

Unravelling the Paradox of Kerala's Health Sector: Relevance of Small Private Medical Institutions to Sustain the Health Care System in Kerala

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Abstract

Kerala has garnered global attention for remarkable achievements in health indicators despite being economically backward. Kerala's success is often attributed to the high public spending and support given by the government to improve health standards and ensure availability of health services thereby undermining the pivotal role played by the private sector. But healthcare has always been in great demand in Kerala and it is cogently clear that small private medical institutions are still relevant for Kerala to sustain its high ranking. Small private clinics, nursing homes and hospitals had an unambiguous role in catering to the health care needs of the people in Kerala including rural areas. There has always been a great demand for healthcare in Kerala and it is cogently clear that the role of small private medical institutions is still relevant in the present scenario of Kerala to sustain its high health status. But stringent regulations can disproportionately affect small private medical institutions which will adversely affect the state's health care system.

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Executive Summary

The tremendous development of the health sector in Kerala amidst economic backwardness has won accolades for the state globally. Kerala is still ahead of other states in terms of health indicators. The success of the state has been mainly attributed to the support given by the government in improving the healthcare facilities in the state. Kerala¹ has the highest per capita expenditure on health in the country in 2013-14, at INR 7,636 and within this the public per capita spending comes to about INR 1,765, which is again one of the highest in the country. The expansion of medical services by the government definitely helped in creating a demand for health care in the state. But public expenditure by the state is not the sole factor for its outstanding success; there are many other factors.

This study attempts to examine the role played by the private sector in meeting the healthcare needs of the people in the state where there has been increasing demand for health care. The study is specifically focused on the role of small private medical institutions including clinics, nursing homes and hospitals.

It examines the role of Christian missionaries and erstwhile rulers before the formation of the state of Kerala in 1956. The presence of Christian missionaries in the state of Travancore and Cochin contributed to the socio-economic development of the states. The progressive reforms adopted by the rulers of Travancore and the generous support given to the medical missions run by the missionaries were instrumental in developing an institutionalized system for delivery of health services.

After the formation of the state of Kerala, the government was keen on expanding its healthcare facilities, but a strong foundation for healthcare was set up even before the state's formation. Despite the deterioration in the quality of medical care rendered by public medical institutions from the 1980s, Kerala was still able to improve its health indicators. The study examines the contribution of small private medical institutions during the 1970s, 1980s and the 1990s when Kerala encountered a fiscal crisis and yet made remarkable developments in its health sector.

The study examines the relevance of small private clinics, nursing homes and hospitals in the current scenario in Kerala and stresses the need for such institutions to meet the demand for healthcare among the people. Our findings reveal that excessive regulation will

¹ Kerala health accounts 2013-14

disproportionately affect the operations of small private medical institutions, which adversely affect the health system in Kerala. It looks at the question of whether a state like Kerala, needs stringent regulations to ensure minimum standards and if it is the right approach to tackle the challenges in the health sector.

1. Introduction

Good health is central to not just the wellbeing of an individual but it mirrors the development of a nation too. Dr Amartya Sen has postulated that health is one among the basic capabilities that gives value to human life. Three of the eight Millennium Development Goals set by the United Nations (2000) pertain to health signifying the role of health as a driver for economic growth.

It is evident that developed nations enjoy better healthcare provisions and have higher health indicators than developing nations which implies that with the progress of the economy, health of the citizens also improve. Public expenditure on health by developed countries is distinctly higher than in the developing nations which signify the relevance of investing on health, thereby making health care services accessible to all. The ⁱcurrent health expenditure as a percentage of GDP is 16.8 percent and 11.2 percent respectively in developed nations like United States and Germany, while it is only 3.9 percent in India. Conversely, it is also true that improvement of the health of the people is directly related to the economic progress

and development of a nation. Ill health and low life expectancy are attributive to 50 percent of the economic differentials between developed and developing nations as per the World Bank (2005).

It is evident that better healthcare need not wait for the development of the economy and Kerala has proved the same by attaining high health indicators amidst economic backwardness. Amartya Sen stated that “Kerala, despite its low income level has achieved more than even some of the most admired high growth economies such as South Korea” (1997). Since 1970s, Kerala has garnered international acclaim for its outstanding achievements in health indicators even without large scale industrialization and urbanization. Kerala still stands ahead of other states in India, in terms of social development indicators which are comparable even to developed nations. According to the Human Development Indexⁱⁱ ranking in 2016, Kerala is at the top of the human development ranking with a score of 0.712 whereas the national average is 0.624. The infantⁱⁱⁱ mortality rate in Kerala is 12, which is the lowest in India, and the state has the highest life expectancy rate of 71.4 in India.

Though Kerala has high indicators for health compared to other states, it also has high morbidity rates and prevalence of

non-communicable diseases. Another major challenge faced by Kerala is the high private expenditure on health in which out of pocket expenditure constitutes the major part. This makes healthcare services less affordable for many.

The state government had passed a Health Policy in 2013 and has proposed the draft of another Health Policy in 2018 with the intention of reducing the out of pocket expenditure on health in the state and to make quality health care affordable to all. The proposed legislation of Kerala Clinical Establishments Bill, 2017 intends to regulate the clinical establishments in the state by prescribing minimum standards to ensure provision of quality healthcare by these establishments. However, it is evident that Kerala was able to make remarkable strides in healthcare even without any health policies.

There are several factors like political awareness among people, spread of education, better infrastructure and road connectivity which contributed to the rapid development of health care in Kerala. While evaluating the success of Kerala in achieving high standards in health, it is important to consider the role played by various healthcare service providers. It can be broadly defined that services provided by government owned entities are public health services and

private health services are the ones provided by private owned entities.

It has been widely postulated that high public spending on health services compared to other states resulted in Kerala's high health indicators. It is a known fact that public spending helped in improving the health standards in Kerala. However, the role played by small private nursing homes and hospitals in improving the health status of Kerala even before the formation of the state in 1956 and afterwards, tends to be side lined by focusing more on the role of the government. The private sector burgeoned in great numbers during the 1980s and 90s when there was a gradual deterioration in the quality of services provided in the public sector. The conclusions would have been different if the impact of public spending on the health status of Kerala is assessed in two different situations-in the presence and absence of private healthcare services.

