-1980s. The collective efforts of the people and the government to improve the quality of services dropped gradually from the end of 1970s. The 'first generation problem', like universalisation of health services, was solved in the 1980s. The improvement in quality of service caught the attention of the public health sector. The stagnation in the economy of Kerala during 1980s became an impediment to the expansion of quality in the healthcare sector. The government could not increase investment in this sector as per the actual requirement (Kutty and Panikar 1995).

The quality of services delivered through the healthcare system in Kerala was deteriorating and it became a subject of discussion in and around the state. Notwithstanding this, since the middle of 1980s the morbidity pattern of Kerala has been shifting from infectious diseases to the lifestyle diseases. The transformation of rural areas into semi-urban structure contributed to environmental changes and also to changes in the disease patterns. The disposal of solid waste in the absence of a proper drainage system became a challenge to social healthcare in the state. Different kinds of infectious diseases like Chikungunya, Dengue Fever and H1N1 was widely reported in Kerala during the recent decade. Thus, Kerala became a fertile breeding place for lifestyle diseases and new infectious diseases manifested in the hazardous environment of a rapidly changing lifestyle (Ekbal 2007).

The decentralisation process launched in Kerala as a part of People's Planning Campaign (PPC) in 1996 was expected to address the issue of declining quality in services especially in the health and education sectors (Isaac and Franke 2000). Primary and secondary healthcare institutions were transferred to the LSGs as part of the decentralisation process in the state. A substantial budget allocation was also made with the PPCs to equip the LSGs to assume these responsibilities. Decentralisation was expected to strengthen the public healthcare network all over the state to address the new challenges emerging in the healthcare sector. Now, 14 years have passed since the PPC. This paper analyses the dynamics of Kerala's health sector during the past one-and-half-decades by linking it with the decentralisation process. It raises the following questions: What were the dynamics of the health sector in Kerala for the last one-and-half-decades in terms of changes in the morbidity and mortality pattern? Has the healthcare network of Kerala met the challenges in terms of higher presence of lifestyle diseases and new kinds of infectious diseases? What was the focus of LSGs in their interventions in the healthcare sector? Have they been able to address the new health challenges in the state through the decentralisation process?

The existing studies on health in the state focused more on either the performance of the LSGs in the healthcare sector or the transition in health sector over the decades. There is a dearth of studies that comprehensively connect the changes in the health sector and the performance of LSGs in addressing the issues. Therefore, this paper attempts to tackle it through a comparative analysis by connecting these two elements. It aims to highlight the responsibilities of the LSGs in the healthcare sector and evaluate their achievements in attaining targets. While making such a comparison, the paper also considers the recent related changes in the healthcare sector and the existing mechanism of the LSGs to deal with it.

A macro level analysis of the initiation of the LSGs and its outcomes in the health sector has been done. A micro level discussion is also attempted towards the end of the paper with three Gram Panchayats — Vallikkunnu (Malabar), Venkitangu (Cochin) and Kudayathur (Travancore) — located in three different geographical and administrative regions in Kerala. Vallikkunnu represents the coastal area, Venkitangu has a substantial SC population and Kudayathur is a tribal region. We used consolidated information from various reports/publications from the Department of Health Services, Kerala State Planning Board, Registrar General of India, National Nutrition and Monitoring Bureau and the publications of the Panchayats for analytical purposes.

We have described the role of the LSGs by identifying their statutory role and responsibility in the health sector in the first part. The second part discusses the changes in the healthcare sector over the decades by taking indicators like changes in healthcare infrastructure, causes of death, prevalence of morbidity, improvement in nutrition etc. A descriptive analysis is made in the third part by comparing the achievement of the LSGs. We have attempted to bring macro and micro level information together in order to reach relevant conclusions and suggestions regarding the future scope of the LSGs in the healthcare sector in the state.

Healthcare Responsibilities and Local Self Governments

In the 1990s, there were numerous debates on the 'Kerala Model' of development and its problems and prospects. The declining quality of healthcare had been an important point in those discussions. Democratic decentralisation was highlighted as a solution to resolve such a crisis (Isaac and Franke 2000). In 1994 the Kerala State Assembly passed the Panchayati Raj Act after the 73rd and 74th Constitutional Amendments. Moreover, in 1995 the Government of Kerala decided to delegate 17 institutions as LSGs empowered with the duties and responsibilities assigned by the Panchayati Raj Act 1994 (GO. P 189-95/LAD, dated 18/9/95). This government order specified that the 17 institutions working under the purview of different departments of the government and their officials had been delegated as LSGs. This order is a landmark in the administrative decentralisation in Kerala. The primary and secondary institutions working under the health department were transferred to the LSGs. As per this order, the family welfare sub-centres and PHCs were transferred to the Gram Panchayats, Community Health Centres (CHCs) to the Block Panchayats, Taluk Hospitals to Municipalities or Corporations and the District Hospitals to the District Panchayats.

