

DEVELOPMENTS AND EMERGING ISSUES IN PUBLIC AND PRIVATE HEALTH CARE SYSTEMS OF KERALA

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ABSTRACT

Kerala was universally recognized for its good health indicators. Even before independence the specific policies, efforts and expenditure for health by the Maharajas of Travancore and Cochin was remarkable. The unswerving governmental support for the welfare sectors till the mid 1980s served as a catalyst for the development of health services in Kerala. This was also reflected in the expansion of health infrastructure. During the periods between 1960s to mid 1980s there was an increase in the public sector institutions. But thereafter the pace of growth of public health care system slowed this decline was made good by the private medical care setup which makes Kerala one of the state with the highest reductions in public health sector contributions.

Keywords: Health care system, Health policy, Hospitals, Kerala, Medical Sector, Private health care, Public health.

INTRODUCTION

Health care is the prevention, treatment, and management of illness and the preservation of mental and physical well-being through the services offered by the medical and allied health professions. Providing drugs and treatment through a skilled practitioner with appropriate advice, tests and procedures to cure or prevent disease are the main components of the health care system. Health care covers not only medical care but also all aspects of the preventive care too [1].

rate, reducing health care expenditure and avoiding catastrophic ruin, improvements in nutritional status, provision of basic sanitation and health, man power requirements, resources development and certain other parameters such as food production, literacy rate, reduced level of poverty and providing equitable access to medicine to all citizens etc.

Health care system is intended to deliver the health care services. It constitutes the management sector and involves organisational matters. It operates in the context of the socioeconomic and political framework of the country. In India, it is represented by five major sectors or agencies which differ from each other by the health technology applied and by source of funds for operation [2].

According to the World Health Organisation (WHO), a well-functioning health care system requires a robust financing mechanism, well-trained and adequately-paid workforce, reliable information on which to base decisions and policies, and well maintained facilities and logistics to deliver quality medicines and technologies. In India health is a state subject. The growth and development of the public health sector depends very much on the budgetary allocation and other supports by the state government. The situation is entirely different in the case of private sector. Studies have shown that the budgetary allocation to health care sector shows more of supply side factors than demand side in public sector where as health care expenditures represent more of demand side than supply side in the private health care sector [3].

The private health sector has grown drastically during the post-independence period in the country due to the incentives and support extended by the governments at the centre and the states. The contribution of private sector was less than 8 % at the time of independence (1947). By 2012, nearly 80% of healthcare services in India were provided by private sector and it accounts for 85% of the health care professionals including doctors, nurses, pharmacists and others. The public sector currently provides about 20% of outpatient care services, and over 40 % of inpatient care. The Planning Commission has reported that in the private health sector incentives are tilted towards curative services and medical education [4]. Kerala is a comparatively small Indian state with 14 districts. The total area of the state is 38,863 sq.km which accounts for only 1 percent of the total area of India. As per the 2011 census Kerala has a total population of 3,33,87,677 (about 3 per cent) with 160,21,290 males and 173,66,387 females. The state has many credits to claim, particularly in the areas of education/ literacy and health care among the Indian states. Kerala has very good health care facilities and can boast of very large number of hospitals, dispensaries and nursing homes spreaded across the state. Kerala has received world wide acclaim on account of its remarkable