In this context, the study aims to examine the important role played by small private medical institutions in Kerala which is often ignored by focusing more on the role of public spending by the government in the Kerala model of development. The study examines the factors which favoured the development of health sector in Kerala, the contribution of private medical institutions including small private clinics,

nursing homes and hospitals in the development of the health sector of the state and their continuing relevance.

It also argues that holistic regulation of the private health sector to meet existing challenges can disproportionately hinder the operation of many of the small private hospitals and nursing homes which play a vital role in the health care system of Kerala. The study attempts to critically analyse the need for stringent regulations of the private health sector to ensure the standards and quality of treatment in a state like Kerala and its possibility to drastically affect a section of private medical institutions in the state.

2. Kerala's Journey towards achieving High Health Status: Historical Perspectives on the Role played by Various Health Providers

The foundation for a medical care system accessible to all had been prepared even before the formation of the state. There were many key players who catered to the healthcare needs of the people and other favourable factors which led to improved accessibility and availability of health services.

2.1 Role of Christian Missionaries

The presence of missionaries had a transformational effect on Kerala setting it apart from other states. The missionaries were instrumental in using education as a powerful tool to oppose social evils and caste system in the state. The^{iv} impact of education proved to be vital in shaping modern Kerala and the education of women improved their social status. European colonization and the influence of Christian missionaries induced progressive changes in the state's socio cultural environment. The missionaries also had a great influence on the government adopting progressive reforms. They worked actively in Travancore and the Christian medical missions received generous support from the Travancore state.

The Portuguese arrived in Kerala in 1498 and their missionaries^v had applied western medical practices to control common diseases like cholera, dysentery, syphilis and fever using herbs. The Church Missionary Society (CMS) sent missionaries to the state of Travancore in 1816, during which medical facilities were very limited in the state. The CMS missionaries popularized the use of the modern system of medicine in Kerala when people only followed the indigenous system of medicine.

Norton^{vi}, the first CMS missionary established a hospital at Alleppey and medicines were provided to people from other missionary centres. Maternity^{vii} aid centres and small dispensaries were established by them so as to expand the medical facilities available for people. The hospitals of the CMS were registered under The Charitable Societies Act in 1937, which set the path for opening many other hospitals providing medical aid to a large number of people.

As part of the expansion of the medical mission of London Missionary Society (LMS), it started a training school in 1864 and the students were posted at various new dispensaries. The Neyyur Hospital in Kanyakumari established by LMS medical mission offered high standards of treatment and had the latest equipment. Dr Theodore Howard Somerwell^{viii} was one

of the medical missionaries in Kanyakumari when it was part of the erstwhile state of Travancore. He was instrumental in the installation of X-ray machinery in 1923 (one of its kind in South India except Madras) and the introduction of radium for cancer treatment in 1930 in the Neyyur Hospital. He had worked as a surgeon in London Missionary Society Boys Brigade Hospital at Kundara from 1923 to 1949 where a unique operation theatre was set up for him. In 1938, he initiated a fund collection drive for healthcare in Travancore which enabled the Kundara hospital to expand to a 50 bed hospital. This signifies the role played by individual medical practitioners in providing health services for the people, the use of new treatment procedures and performance of surgeries which were very rare in the country in those times.

Table 1: Number of patients treated in Government and LMS Institutions

Year ²	Government Institutions	LMS Institutions
1870-71	66,757	12,046
1880-81	92,419	n/a
1890-91	1,20,883	n/a
1900-01	4,38,433	66,996
1910-11	5,43,345	1,13,203
1920-21	9,40,170	1,18,144
1930-31	19,75,328	1,45,532

Source: Travancore Administration Report for 1870-71, 1880-81, 1890-91, 1900-01, 1910-11, 1920-21 and 1930-31. South Travancore Medical Mission Annual Report for 1937 in Travancore Report, CWMA

²The year shown here is a Malayalam year which begins in August every year. The figures for the LMS institutions are for 1871, 1881, 1891, 1901, 1911, 1921 and 1931 respectively.

Though the government institutions treated more patients than the LMS institutions, the medical mission^{ix} in Travancore had greater reach than the other medical mission of LMS; in 1930, it treated 43.8 percent of all the patients treated by the medical missions of LMS. The Maharajas recognized the usefulness of the mission and gave large amounts in subscription and grants to the mission which helped their development.

The Salvation Army began operations much later than LMS and CMS. Its activities were extended to central Travancore^x by 1899. The Salvation Army also gave great attention to the training of Indian assistants and started a four year medical course with the financial help of the Maharaja of Travancore. Some hospitals were built in areas where malaria was prominent, it being one of the serious diseases in Travancore then.

The medical mission of LMS and CMS inspired other Christian churches and societies like Nair Service Society (NSS), the Sree Narayana Dharma Paripalana Yogam (SNDP) and Muslim Educational Society (MES) to start hospitals. The establishment of a large number of private hospitals increased the availability of medical services in the state and the missionaries played a key role. The provision of training facilities facilitated

the increase in the availability of doctors and nurses. It is evident that the availability of medical professionals with global exposure, and the multiple clinics, dispensaries and hospitals provided a strong foundation for the state's health sector.

2.2 Expansion of Health Care Services in the erstwhile States of Travancore and Cochin

Travancore and Cochin had a preeminent place in terms of healthcare facilities in comparison to Malabar and the neighbouring Madras Presidency. Their rulers played a prominent and supportive role and were keen on making western medical care available for all. Travancore and Cochin were integrated into the state of Kerala in 1956 along with the Malabar district of the Madras Presidency of British India.

Government institutions were more prominent in Travancore from the beginning. The European^{xi} system of medicine was first introduced in 1811 and the expansion of government institutions happened under the supervision of a European medical officer called a *darbar* (government physician). The^{xii} General Hospital was opened in 1865 and a medical school also started in 1869.

By 1901, Travancore^{xiii} had 35 hospital beds per 100,000 persons, whereas Malabar had only 15. Malabar had only 25 medical institutions and even in 1956-57, the number of hospital beds per 100,000 persons in Malabar was only 34. Travancore had achieved this 60 years before (1896-97). The state^{xiv} of Cochin had 33 hospital beds per 100,000 persons and seven allopathic medical institutions, or one medical institution per 108 square miles by 1909, and fared better than Malabar. The role of Christian missionaries was limited in Malabar compared to Travancore and Cochin.