Despite this order, until the PPC was implemented in 1996, the LSGs was not vested with financial powers. In 1996 as the part of PPCs, the Government of Kerala decided to allocate 35 to 40 per cent of budget allocations to the LSGs. It was also specified that the LSGs could spend up to 40 per cent of their budget allocation for the improvement of the service sector, which includes health and education (Kerala State Planning Board 1999). The administration of hospitals and health centres became the responsibility of the LSGs. The financial requirement for the day-to-day activities and for the improvement of service was allotted to the LSGs as budget assistance. Along with the health centres, *Anganvadis*, which provide various health services, were also transferred to the LSGs. As prerequisites for the creation of a hygienic environment, the LSGs were made responsible for the supply of quality drinking water and good sanitation facilities at the local level. The protection and the

promotion of public health at the local level became a pivotal responsibility of the LSGs (Kerala Panchayati Raj Act 1994). In 1994, the Government of Kerala decided to provide a grant to the LSGs for the maintenance of assets transferred to them (Ommen *et.al* 2009). These provisions provided more autonomy to the LSGs to expand the infrastructure of transferred institutions including primary and secondary healthcare institutions.

The responsibilities of the LSGs under the Panchayati Raj Act 1994, and later amendments, included maintenance of healthcare institutions, providing hygienic drinking water and sanitation system at the local level, providing medicine and health accessories to the healthcare centres, intervening during epidemics, promoting health practices, etc. The financial autonomy attained by LSGs through the PPC empowered them to act as autonomous bodies to intervene in the preventive, curative and promotional aspects of healthcare. They also got institutional assistance to implement their responsibilities in the healthcare sector. The remaining portion of this article is an attempt to analyse the status of the healthcare sector and the nature of changes that have occurred in the last 15 years after decentralization.

Dynamics of the health sector in Kerala

It is well accepted that in terms of traditional indicators the performance of Kerala's health sector is one among the best in the country and is even comparable to developed countries (Panikar 1999). The general health indicators of a society are birth rate, death rate, infant-child and maternal mortality rate, fertility rate and life expectancy. While we analyse Kerala's status based on all these indicators, Kerala ranks way above the national average, which is shown in Table 1.

Table 1: Health Indicators of Kerala and India, 1995 and 2006

Index	Kerala		India	
	1995	2006	1995	2006
Birth Rate[a]	18.0	14.9	28.3	23.5
Death Rate[a]	6.0	6.7	9.0	8.1
Infant Death Rate[b]	15.0	15.0	72.0	57.0
Maternal Mortality Rate[c]	140*	110	408*	300
Total Fertility Rate	1.8	1.7	3.4	2.8
Life Expectancy^				
Male	69.9	71.4	59.7	62.6
Female	75.6	76.3	60.9	64.2
Person	72.9	74.0	60.3	63.5

Source: Registrar General & Census Commissioner, India 2009

Notes : * indicates the year 2001; ^: Life Expectancy 1991-95 for 1995 and 2002-06 for 2006;

[a:] for 1000 population; [b:] for 1,000 births; [c:] for 100,000 live births

Table 1 shows that the national average of infant mortality rate is three times higher than that of Kerala. There is a big difference in the birth rates also. The major reason for the reduction in the death rate in Kerala is the drastic reduction in infant, child and maternal mortality rates (Kerala Development Report 2008). Between 1977 and 1997, neonatal mortality rate in Kerala reduced from 33.9 to 7.5 and post-natal mortality rate reduced from 22.12 to 7 per thousand of births. It is also indicated that a reduction in mortality of children below 5 years (27.5 in 1971 to 3.8 in 1996) was the major reason for the decline in the total death rate in Kerala. The Government of Kerala initiated an immunisation programme on its own capacity in 1970s for the infants and pregnant women even before the immunisation programme at the national level was launched with the assistance of the WHO in 1980s. This later contributed to the reduction of infant and maternal mortality rates in the state. It should also be noted that the national immunization programme, which started in 1980s, was also effectively implemented in Kerala because of the near-universal network of public healthcare system.

The care available to pregnant women was also much better in Kerala due to the public healthcare network. The number of deliveries through the institutional system increased considerably in the state during 1977 to 1998. In 1977, the institutional deliveries were only 23 per cent of the total deliveries whereas it increased to 93 per cent in 1998 and further increased to 97 per cent in 2003. There is a family welfare sub-centre every 6 kilometers and a PHC every 33 square kilometers in Kerala. This made higher institutional service accessible to the public especially in the period of pregnancy and delivery (Economic Review 2002). Moreover, increased literacy among women in Kerala led to the higher usage of public healthcare services, which in turn helped reduce maternal death rate in the state.

The first state government itself started a campaign in the healthcare sector to implement family planning methods effectively in Kerala, which resulted in reducing the birth rate as well as infant and maternal death rates in the state. Moreover, the public healthcare campaigns successfully implemented by the healthcare institutional network also helped reduce the general death rate due to infectious diseases.