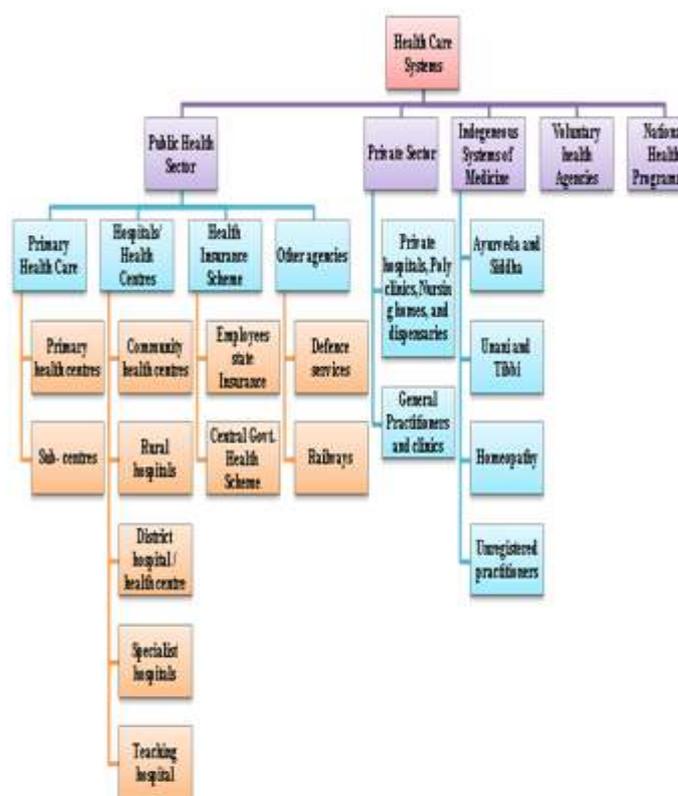


Fig. 1: Shows the health care system in India

The purpose of health care services is to improve the health status of the population. The goals to be achieved was fixed in terms of mortality and morbidity reduction, decrease in population growth

achievements in the sphere of human development despite its economic backwardness. This contradiction, often quoted as the 'Kerala Model of Development', was made possible by low cost health care and its universal accessibility and availability even to the

poorer sections of society [5]. For many poor income countries, Kerala had become an ideal model. Through this study we are focussing and analysing the public and private health care system of Kerala and identifying the emerging issues.

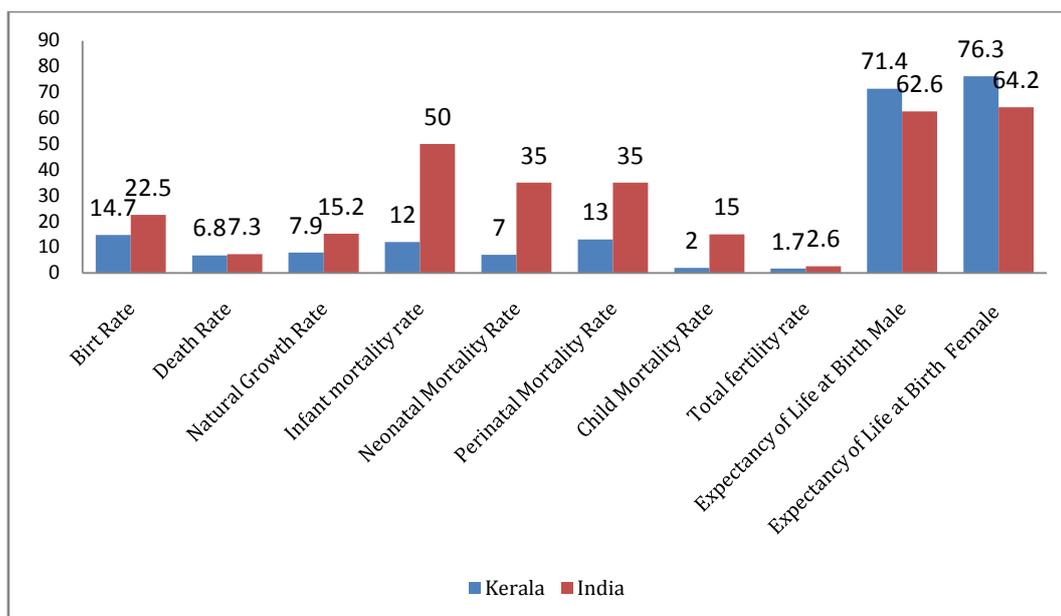


Fig. 2: Health Indicators of Kerala compared to India

Source: National Rural Health Mission (NRHM 2012), Program Implementation Plan, Kerala.

Public Health Care System of Kerala

Kerala state was formed in November 1956, merging the former princely states of Travancore and Cochin with Malabar district ruled by the British prior to Independence. The health status of the populations of Travancore and Cochin was having much lower levels of mortality and higher life expectancies than did Malabar. Kerala has a long tradition of organised health care. Families of practitioners of indigenous systems like Ayurveda handed their traditions from generation to generation and the people of Kerala become very much accustomed to approaching the healers when they are sick. Even before the formation of the state in 1956, the remarkable progress made by the state of Kerala; particularly in the field of education, health and social transformation [6].

In the traditional Kerala Society, the key factors of the utilization and non-utilisation of (public) health care services are cultural and institutional factors. The public health and overall health transition in Kerala were prominently contributed by the indigenous medical system especially Ayurveda [6]. Other parallel services also enhance the development of health services such as providing safe drinking water, provision of primary education including education for women [7].

Like any other Indian states colonial powers brought the western medical system to Kerala also. During 19th century, the princely rulers took the necessary actions for the availability of western system of care to their subjects. And these developments were not confined to the preventive care, but they also established general hospitals in Thiruvananthapuram and Cochin which were more than 150 years old now.