There were 56 medical institutions including 12 aided ones in 1904. This^{xv} indicates that there was one medical

institution for every 125 square miles and every 52,715 of the population in comparison to one for every 224 square miles and every 60,510 of the population in Madras presidency.

The Travancore government made substantial efforts to eradicate small pox by promoting vaccination. To curb resistance from the public against vaccination, the king of Travancore Raja Ayilyam Thirunal Rama Varma III proclaimed the Royal Edict of 1879 making vaccination mandatory for all. Though the state of Kochi had also initiated vaccination programmes in late 19th century it was not able to achieve the reach attained by Travancore state.

Table 2: Progress of Vaccination in Travancore, 1862-63 to 1934-35

Period	No. of Vaccinations ³ per year	Midyear Population
1862-63- 1869-70	29392	
1870-71- 1879-80	79760	
1880-81 - 1889-90	86758	2479027
1890-91- 1899-1900	118833	2747008
1900-01 - 1909-10	151330	3175744
1910 -11 - 1919-20	225784	3706722
1920-21 - 1929-30	233305	4518838
1930-31 - 1934-35	753064	5559707

Source: Reports on the Administration of Travncore from 1038 to 1110 M.E.

³The number of vaccinations include both primary and re-vaccinations

The state also ensured the vaccination of lower castes and their treatment in government institutions. From 1914, people from all castes and communities were allowed to access medical care from all medical institutions in the state. However, lower castes were not allowed to study in government schools until the late 19th century. The^{xvi} introduction of western medicine helped in legitimizing the rule of maharajas through charitable activity and in promulgating their modernizing stance to the British.

The government became keen on the development of indigenous medicine from the late 1800s after a revitalization movement began for indigenous medicine, which had been sidelined by western medicine. The government^{xvii} opened an Ayurveda school in 1889 and sanctioned a system of medical grants to *vaidyans* from 1895-96. The school later became a college offering a five year course.

There was a high demand for healthcare in the state. The Travancore Administration Report 1886-87 states that many petitions were received with the request to open more hospitals and dispensaries which forced the state to respond to their needs. There was a subsequent increase in the number of patients treated at government hospitals as seen in Table 1. The increased demand for healthcare needs among the people prompted the state to offer continuous support to the medical missions run by missionaries. The^{xviii} state had 140

government medical institutions, 32 hospitals and 108 dispensaries and 20 private medical institutions that received grants-in-aid from the state by 1946-47 which explains the rapid investment on infrastructure facilities for healthcare in the state.

It is evident that the development of infrastructure facilities for healthcare and the collaboration with the medical missions run by the missionaries enabled the expansion of public health activities in the state of Travancore. The next section examines the role of government and private players for the expansion of healthcare services after the formation of the state of Kerala in 1956 and the myths associated with the Kerala model of development

3. Progress in the Health Sector of the State of Kerala (1970s-1990s)

It is evident that Kerala had a comparatively large number of medical institutions and infrastructure facilities even before its formation. It was easier for the government to expand the health facilities in the state as a strong foundation for healthcare was already laid for institutionalizing a framework for the development of healthcare and reduction of mortality rates.

3.1 Public health expenditure on health and its implications on healthcare

Many social scientists have attributed the rapid progress in social indicators made by the state to large government spending on the social sector. The state of Travancore was able to make rapid progress in the field of health and education due to the commercialization of agriculture and modernization programmes spearheaded in the 1860s. The expansion of trade resulted in the increase in the revenue of the government, so that the government had a surplus budget till 1904-05. This enabled the Travancore government to allocate significant proportion of its expenditure on health and education. The budgetary allocation for health care was 0.39 percent in 1862-63 which rose to 4.07 percent by 1899-1900 and increased to 4.14 percent by 1947. The public expenditure for health care increased by 26 times between 1871-72 and 1946-47.

After the formation of the state of Kerala in 1956, the expansion of medical facilities by the government was predominantly from 1961 to 1986. There has since been a noticeable decline in the quality of services in government medical institutions over the years. This is mainly attributed to the decline in capital expenditure in the

health sector which stagnated during the 1980s and the continuous growth in revenue spending into the ^{xix}1990s despite the fiscal crisis. Salaries and pension for employees constituted the major part of the revenue expenditure on health. This had a drastic effect on infrastructural facilities and supplies to the government facilities which in turn impinged the quality of public health services.

3.1.1 Public Expenditure on health by Kerala in comparison to other states

Kerala stood ahead of other states in terms of per capita healthcare expenditure from the early years of its formation. A study^{xx} by National Institute of Public Finance and Policy (NIPFP) observes that there was wide variation in the per capita healthcare expenditure of the states in 1974-75 which narrowed down by 1990-91. Bihar and Uttar Pradesh had the lowest per capita healthcare expenditure and their relative position with respect to other states did not change much in the stated time period. The disparity in per capita healthcare expenditure of the lowest spending state, Bihar and the highest spending state Kerala was 1: 3.83 during 1974-75, while it came down to 1:2.62 during 1990-91 when Tamil Nadu was the highest spending state. The percentage increase in the per capita expenditure on health for the states of Bihar and Uttar Pradesh during the time period from 1974-

75 to 1990-91 was 124.5 percent and 123.55 percent respectively while it was only 46.28 percent for Kerala. Thus the states with very poor indicators of health were also keen on increasing their expenditure for healthcare like Kerala.

Kerala, uniquely among other states, was able to attain remarkable development in the healthcare sector despite low per capita income while states like Maharashtra and Punjab attained relatively high development having high per capita income and better economic development. The strong foundation for healthcare which was laid before the formation of the Kerala state helped it develop its healthcare facilities even without further development of the existing infrastructural facilities.

The term^{xxi} 'Kerala Model' came into being early in the 1980s and it was associated with the study done by Centre for Development Studies on Poverty, Unemployment and Development Policy specific to Kerala. Though the study signifies the role of the state in the support given for healthcare and education which reduced social inequalities, it didn't state that Kerala presented a model of development. The public expenditure on health has definitely helped the state improve its health status, but it is not the only contributing factor.