Table 2: Target achieved by immunization programme in Kerala

Immunization Program	2002-03	2005-06
DPT	95.8	99.3
Polio	95.3	100.0
BCG	103.0	102.0
Measles	90.6	97.6
T.T. for Pregnant Women	86.1	105.0
T.T. for 5 years	89.2	94.1
T.T. for 10 years	98.1	100.0
T.T. for 16 years	95.0	98.0

Source: Compiled figures from Economic Review 2004, 2006

The data in Table 2 shows that the immunisation of infants was successful and considerably improved during the last decade. The increase in the immunisation rate during the last decade could be attributed to the better access to immunisation programmes to all groups of the society. The Ward-Level Committees formed as part of decentralisation program, Anganwadi Welfare Committees and the Women's Self-Help Groups at grass-root level might have contributed to this attainment. This public network at the local level as a part of the decentralisation process have solved the problem of information asymmetry brought government services to the grass root level.

Changes in the mortality and morbidity pattern

Another interesting factor in the healthcare scenario of Kerala was the change in its mortality and morbidity patterns. The deaths caused by infectious diseases in Kerala reduced to 10 per cent of the total deaths in 1998. However, the rate of circulatory and respiratory diseases, cancer and accidents and injuries increased considerably in proportionate and absolute terms. The proportion of deaths by non-infectious diseases was much higher in Kerala than the national average (MCCD and CDS (R) Reports- various years).

Figure 1: Percentage distribution of deaths due to select diseases in Kerala during 1978-1998 (Rural)

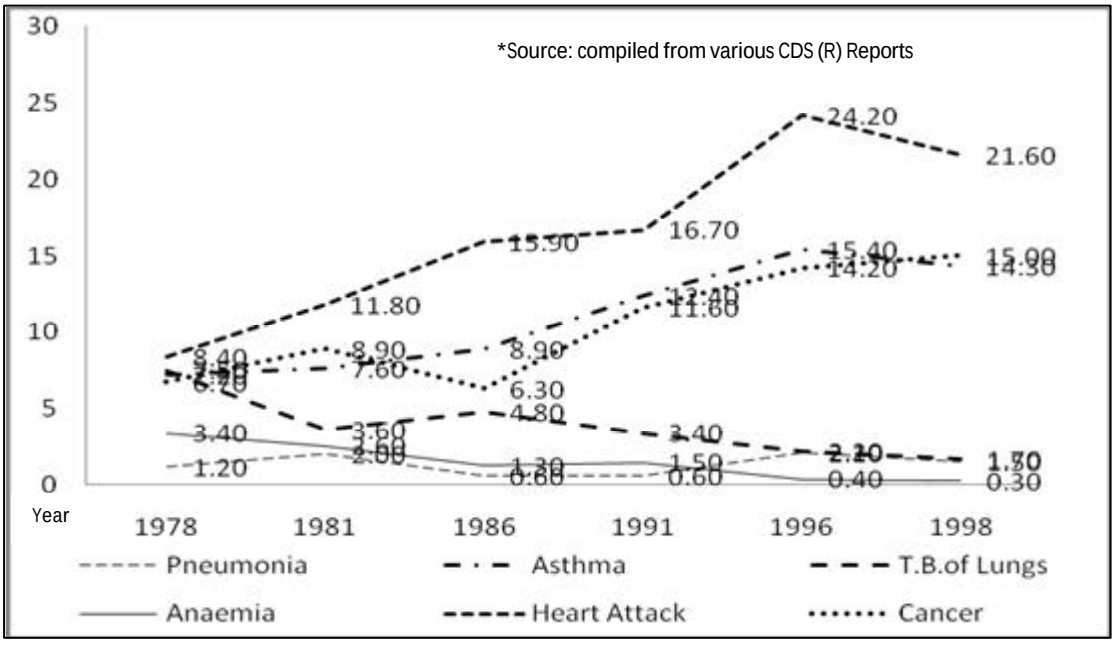

Figure 1 shows changes in the percentage distribution of deaths caused by select diseases in Kerala from 1978 to 1998. It indicates that deaths from chronic diseases like heart attack, cancer and asthma increased substantially. The deaths caused by heart attacks and cancer alone increased from 15.10 per cent in 1978 to 36.60 per cent in 1998 in the rural areas of the state. High-risk exposure and the vulnerability of the adult population, especially males, to these diseases were noticed in the state. Moreover, it is also shown from various studies that the mortality rate for adult males in Kerala stands

at a higher level without significant reduction in the recent decades (James 1997, Saikia *et.al.* 2008). Nevertheless, deaths caused by severe infectious diseases, like tuberculosis (lungs) and pneumonia, declined to below 2 per cent over the decades. The morbidity pattern also shows a changing trend. Except in the case of respiratory diseases, the incidence of all other diseases that pose public healthcare concern have been controlled in Kerala.