Major steps has been taken to enhance the general socio-economic status of the people by providing preventive and curative health care through primary, secondary and tertiary level health care institutions after the post independence period i.e.; after 1947. Progressive and radical social reforms significantly affected the socio-economic transformation of Kerala Society [6]. From 1961 to 1986, the state greatly expanded its government health facilities. The number of beds and institutions increased sharply. The total number of beds in government hospitals in the western medical

sector increased from around 13,000 in 1960-61 to 20,000 in 1970-71, and 29,000 in 1980-81. By 1986, the total was 36,000. Thus the major growth phase of facilities in the government sector was before 1986, after which it slowed considerably [7].

The percentage share of different expenditure categories in Kerala's health care budgets has undergone substantial transition particularly after the 1960s. For instance, pays and allowances have increased substantially from 36.6 percent in 1960 to 62.8 percent in 1995. The decline in the share of the state health budget and the proportion allocated to drugs and medicine which was as high as 39 percent in 1960 which declined sharply to 18 percent in 1995 [6]. The inadequate budget allocation for medicine supply is the crucial problem in the health care delivery in Kerala.

The period from the mid-1970s to the early 1990s has been termed a period of 'fiscal crisis' for the state government [7]. Severe financial impact is perhaps surprising for some as the Kerala health system was once advocated as the ideal - 'Good Health at Low cost' model. Fiscal crisis was due to economic stagnation, rising social expenditure, steep rise in health care costs and this financial crisis of the government resulted in the default of cores of rupees as payment to medical companies related to the purchase of medicines and supplies to Govt hospitals.

A new Kerala model started to arise in 1990s, through decentralized administration; especially planning, uniting productive and environmental objectives and co-operation between the state Non Government Organisation (NGO) and civic movements [8]. The advantage of Kerala's decentralization is the dynamism that it has brought into the resource allocation mechanism, also seems to create inequity of a different kind between the panchayats. Decentralisation policy has strengthened the capacity of local bodies to manage scarce resources and necessitated a dialogue with the local people.

It has addressed common failures of community based strategies & community failures. But decentralization brought no significant change to the health sector both quantitatively and qualitatively and

it does not ensure empowerment [5]. In 1996, the Kerala govt brought primary health centres (PHC's) under the control of local governments (panchayats). For initiating decentralised planning; Kerala State Planning Board established the people campaign and to assist local bodies they trained nearly ten thousand voluntary resource persons. The local development plans were probably to express the political influence than a common wish, though the state government is making a sincere endeavour to initiate community based sustainable development. But it failed to create private -

public partnership at the macro level and limit Kerala's prospects in attaining sustainable development [8].

Public health system in Kerala is not geared towards the management of Non communicable Diseases and is unable to mitigate the consequences of seeking treatment. And the problem of

high morbidity reported from both urban and rural areas and Kerala has been identified as the state with highest morbidity prevalence state. This hike in morbidity culminated in declaring health package for the state [6, 9, 10]. Public sector hospitals have been continued to annoy the common people by not filling the vacant posts of the doctors. Because of the private sector boom and also the tendency of specialized doctors refusing to join the government hospitals and hence there is a severe dearth of doctors in the rural hilly and tribal areas and even some urban centres and medical colleges which reflects the anarchy in public hospitals, and no individual and personal attention is paid to the patients and those who approaching health care services [11], [12]. Since access to hospitals in terms of distance was also considered as one of the major factors in the utilisation of health care system [13]. Table 1 shows the distribution of government health facilities year wise.

Table1: Public Health facilities year wise distribution.

Year	1969		1974		1978		1983		1985		2001		2006		2012	
	No	Beds	No	Beds	No	Beds	No	Beds	No	Beds	No	Beds	No	Beds	No	Beds
Name of Institution	No	Beds	No	Beds	No	Beds	No	Beds	No	Beds	No	Beds	No	Beds	No	Beds
Hospitals	109	17026	119	20153	141	24288	149	23673	150	24291	135	2482	136	23665	125	23856
T.B clinics	20	302	20	290	20	318	23	1518	23	1518			18	176	17	176
Secondary Health Centre	1	122	1	122	....	....	....	....	....	....	104	4380	114	4730	230	7146
P.H.Centre/ Units	162	1351	163	1456	163	1847	179	2135	189	2262	945	5222	929	7675	835	5643
M.C.H.Centre	1	20	1	20	1	20	5	54	6	94			....	....	..	....
Dispensary	230	1112	468	1468	563	1476	631	1481	626	1545	53	176	59	190	....	....
Others	1	.....	2	20	....	....	6	1866	6	1866	....	....	18	0	48	198
Total	524	19936	773	23509	888	27949	993	30727	999	31576	1237	37946	1274	36436	1255	37021