The study^{xxii} done by Ramankutty and Panicker (1995) concludes that the government played a pivotal role in developing on the foundation set for an unequivocal health system in the state in the early years but failed to make further developments due to the fiscal crisis from the 1980s. The public health care system prioritized family planning over other health services thereby reducing access to other services. A study done by Kunnikannan^{xxiii} and Aravindan (2000) to explore the Kerala Model of Development states that a larger share of the resources were spent on family planning without considering the needs of the community. It is evident that the priorities of the government were not rightly focused on the health care preferences of the people and resources were not allotted in an efficient way to improve the health status of the state.

There has always been demand for healthcare in the state, due to which the state of Travancore spent more on healthcare and started many medical institutions. However, the government of Kerala was not able to meet the increasing demand for healthcare as they failed to maintain the quality of the existing facilities in healthcare institutions.

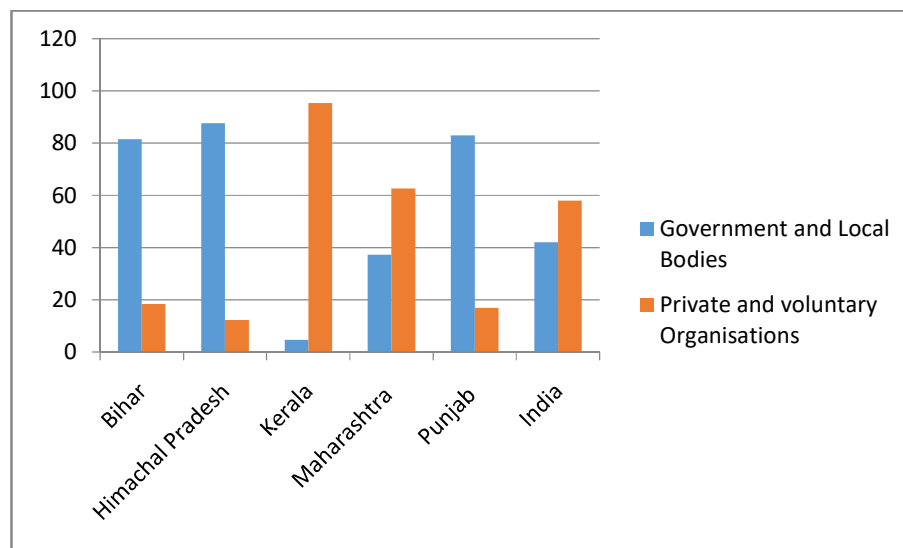
3.2 Role of Private Medical Institutions (1970s-1990s)

The private^{xxiv} sector played a significant role even before the formation of the state, by providing health services in institutions like mission hospitals. The private sector comprised a heterogeneous group of healthcare providers and their scale of operations ranged from individual practitioners running small clinics, to small and medium sized hospitals to large corporate hospitals. While probing the achievements of Kerala in its health sector, there is a general tendency to undermine the vital role played by the

private sector. This is mostly due to the limited availability of data and information on the role played by private medical institutions.

Figure 1 indicates that 95.31 percent of the total number of hospitals in Kerala in 1991 was run by private and voluntary organizations. Only 4.69 percent of the hospitals belonged to government and local bodies. It is seen that the share of private hospitals was considerably higher in Kerala in comparison to other states and the nation as a whole.

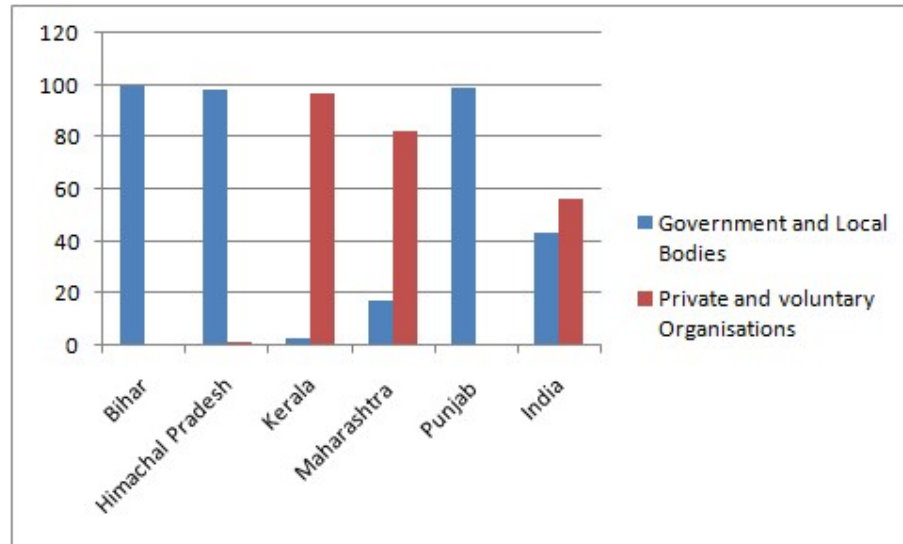
Figure 1: Number of Hospitals in selected states in 1991



Source: CMIE District level data for Key Economic Indicators, Health Information of India 1991 CBHI, DGHS, MHFW, GOI, New Delhi, CMIE Basic Statistics relating to the Indian Economy Vol 2- States Sept

1991

Figure 2: Number of dispensaries in selected states in 1991



Source: CMIE District level data for Key Economic Indicators, Health Information of India 1991 CBHI, DGHS, MHFW, GOI, New Delhi, CMIE Basic Statistics relating to the Indian Economy Vol 2- States Sept 1991

Figure 2 shows that out of 1752 dispensaries in Kerala, 97.09 percent belonged to private and voluntary organisations while the share of government dispensaries was only 2.91 percent. The dispensaries constituted 37.9 percent of the total number of medical institutions run by private and voluntary organization. This signifies the corroborative role played by private medical institutions in meeting the health needs of the people, especially in dispensing primary health care.

As stated earlier, in Travancore government medical institutions catered to more patients than LMS and there was an increase in the number of government

medical institutions to meet the demand for healthcare among the people. The expansion of medical services by the government had an impact on creating a demand for health services as people realized the need for better healthcare. The increasing demand for health services in Kerala is attributable to many factors in the social environment in Kerala. High literacy rates, even among females, instigated the need among people to avail health services and people availed health services from government institutions considering it as their legitimate right.