Table 3: Rate of attack of severe communicable diseases in Kerala*

Disease	1995	2000	2004	2008
Acute Diarrheal Diseases	46.30	24.37	16.22	15.80
Measles	0.46	0.19	0.09	0.08
Chickenpox	.....	0.43	0.45	0.49
Acute Respiratory Infections	210.65	253.57	257.25	229.30
Pneumonia	1.25	0.90	0.67	0.47
Enteric Fever	0.56	0.40	0.28	0.13
Viral Hepatitis A	0.69	0.21	0.21	0.19
Pulmonary Tuberculosis	2.59	1.38	0.62	0.36

Source: Department of Health Services, Government of Kerala

Notes: * Each diseases among 1000 reported total disease cases

.... Not available

The data in Table 3 shows that the morbidity pattern in Kerala in case of some diseases is quite low. Notably, the diseases which are concerned to public health intervention, has reduced over the periods. The Kerala Sasthra Sahithya Parishad (KSSP) conducted a survey in 2006 and compared the results of their own studies in 1987 and 1996. According to the KSSP, the general morbidity rate of Kerala was 206.3 per 1000 persons in 1987. It dropped to 121.9 in 1996 and to 79.2 per 1000 persons in 2004. The reduction in the infectious diseases among the children that can be curbed through vaccination and reduction in diarrhea-related diseases because of the expansion of household sanitation system are the major reasons for the reduction of the general morbidity rate (KSSP 2006).

Though the state has been able to reduce the first-generation group of diseases (concerned group to public healthcare intervention), the second-generation diseases that caused by life style changes (non-communicable/degenerative diseases) in Kerala have been increasing alarmingly and the general morbidity rate in the state is now higher than the national average. In rural areas, the death rate due to lifestyle diseases is two times higher than the national average and 15 per cent more than the urban average (Kerala Development Report 2008). The acute diseases which remain only for a short term have decreased because of the reduction of infectious diseases but the rate of chronic diseases have increased considerably during the last three decades. In the case of chronic diseases, the morbidity rate among the 15-54 years age group is very high in Kerala.

Table 4: Incidence of chronic diseases in Kerala*

Disease	Kerala	India
Hypertension	1433	589
Diabetes	980	221
Heart Disease	914	385
Mental Disease	283	132

Source: Economic Review 2004, State Planning Board 2005 (Qtd in Ekbal 2007)

Notes: * per lakh of population

As shown in Table 4, chronic diseases like hypertension, diabetes and cancer and circulatory diseases are high in the state compared to the national rate. A similar pattern is also evident among different age groups. For instance, hypertension is prevalent among 22 per cent of the people in 34-64 years age group while the national average is only 9.6 per cent. Hypertension among 70 years and above age group is 51 per cent. Diabetes patient among 34 to 64 years age group in Kerala is 16.3 per cent while it is 12 per cent at the national level. The number of cardiac and cancer patients in Kerala has increased alarmingly over the decades. The number of cancer patients per 10-lakh population at the national level is only 216 while it is 2,306 in Kerala. The patients suffering from cardiac and related illnesses in the 34 to 64 years age group in Kerala is 13 per cent while national average is only 3 per cent (KSSP 2006, KILA 2010). The incidence of chronic diseases like hypertension, diabetes, and circulatory diseases was high among middle and upper middle class people in the earlier decades. However, in the recent decades almost all the sections of the society, irrespective of the class, are suffering from these diseases.

The increasing prevalence of chronic diseases in the society and the high demand for therapeutic healthcare services witnessed the mushrooming of private hospitals in Kerala. The total number of beds available in the public healthcare institutions increased to 50,515 in 2006 from 42,569 in 1996 and the per-lash availability of beds increased from 137 to 159 during the same period. In comparison with non-government sector, the number of beds in the public sector was lower in 2006 (Economic Review 1996, 2006). It was only 39 per cent of the total number of beds in the state. Notably, the private sector alone has 70,506 beds — 221 beds per lakh of population — evidence of their dominance in providing curative healthcare. Moreover, a fall in the quality of services in government hospitals compelled more than 44 per cent of the lower income groups to seek help from the private healthcare system (Ekbal 2007).

The privatisation created dichotomies in the provision of healthcare in Kerala. The first one is the rural-urban dichotomy where “the bias of the public sector in urban areas has been moderated by the growth of the private healthcare system in rural areas” (Kannan *et.al.,* 1991). The second dichotomy is ‘preventive-curative’ dichotomy which shows that “the public sector has remained the primary source for most preventive interventions such as immunisations, while the private sector seems to have taken the initiative in high technology curative care” (Ramankutty, 2006). A recent study shows that the private hospitals are better equipped in terms of technical resources and are reported to be encashing on the long-term illnesses prevalent in the state (Dilip, 2009).

On the other hand, recent studies show that the per capita healthcare expenditure in Kerala has increased having an unfavorable impact on the poor people. In 1987, the per capita healthcare expenditure was only Rs 89. It increased to Rs 549 in 1996 and to Rs 722 in 2004. The onetime healthcare expenditure in 1987 was only Rs 16.6, which increased to Rs 165.2 in 1996 and further to Rs 830.7 in 2004. The per capita year-wise in-patient expense was Rs 971.90 according to 2004 data (KSSP 2006). Moreover, Ekbal *et.al* (2007) argued that the inadequacies of the public healthcare system in a changed epidemiological scenario resulted in the marginalisation of the poor who are estimated to comprise 30 per cent of the population.