The settlement pattern and better road infrastructure in Kerala were other contributory factors which facilitated easy

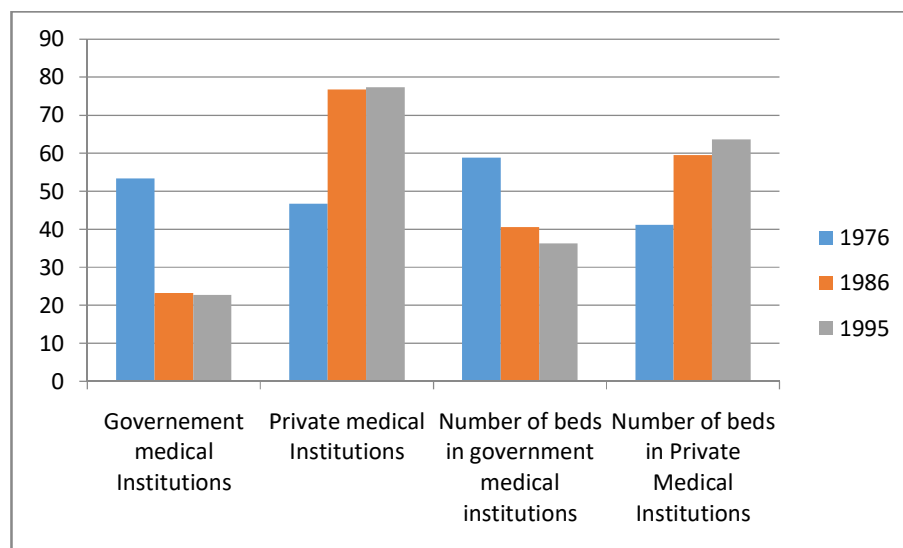
access to nearby towns where medical institutions were situated. The demographic transition of increase in ageing population which took place in Kerala during 1970s and 1990s also spurred growth in the demand for healthcare services in Kerala. The^{xxv} life expectancy for men and women during the decade of 1971-81 was 60.6 years and 62.6 years respectively and it increased to 70 and 76 years during the period of 1991-96.

But it is evident that by the 1990s, the number of private hospitals and dispensaries outnumbered the government medical institutions. The number of beds in^{xxvi} the government sector increased from 36,000 to 38,000 during 1986-1996, with a

slight increase by 5.5 percent as against a 40 percent growth in the number of beds in private institutions from 49,000 to 67,500. The spurt in the growth of private medical institutions could be attributed to the rise in disposable income and easier regulatory barriers in opening and running private medical institutions.

Figure 3 shows the percentage share of government and private sector in terms of number of medical institutions and number of beds during the years 1976, 1986 and 1995. The data clearly specifies the increasing contribution of private sector in terms of infrastructural facilities from the 1970s to the 90s.

Figure 3: Percentage share of Government and Private sector in terms of Number of Medical Institutions and Number of beds during 1976, 1986 and 1995



Source: Government of Kerala (1985, 1995), Report on the survey of private medical institutions in Kerala 1995. Thiruvananthapuram. Department of Economics and Statistics, 1996

The private sector enabled the rapid advancement of medical technology for diagnosis and therapy like CT scan, endoscopy, neonatal care and MRI, outpacing the government in terms of technology and modern facilities for diagnosis. According to the study^{xxvii} by Sara Abraham (1995), out of the 26 CT scan centres in the state in 1995, 22 were in the private sector.

The prevalence of communicable and non-communicable diseases is one of the health challenges faced by Kerala amidst its high health indicators. As per the results of the 28th round of National Sample Survey of 1974, the morbidity rate was 71.21 per 1000 for rural Kerala while it was only 22.46 for India. The morbidity for chronic illness was 83.68 per thousand for rural Kerala compared to 20.98 for India. The combined morbidity rate for acute and chronic ailments for Kerala was 118 per 1000 for rural Kerala and 88 per 1000 for urban Kerala in comparison to 55 and 54 for all India as per the National Sample Survey (1995-96).

The^{xxviii} advancement of private diagnostic services makes it an inevitable partner for public health surveillance. The role of the private sector in achieving 100 per cent coverage of various vaccination programmes in the state is unanimously acknowledged. Vaccines were made available in small private clinics and hospitals and administered by private

practitioners thereby facilitating their easy availability for all. The immunization^{xxix} coverage substantially increased during 1980s. The study done by National Institute of Health and Family Welfare on universal immunization programme among children aged 0-23 months in 1986-87 states that Kerala was able to achieve a coverage of about 90 percent for all the vaccines.

The Immunisation survey^{xxx} of 1991 states that one-third of the total number of child immunization and more than half of TT vaccination was given by private physicians. Private hospitals and doctors have also been part of awareness campaigns and health camps initiated by various medical bodies even in remote areas of the state.

The results of Household Consumption Expenditure survey of 1977 and 1993 indicates that the share of the population to the states consumption expenditure increased during the given period. While 50 percent of the population accounted for 20 percent of the state's total consumption expenditure in 1977, it increased to over 30 percent in 1993. The increase in disposable income for the lower income group of people enabled many in the group to avail private healthcare services. There^{xxxi} has been an increase in the proportion of birth taking place in private hospitals from 42 percent in a survey conducted in 1987 to 63 percent in 1996 which indicates that more

people utilized services from private hospitals.

It is evident that private medical institutions played a major role in the various aspects of curative, preventive and promotive healthcare in the state, continuing the initiatives implemented by the missionaries. The study done by Pillai (1999)^{xxxii} investigated the role of the Kerala Model and concluded that the private sector significantly contributed to the health status of Kerala overarching the contributions by the government sector. It is interesting and vital to consider the size of these private medical institutions which played a contributory role in meeting the health needs of the people.

3.2.1 Contribution of Small Private Nursing homes and Hospitals

It is known that around 75 percent of the population in Kerala goes to private medical institutions for treatment. The stakeholder interviews held as part of the study revealed that of the 75 per cent visiting private medical institutions, around 75 percent go to small clinics, nursing homes and hospitals as they get effective treatment at comparatively low cost. It was revealed that they play a major role specifically in rural areas.

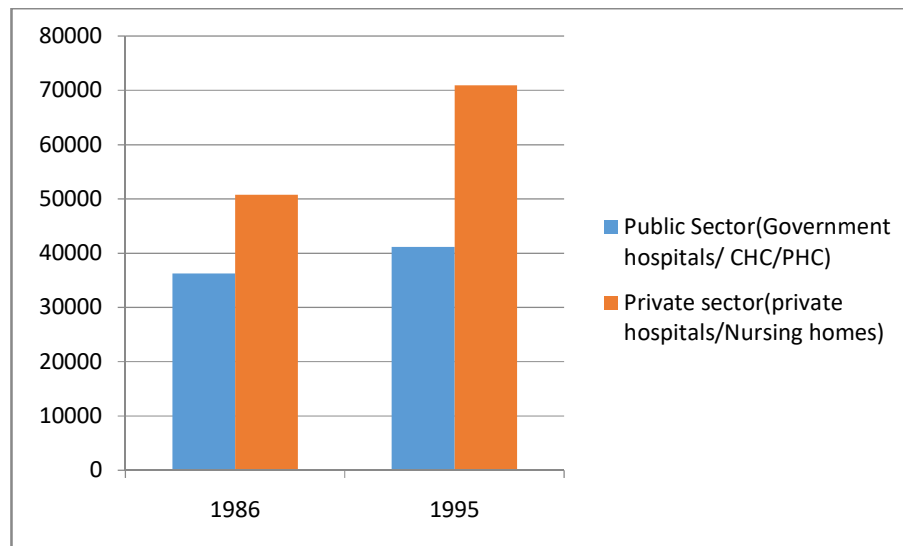
Table 3 shows that there has been a rapid increase in the number of private medical institutions under other systems of medicine in comparison to allopathy hospitals during this time period. The percentage of hospital beds in private sector was 58.3 percent in 1986 which increased to 63.3 percent in 1995.

Table 3: Number of Private Hospitals/ Nursing Homes in Kerala during 1986 and 1995

	1986	1995	Percent Increase in the number of private hospitals/Nursing homes from 1986 to 1995
All systems of medicine	2042	2274	11.36
Allopathic System of medicine	1864	1958	5
Other system of medicine	178	316	77.52

Source: Department of Economics and Statistics, Government of Kerala, Report on Private Medical Institutions in Kerala for the years 1986, 1995

Figure 4: Number of Hospital beds in Public and Private sector in Kerala during 1986 and 1995



Source: Department of Economics and Statistics, Government of Kerala, Report on Private Medical Institutions in Kerala (for the years 1986, 1995)

Figure 4 shows that there has been a rapid increase in the number of beds in private hospitals and nursing homes from 1986 to 1995 while there was only a meagre increase in government medical institutions. As per the study done by Kannan et al (1991), the private sector had a balanced presence in both rural and urban areas of the state. It is seen in table 4 that 49 percent of the doctors in the private sector and 53 percent of the beds

were in rural Kerala. A rough idea of the size of private medical institutions which operated in the 80s and 90s emerges from the data on average number of beds per private hospital. The^{xxxiii} average number of beds per private allopathic hospital was 26 and 34 during 1986 and 1995 respectively. Based on the data, it may be assumed that majority of the medical institutions were in the category of less than 50 beds.

Table 4: Percentage share of distribution of health care facilities and resources under government and private sector in rural and urban areas

	Government		Private	
	Rural	Urban	Rural	Urban
Institutions	86	14	66	34
Doctors	33	67	49	51
Beds	25	75	53	47
Paramedics	39	61	51	49

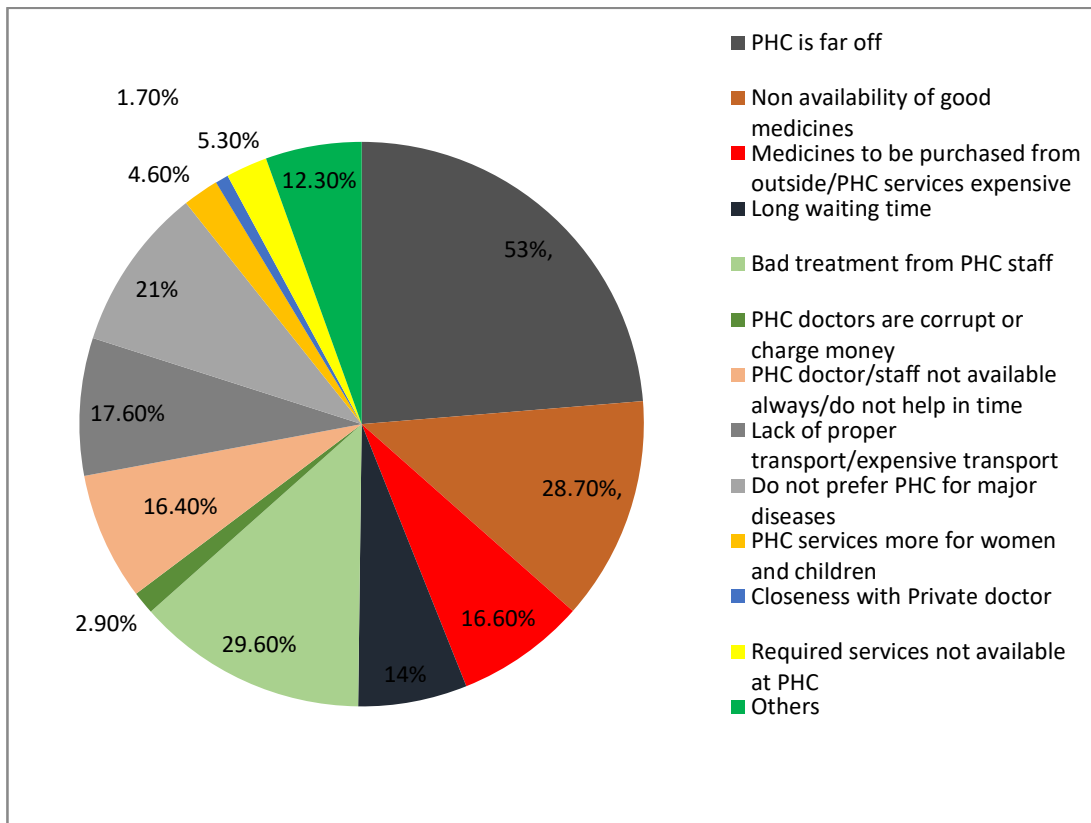
Source: Kannan et al (1991) Study on concentration of Private vs Public healthcare facilities

Though government medical institutions were there at the three tiers of health care, people preferred to avail services from private medical institutions for various reasons. According to a study done by KSSP in 1991 among 10,000 households, 83 percent of the households were aware

of the PHC, yet only 39 percent availed their services. Also only 23 percent used government health facilities in cases of acute illness (Kannan, 1991).