Along with the other chronic diseases, the prevalence of mental health diseases is also high in Kerala. Similar is the case with suicides. Moreover, in this decade Kerala has witnessed several diseases related to the environmental hygiene, such as dengue fever, chikungunya, Japanese encephalitis etc. Diseases like chikungunya and dengue fever became public healthcare issues during the last decade. On the other hand, the infectious diseases such as tuberculosis, pneumonia, etc., are not fully eradicated. The re-emergence of eradicated diseases like malaria, the emergence of new diseases and the persistence of life-style diseases along with the soaring healthcare expenditure has deepened the crisis in the healthcare sector in Kerala.

Decentralisation and initiatives in healthcare sector

One who attempts to analyse the relation between the decentralisation and healthcare sector in Kerala has to consider the above health indicators. The next section of this paper attempts to analyse how the impact if the initiatives of the LSGs to address the health issues in the state. If decentralisation has been able to address these issues to some extent, we could say that it has improved the quality of healthcare in the state.

The following could be considered as indicators to assess whether the initiatives of the LSGs have been adequate enough to address the responsibilities of the healthcare sector and the emerging challenges. The interventions of the LSGs to expand infrastructure facilities and the service delivery system through the transferred healthcare institutions would be prominent among them. Their initiatives to ensure environmental hygiene by improving household sanitation facilities and ensuring safe drinking water are the other indicators to evaluate their performance. The initiatives of the LSGs to bring healthcare services to the lower levels of society and efforts to address the issue of solid and liquid waste management also are prominent factors that need to be analyzed in this context. The attempts of the local bodies to address the issues of increasing lifestyle diseases and newly emerging diseases can also be discussed because of their severity. Therefore, the prominent question would be whether the LSGs have been able to develop a comprehensive healthcare plan to address the changing healthcare needs of the local societies. Therefore, further discussions focus on these concerns.

As we mentioned earlier, in 1995 the healthcare institutions and officials were transferred to the LSGs. All the primary and secondary healthcare institutions in the health departments, except tertiary systems like medical colleges, were transferred to the LSGs. Altogether 2,621 health institutions were transferred. About 1,226 institutions comprising 938 PHCs, 105 CHCs, 11 district hospitals and 172 other hospitals of the transferred institutions were allopathic hospitals. In addition, there were 113

Ayurvedic hospitals, 727 Ayurvedic dispensaries, 31 Homeopathic hospitals and 524 Homeopathic dispensaries (Economic Review 2002). The pivotal responsibility of the LSGs in the healthcare sector was the management of primary and secondary institutions transferred to them. It is important to note that though the management of the institutions was transferred to the LSGs, the appointment of officials, transferring of staff and payment of salaries still remained with the health department. In the case of allopathic hospitals, the distribution of medicine continued to be the responsibility of the health department. Later on, the government empowered the LSGs to appoint doctors on contract basis in cases of emergency situations. There were several obstructions for the LSGs to exercise their power, which was conferred on through legislative measures and government orders.

Creating infrastructure for the transferred institutions was a prominent factor in improving the delivery of services through local institutions. The data shows that the LSGs succeeded to a great extent in carrying out their responsibilities. The data for 1997-2000 (the first three years of People's Planning Campaign) shows that the LSGs constructed 90,021.6 square meters of buildings for the expansion of healthcare institutions at the local level (Ekbal 2000). During the 9th Five Year Plan (1997-2002), 1,40,671 square meters of buildings for hospitals and health centers were constructed all over the state (Economic Review 2006). In 10th Plan also the LSGs spent substantial amounts for this purpose. The other noticeable factor is that almost all the LSGs gave importance to the construction of buildings for the family welfare sub-centres of the PHCs, which had remained neglected before the decentralisation era. Most of the sub-centres were provided with residential facilities for the staff. It can be concluded that the LSGs invested a considerable amount of money to rebuild the PHCs and sub-centres. They also gave importance to the provision of furniture and medical equipment to the transferred institutions. It is to be noted that the facilities at the PHCs, CHCs and district hospitals also improved during the last 15 years (Elamon, 2006).

The initiatives in the healthcare sector should not be viewed on the basis of the expansion of treatment facilities alone. It should also be viewed on the basis of the attempts to create a healthy environment. In this respect, the LSGs took two important initiatives. One was the construction of safe sanitation facilities at the household level and other was the assurance of safe drinking water to the local people. In the 9th Plan itself, the LSGs constructed 5,71,145 latrines all over the state. They built 4,49,084 latrines in the 10th Plan also. The data shows that the rate of diarrhea-related diseases reduced considerably during the last two decades in Kerala. The incidence of diarrhea-related diseases in 2002 was 17.63 per cent in Kerala, which further reduced to 14.14 per cent in 2007. The Kerala Development Report indicated that the decade between 1996 and 2006 witnessed a sharp decline in the incidence of diarrhea-related diseases compared with earlier decades. Likewise, the efforts to provide clean and safe drinking water by the LSGs reduced the occurrence of waterborne diseases. In the last 15 years, the number of people availing piped drinking water increased from about 1,69,41,719 in 1997 to 1,90,43,032 in 2002 (Economic review 2002). As much as 68 per cent of healthcare expenditure of the LSGs in 2007 was used to provide safe drinking water. This initiative could have contributed to the near eradication of diarrhea-related diseases.

The last 15 years was a period that witnessed mass participation in the healthcare activities in Kerala. The help of women SHGs was widely available to the healthcare activists for the universalisation

of immunisation and public healthcare awareness programmes. The network of women SHGs acted like a support system to the Pulse-Polio Campaign and the campaign to control deadly epidemics like chikungunya, dengue etc. It is also pertinent that the consistent monitoring and the intervention of the local bodies and its elected representatives brought visible changes in the implementation of healthcare programmes including the central programmes like polio vaccination. Table 2 compares the immunization status 2002-03 with that of 2006-07 shown in the earlier part of this paper. This provides the evidence that the rate of immunisation increased during this period. The target achieved in polio vaccination was only 95.3 per cent during 2002-03, which increased cent-per-cent in 2006-07. Similarly, only 86.1 per cent of pregnant women were giver tetanus vaccination in 2002-03 and it increased to 105 per cent, which was far higher than the target for 2007. This highlighted the functioning of PHCs and sub-centres and their interventions through Anganwadis helped to bring the healthcare services to the lower levels effectively under the decentralised regime. Moreover, the care that was available to children and pregnant women also increased during this phase. The number of people resorting to the public healthcare system increased during last 15 years (Ekbal 2010). A study by KSSP comparing the scenario in 1996 to that of 2004 showed that 28 per cent of the population was dependent on the government sector in 1996 and it increased to 32 per cent in 2004 (KSSP 2006). Along with the high cost of treatment in the private sector, the improved quality of services in the government sector also has contributed to this change. Public accountability of the government institutions increased with the democratic decentralisation. The services delivered to the people and the people's accessibility to them expanded during this regime (Elamon 2006).

Table 5: Health sector expenditure in selected Gram Panchayats in Kerala

Gram Panchayat	Activities Undertaken	Expenditure (in `)	
		9th Plan	10th Plan
Vallikkunnu	Construction of latrines	1358000 (5.8)	1073800 (3.7)
	Drinking water supply schemes	2066650 (8.8)	916061 (3.2)
	Construction of new hospital buildings	_ (0.0)	232706 (0.8)
	Extension and renovation of hospital buildings	35000 (0.1)	37470 (0.1)
	Purchasing equipments to hospitals	797100 (3.4)	20000 (0.1)
	Medical camps and supply of medicines	6250 (0.1)	417480 (1.4)
	Health awareness programs	88950 (0.4)	159910 (0.5)
	Garbage and waste disposal	45000 (0.2)	200000 (0.7)
	Purchasing of medicine to hospitals	150000 (0.6)	242582 (0.8)
	Total expenditure in health sector	**4546950 (19.3)**	**3300009 (11.4)**
	Total expenditure	**23580698 (100)**	**29078148 (100)**
Venkitangu	Construction of latrines	312000 (2.0)	370000 (1.1)
	Drinking water supply schemes	1942479 (12.2)	1031273 (3.2)
	Construction of new hospital buildings	249345 (1.6)	954017 (2.9)
	Renovation of hospital building	196267 (1.2)	_ (0.0)
	Garbage, waste disposal and mosquito eradication	5694 (0.0)	14000 (0.1)
	Medicine supply to aged people	_ (0.0)	560985 (1.7)
	Health awareness and medical camps	_ (0.0)	242258 (0.7)
	Total expenditure in health sector	**2705785 (17.0)**	**3172533 (9.8)**
	Total expenditure	**15924144 (100)**	**32422799 (100)**
Kudayathur	Construction of latrines	442000 (5.2)	418000 (2.4)
	Health promotion of aged & handicapped people	_ (0.0)	80042 (0.5)
	Purchasing of medicine to hospitals	_ (0.0)	109946 (0.6)
	Medical camps	_ (0.0)	77981 (0.5)
	Health awareness Programs	_ (0.0)	7500 (0.1)
	Equipments to handicapped	_ (0.0)	59000 (0.3)
	Renovation of hospital building	_ (0.0)	9500 (0.1)
	Health survey	_ (0.0)	12472 (0.1)
	Garbage, waste disposal	_ (0.0)	26351 (0.2)
	Water supply scheme	341868 (4.1)	832159 (4.8)
	Total expenditure in heath sector	**783868 (9.3)**	**1632951 (9.5)**
	Total expenditure	**8424328 (100)**	**17238162 (100)**

Source: Compiled from the reports of Vallikkunnu, Venkitangu and Kodayathur Gram Panchayats.

Note: Figures in the parenthesis are the percentages to the total expenditure.