Figure 5 lists the various reasons for not preferring medical help from PHCs and Sub centres.

Figure 5: Reasons for not preferring Medical Help from Primary health Care Centres and Sub centres



Source: Uplekar, Mukund and Alex George. 1994. Access to Healthcare in India: Present Situation and Innovative Approaches. Discussion Paper Series No.12. The United Nations Development Programme

The data^{xxxiv} shows that in the 90s the number of private hospitals per 10 sq km was 1.10 as against 0.32 government hospitals per 10 sq km. The survey results indicate that 53 percent of the respondents considered distance as the major factor for not utilizing government PHC services. The presence of small private clinics and hospitals along with government PHCs even in rural areas

provided primary health care. Non-availability of medicines in PHCs and ineffective treatment were other major reasons for the non-preference of availing health services from government PHCs and Sub-centres.

Interaction with the stakeholders revealed that people prefer to visit small clinics and nursing homes as they are easily accessible and save time as there are not many

procedures to meet the doctor. Those belonging to low income and medium income groups often visited small clinics and nursing homes. The personal rapport among the patients and the doctor who runs the clinic was an important aspect in determining repeated visits to the same clinic. Earlier doctors running small private clinics used to go to the houses to assist deliveries which signify the role played by the private practitioners in providing medically assisted births. Free medicines were also given to the very poor implying that small clinics played a similar charitable role as the missionaries earlier.

The preference for treatment in private medical institutions especially when small nursing homes and hospitals were in great numbers, in the 1980s and 1990s, indicate that the objective of providing quality healthcare to poor people can also be achieved through private medical institutions. It also implies the relevance of these smaller institutions and their significant contribution to the healthcare sector in Kerala.

4. Relevance of Small Private Nursing Homes and Hospitals in the Present Scenario in Kerala

There has been a decrease in the number of private allopathic hospitals by 24.6

percent from 1984 to 2004. However, the increase in the average number of beds per hospital under the allopathic system increased to 41 in 2004 from 26 in 1986. The^{xxxv} increase in average number of beds per hospital despite the decrease in overall number of hospitals under allopathic system, implies the tendency for increase in large hospitals with more number of beds. It signifies that there has been either closure of small nursing homes and hospitals or their transformation into large hospitals. There was a perceivable shift during the 90s in the health sector as private sector emerged as a major provider of healthcare services.

The large share of private expenditure in health is one of the major challenges faced by Kerala. The private^{xxxvi} health expenditure in Kerala is INR 19,863 crores which comprises nearly 80 percent of the total health expenditure in the state. 95 per cent of this private expenditure is out of pocket expenditure and outpatient visits have the maximum share in overall out of pocket expenditure. As per National Family Health Survey-4, Kerala is among the top five states in the nation with average expenditure above INR 6000 per delivery in a government hospital. It indicates the high burden on the poor to avail health services in Kerala which once boasted of affordable health care for all.

The trend in the rise of super specialty hospitals at the cost of small hospitals and

clinics questions the future of accessible and affordable healthcare for the people as these small private medical institutions were easily accessible and played a significant role in providing basic curative healthcare even for the poor. It is clear that many unnecessary investigations are done in corporate hospitals. These hospitals conduct many of these investigations because if they fail to diagnose the problem correctly and another hospital diagnoses the real problem, then the patients have the right to sue them as per The Consumer Protection Act of 1986. However, it brings additional burden on the low and middle income groups when they visit the corporate hospitals even for basic healthcare and diagnosis.

The corporate hospitals are mostly preferred by the rich and those with insurance coverage and most are still dependent on small and medium hospitals for their treatment even now. Though

Kerala has achieved high health indicators, the social coverage is limited. The role of small private nursing homes, clinics and hospitals is still relevant in Kerala given the challenges of high out of pocket expenditure, as they fill the gap in providing accessible and basic healthcare to the people in Kerala where there is ever increasing demand for healthcare.

4.1 Impact of Regulation on Small Private Clinics, Nursing Homes, Hospitals and its Implications

As mentioned earlier in the paper, the huge demand for healthcare in the state of Travancore and the need to legitimize the rule of Maharajas led to the vast expansion of government medical institutions. Hence, the medical missions run by missionaries also received generous support from the government and this greatly improved healthcare facility in the state.

Table 5: Number of Private Hospitals in Kerala

Number of Beds	Number of Hospitals
Less than 20	57
21-50	77
51-100	49
101-200	34
201-300	13
301-500	8
Above 500	3

Source: Kerala Private Hospitals Association

People in Kerala have high health seeking behaviour- almost a third of the households in Kerala spend 10 percent or more of household consumption expenditure on health. As per the NSSO estimates in 2014, the morbidity rate in Kerala is 30.8 percent which is higher than the national average of 9.8 percent. Furthermore due to the demographic transition, Kerala has got a rapidly ageing population and the demand for healthcare for the elderly population is very high.

Table 5 shows the number of private hospitals in Kerala at present registered under Kerala Private Hospitals Association(KPHA)

Though the numbers does not include all the hospitals in Kerala, it gives an idea of the number of hospitals based on their bed strength. It is seen that majority of the hospitals fall under the category of hospitals with less than 50 beds. As per the nursing associations^{xxxvii}, there are around 1100 private hospitals in Kerala, out of which only 457 have more than 50 beds, which again implies that majority of the hospitals in Kerala belong to the category with less than 50 beds.

According to Ramankutty (1989) people utilize services from private hospitals as the travel time and waiting time are relatively lower in the private sector. Thus the presence of small private hospitals has made health services easily available. Considering these aspects, it is cogently

clear that small nursing homes and hospitals are still relevant in Kerala.