Micro level field data from the three selected Panchayats confirms the success of the Gram Panchayats in the above aspects. For instance, table 5 shows the expenditure pattern in the health sector of the selected Gram Panchayats. It includes the amounts spent for health, sanitation and drinking water supply etc. The table 5 also corroborates the observation from the state level data on expenditure of LSGs in the healthcare sector. In Vallikkunnu, Kodayathur and Venkitangu a substantial amount was spent by the healthcare sector for providing drinking water and sanitation facilities to the local people. Vallikkunnu implemented nine mini drinking water supply schemes, whereas Venkitangu and Kodayathur implemented eight and three, respectively. They also spent a substantial amount of money on extending the piped drinking water supply in the water scarce areas of the Panchayats.

Table 5 also indicates that these Panchayats made considerable advancement in ensuring latrines at the household level. The Vallikkunnu Gram Panchayat provided assistance to 1,215 families to construct latrine while Venkitangu Gram Panchayat helped build 241 and the Kudayathur Gram Panchayat built 430 during the ten-year period of 9th and 10th Five Year Plans. The attempt by the Gram Panchayats to expand the infrastructure facilities of the healthcare institutions is evident from their expenditure pattern. They succeeded in expanding the PHCs facilities substantially and started in-patient departments in Vallikkunnu and Venkitangu. The Venkitangu and Kudayathur Panchayats constructed new buildings for the Ayurvedic hospitals. Moreover, a homeo dispensary was also built in Venkitangu during this period (Vallikkunnu, Venkitangu, Kudayathur GPs: 2002, 2007).

In short, the initiatives of the LSGs in the healthcare sector in terms of creating infrastructure facilities for the healthcare institutions, providing instruments and equipments to the hospitals, widening the healthcare services at the local level, providing safe drinking water and sanitation facilities to the local people, ensuring the accountability of public healthcare system etc., could be considered as the contribution of democratic decentralisation to the healthcare sector in Kerala.

Limitations of interventions

We have already mentioned the transitions in the mortality and morbidity pattern in Kerala. Chronic illnesses like hypertension, diabetes, cardiac diseases, cancer and mental diseases have become increasingly visible in Kerala regardless of the financial and social status of the population (KILA 2010). The number of cancer cases among women, especially breast and cervix cancer, is also on the increase in the state. Though family planning measures are widely used in Kerala, it was found that those measures are still focused on females than males. According to the NFHS survey, one among five women in Kerala is facing the threat of malnutrition.

Kerala is also facing the healthcare challenges specific to the demographic transition that happened in the state. In 2010, the population above 60 years formed 15 per cent of the total population of the state. The age difference between men and women resulted in large number of widows in Kerala. These factors together created challenges in the healthcare of the aged in Kerala (Ekbal 2010). Dominance of chronic diseases in the healthcare sector, increased prevalence of lifestyle diseases, the increased old age population, malnutrition among women and children, enhanced number of reproductive system related diseases among women, etc., emerged as new health challenges in the state. It is testified from the above discussions that Kerala's healthcare system has not been able to

address the new challenges even after decentralisation. Apart from expanding the existing healthcare systems, the LSGs could not address the new health challenges nor develop comprehensive health plans to address these problems.

The initiatives of the LSGs in the healthcare sector are still limited to the construction of building, providing other infrastructural facilities, medicines, and preventing epidemics, etc. Very few LSGs in the state have attempted to launch innovative initiatives. The attempts by some LSGs to initiate Buds Schools for the rehabilitation of totally deprived and neglected children, palliative care units for the cancer patients and setting up diabetics and BP clinics are worth mentioning in this regard. Though some LSGs have started such innovative, it was not yet widely recognised in the state. Thirty per cent of poor in the state still depend on the private healthcare system. About 39.63 per cent of the income of the poor people is still spent on healthcare (Ekbal 2010). The quality of planning in the healthcare sector by the LSGs is poor. They could not improve the quality of healthcare services through democratic decentralisation (Vijayanand 2007). It is interesting to note that the LSGs failed even in creating a scientific database on health at the local level. They also could not develop a methodology for local healthcare planning and the management of healthcare institutions.

A major aim of decentralisation was the improvement of social healthcare through the participation of the public. Therefore, the planning process emphasised the preventive and promotional approaches rather than depending more on curative intervention to improve the health status. It included the reduction in risk exposure to diseases influencing lifestyles by raising awareness about nutritious foods, hazards of tobacco and alcohol consumption and sedentary lifestyle, etc. However, in reality, these aims were not fulfilled. Notably, the average per day intake of essential nutrients like protein, calcium etc., has not improved over the decades (Various NNMB Survey Reports). Moreover, the intake of cereals and millets, vegetables, roots and tubers declined considerably. It reflects the LSGs failure to promote the aspects of individual health and good food habits.