The recent approach of the government of Kerala in terms of regulation of the private sector seems dissimilar to the kind of approach undertaken by the rulers of Travancore. The intention of the regulatory measures is to ensure maintenance of physical standards, standards of treatment and to check profit motivated practices in private healthcare sector. Though this is an issue raised against the private healthcare sector, it is to be pondered if it can be generalized in a state like Kerala. Panikar (1999) states that if universal literacy and a strong public health system could create demand for modern medical care, it would also have set standards for provisioning of healthcare services in the state and hence the expectations about healthcare would be high in Kerala.

The Kerala Clinical establishments Bill in 2017, passed by the state Assembly intends to be a regulatory model focusing on patient safety. Imposing minimum standards on clinical establishments, which are practically difficult to comply with, can affect the category of small clinics and hospitals more than any other category of medical institutions. The small private clinics and hospitals with less than 20 beds which constitute a major share of the number of hospitals in Kerala are also not exempted from the Act and only those

institutions which proffer just consultation services and prescriptions are exempted from the Act.

During our stakeholder interaction, it was said that right now there are around 60 to 80 laws to regulate the functioning of private clinics and hospitals and more than 1000 small private medical institutions have closed down due to increasing operational costs and strict regulations. So the question is if there is need for such stringent regulations in a state like Kerala, making the entry and operation of private medical institutions more difficult, to ensure minimum standards in the private healthcare sector. Also, will the new regulations benefit the state in meeting existing challenges in the healthcare sector?

The issue of the Government notification on minimum wages for nurses and other hospital staff in private medical institutions will add onto the existing burden of high operating cost of small private medical institutions. The stipulation of minimum wages based on number of beds rather than levels of care itself is a farce as the number of beds is hardly an indicator of the extent of patient care.

Another aspect is the occupancy rate of beds in small hospitals with inpatient facilities. During our interaction with the stakeholders, it was pinpointed that the

occupancy rate in hospitals is mainly seasonal and it can come down to 30 to 40 percent at times. Since minimum wages have been specified based on the number of beds, many of the hospitals are trying to bring down their bed strength; it also reduces the incentive to provide inpatient facility. Small clinics and hospitals cannot increase their service charges beyond a limit as there is competition from many other hospitals. Furthermore, the increase in the charges will ultimately affect the common man.

The demand of the nurses' community is justifiable as they need to get decent wages for the work they do. But there are other aspects which need to be considered along with this. It is estimated that there is a hike of 133 percent in the wages and with the increased wages, the human^{xxxviii} resources cost of a hospital will account for 67 percent of the total earnings. It is quite evident that it is difficult to survive in a competing environment with the remaining 33 percent of the earnings.

Majority of the small clinics and hospitals in rural areas are run by individual doctors, except those run by the medical missions. Considering the variations in the occupancy rate in hospitals, there would be drastic changes in the profit of small hospitals with less than 50 beds, and decrease in profits will also simultaneously

lead to a decrease in the possibilities of improvement of facilities and quality of health care services. This will have a drastic effect on the availability of health services in rural areas.

Poor staffing and working environment can have a significant effect on the job satisfaction of the nurses and the quality of care provided to patients. In order to improve staffing, more nurses need to be recruited but high wages can make hiring more difficult for small and medium private medical institutions. Small private medical institutions play a major role in providing jobs for inexperienced nurses and other staff. But stringent regulations which make hiring difficult can hinder the job opportunities available for inexperienced nurses.

The regulations enforced by the government on the private health sector without considering the real costs associated with complying with such regulations will largely affect their existence and operations in the state which will have a massive effect on the health system of the state. The approach taken by the government will neither help those who run the hospitals nor the nursing community and other hospital staff. It can also discourage the entry of new small private medical institutions and hinder the operation of the existing ones, as it is not possible to meet all the regulatory

requirements and yet charge minimum fees.

It was seen earlier that the large sums in subscriptions and grants for the medical missions, given by the government, greatly helped them at the early stages of their development. This ultimately benefitted the people as they were able to get accessible and affordable quality healthcare. However, the approach taken by the government in Kerala seems to discourage the opening of new hospitals and affects the functioning of the existing ones, especially the ones belonging to the small and medium category. The government has been increasing the wages and regulations on private hospitals while not helping the private sector which faces escalating costs to comply with them.

5. Conclusion

The medical missions of the Christian missionaries, social reform movements and the progressive measures of the rulers of the erstwhile states of Travancore and Cochin laid the foundation for a strong healthcare system in Kerala. The public expenditure on healthcare and education definitely helped in reducing social inequalities as implied by the Kerala Model of development during the 1970s and 80s. However, the private sector played an unambiguous role in improving healthcare

services in Kerala from the 1970s to 1990s. The small nursing homes and hospitals played a crucial role in helping Kerala achieve health status as they were instrumental in providing quality care at affordable prices. The small private clinics, nursing homes and hospitals in the private sector still continue to play an important role in sustaining the health standards and surveillance of infectious and non-communicable diseases.

Increasing number of beds in super specialty hospitals are a threat to small and medium category of hospitals. This trend will not help the state in providing accessible, affordable quality care for all. The new regulations by the government will disproportionately affect small nursing homes and hospitals, thereby favouring bigger corporate players and putting the sustenance of Kerala's high health status at risk.

The collaboration of the government with the medical missions of the missionaries in the state of Travancore greatly helped the state in meeting the increasing demand for healthcare. As stated by NSSO^{xxxix} (1998), the increased role of the private sector can ease the burden on the government. There is an increasing demand for health care in Kerala even now and the need of the hour is a collaborative effort between the government and the private sector. The government still partners with the

private sector, including small hospitals, to implement schemes, awareness campaigns and training programmes.

While the increase in out of pocket expenditure is a challenge in the health sector of Kerala, the solution to curb it is not just to impose regulations on the private health sector. Other alternatives like health insurance schemes can be considered. Given the fact that Kerala was able to make remarkable achievements in the health sector even without implementation of any health policies, one needs to carefully consider the need for stringent regulations to regulate the private health sector.

By imposing multiple regulations on the private health sector, the government is treating it as any other profit motivated commercial enterprise, which is not the right approach. There is huge demand for healthcare in Kerala and the existence of small private medical institutions is a necessity for the state to meet this demand.

The unfavourable attitude towards private hospitals will adversely affect the operation of small private clinics and hospitals and leave a gap in the state's healthcare system. The government needs to step up and play the role of a facilitator by supporting private healthcare providers meet the increasing demand for healthcare in the state

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