The LSGs are responsible for the collection and processing of waste in their locality and it is viewed as a mandatory responsibility (KPR Amendment act 1999). Kerala's developmental culture is different from that of other Indian states. The rural-urban difference in the state is narrow and the semi-urban culture of the rural area is very widespread. Therefore, the collection and disposal of the waste is a prominent problem in Kerala irrespective of rural-urban difference. The LSGs in Kerala largely failed in resolving this issue. Though the central and state government programmes like the Total Sanitation Campaign, Clean Kerala Mission etc., have been functioning in the state for more than one decade, the expected improvement in this sector could not be achieved. The experiments to produce bio-fertilisers, energy and bio-gas also were not widely explored in Kerala.

The micro level data from the selected Panchayats also corroborates these findings. For instance, though waste disposal and processing is a key responsibility of the Panchayats, the initiative of the three Gram Panchayats in these aspects was limited. They have spent some amount under this title. In fact, it was restricted to the cleaning of streets and fixing waste bins in public places. An attempt to process garbage was initiated only by the Venkitangu Gram Panchayat by constructing a bio-gas plant for processing bio-degradable waste. Moreover, all the three panchayats made no serious effort to

control the lifestyle diseases that are the newly emerging challenges in the healthcare sector (See Table 5).

The financial status of Gram Panchayats improved during the 10th Plan compared to that of the 9th Plan but the actual funds spent by the healthcare sector substantially reduced except in Kudayathur (ibid). The Gram Panchayats could have utilised the same proportion of funds to address the emerging challenges instead of diverting it to the non-healthcare sectors. However, very little effort was visible in this regard. Therefore, it seems a paradox and an indication of the inertia of the Panchayats to address the second generational problems in the healthcare sector, particularly in addressing the issues of the lifestyle diseases and management of waste.

The LSGs are not solely responsible for these defaults. Even after one-and-half-decades of decentralisation, the LSGs were not provided with sufficient power to control the staff transferred to them. The role of the officials as a part of LSGs and also as a part of department is still not yet defined categorically. The National Rural Health Mission (NRHM) has not been properly linked with the local healthcare plan and activities of the LSGs. In addition, the LSGs were forced to implement the centrally sponsored programmes without considering the local facilities and needs. Apart from the NRHM, the other Central Government programmes were continued as a parallel activity that worked against the spirit of decentralisation.

The various healthcare schemes of the different tiers of government have not been brought into a single umbrella of local level for its effective implementation and evaluation. It is also ironical that even after 64 years of formation of Kerala state it has no unified Public Health Act. The state could not review the changing healthcare paradigm and the health requisites of society nor make changes in the healthcare policies according to the changing needs of society. The primary healthcare responsibility of the PHCs still continues to be prevention of infectious diseases even in the time of reduced infectious diseases and increased lifestyle diseases. The Public Health Act and policy of Kerala need to be redefined to meet the changing healthcare needs. Kerala should give functional autonomy to the LSGs to intervene in society according to the actual healthcare needs. Therefore, the role of the state and LSGs in the healthcare sector needs to be redefined according to the challenges that have arisen in the healthcare sector of the state.

Concluding observations

Kerala's healthcare sector has undergone radical changes in the last few decades. Universalisation of public healthcare services through a wide network of public healthcare interventions, and increased health awareness of the people are the remarkable factors responsible for the better health status in Kerala. Along with these favorable developments, Kerala also witnessed a worsening of its health status in the last two decades. The high dependency on privatised healthcare institutions, increasing incidence of lifestyle diseases, diseases emerging out of environmental hygienic issues and the presence of new diseases from different sources altogether created a crisis in Kerala's healthcare sector.

The democratic decentralisation process launched in Kerala through the Panchayat Raj Act 1994 and the People's Planning Campaign was expected to address the challenges in the healthcare sectors of the state. Decentralisation succeeded to an extent in improving the infrastructure of the

primary and secondary healthcare institutions. It also helped to bring health services to different tiers of society through the expanded social networks and institutions of decentralisation. The LSGs succeeded in ensuring better household sanitation and drinking water facilities to the people. However, the LSGs could not address the challenges of nutritional imbalance, old age care, lifestyle diseases and the changing morbidity pattern in the state. Some LSGs developed unique models in solid waste disposal, caring for mentally and physically deprived children and starting diabetics and BP clinics but these initiatives have not been widely recognised in the state.

The LSGs are not solely responsible for this situation. Though several responsibilities and substantial financial powers have been transferred to them, they do not have sufficient autonomy to control the staff transferred to them through the institutional transfers. The powers of the LSGs over the department's officials and institutional system are not clear still after 15 years of democratic decentralisation. Moreover, the government of Kerala failed in bringing changes to the functional targets and responsibilities of the transferred institutions according to the changing requirements of society. Even in the context of increasing lifestyle diseases, the major responsibility of the public healthcare system is confined to the prevention of infectious diseases. Kerala does not even have a unified public healthcare legislation and policy after six decades of its existence as state. Thus, an immediate intervention is required to draft a unified and comprehensive healthcare policy to can address the current health-related issues in the state. There should be provisions to ensure the functional autonomy of LSGs to address specific healthcare needs in each locality.

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