Source: Administration Report of Health Services, Standardised list of Govt. Allopathic Medical Institutions. Health Services Dept. Govt. of Kerala

Some of the reasons of unused / under used potentials of many institutions are a) Lack of periodic or annual maintenance of buildings resulting to dilapidated conditions. b) Non- availability of building / lack of proper electrification/ lack of water and sanitation facilities. c) Lack of manpower: Often building and equipment were constructed and established but the lack of man power results in idling of a facility. d) Lack of sufficient equipment and furniture, rusty and unrepaired cots, spoilt mattress and torn dirty bed sheets or their absence is a common sight in many of the government healthcare institutions. e) Majority of them may not even have basic clinical investigation facilities and may even lack life supporting facilities like round the clock availability of oxygen etc. f) shortage of medicine due to the irregular supply of medicines and other materials, so patients seeking medical care from the government hospitals are forced to buy them from outside, curt attitudes of doctors and other staff members, bribery, absence of cleanliness.

Table 2: Major Medical Institutions 2011

		Private sector	Govt. sector (DME)
1	Medical College	17	5
2	Dental College	19	3
4	Ayurveda Medical college	13	3
5	Homoeo Medical colleges	3	2
6	Siddha	1	1

Source: Twelfth Five Year Plan 2012- 2017; Govt of Kerala; State Planning Board Thiruvananthapuram

The number of people resorting to the public healthcare system increased during last 15 years. A study by Kerala Sasthra Sahitya Parishath(KSSP) comparing the scenario in 1996 to that of 2004 showed that 28% of the population was dependent on the

government sector in 1996 and it increased to 32% in 2004 [14]. 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 [15]. Number of major medical institutions in private and public in 2011 is given in Table 2.

Private health care System of Kerala

The private health sector consists of various health services provided by Non Government Organisations (NGO's), charitable

institutions, missions, trusts, and various types of practitioners and institutions. The corporative medical institutions are also added to this sector. The licensed practitioners ranging from general practitioners (GPs) to the super specialists, various types of consultants, nurses and paramedics, licentiates, and rural medical practitioners (RMPs) are all included in this healthcare system. The health care practitioners with no formal qualifications constitute the 'informal' sector which consists of faith healers, local medicine men / women, traditional birth attendants, priests and a variety of unqualified persons (quacks). The private health subsector institutions are heterogeneous in the size and quality and services they provide [16]. In Kerala even before the foundation of state, services were provided privately through institutions such as mission hospitals in remote areas under the auspicious of Christian churches [17, 7]. During those periods treatment is offered as services and not for any profit. Within the private health sector, for profit hospitals were initially small nursing homes and large hospitals were mostly in the not-for-profit or charitable sector. Anyhow the massive growth in numbers of specialists during post 1975 altered the entire situation, and by the mid eighties the for-profit private hospitals became a force to deal with. Post mid-seventies the State also given different incentives like concessional land, tax-breaks and duty exemptions for imports for establishing the private hospitals. The private pharmaceutical industry received significant State-benefaction for its growth through process patent

laws, subsidised bulk drugs from public sector companies and protection from Multi National Companies [18].

Expansion of private sector is due to the interruption between the intrinsic worth of service the public and private medical sector can contribute. Most of the patients preferred to utilize the private because the care provided at the public sector did not fulfil them, This inefficiency of the public facilities paved the way for the expansion of the private medical care setup in the state; this has brought about the commercialisation and the commoditisation of healthcare.

A study by T.R.Dilip entitled "Role of private hospitals in Kerala: an exploration"; he reported a decline in number of private medical institutions having inpatient facilities. Number of such institutions increased from 2042 in the year 1986 to 2274 by the year 1995, and then declined to 1942 in the year 2004. The same is true for hospitals under the allopathic system of medicine. There was a rapid increase in number of beds in private sector between 1986 and

1995. Thereafter a slight decline in total number of beds from 112,088 in 1995 to 108,684 in 2004 is noticed. Increase in this ratio despite an overall decline in private institutions with inpatient facility indicates that the large hospitals with more number of beds are increasing, while the smaller hospitals and nursing homes are either being closed down or getting transformed into larger hospitals [19]. Table 3 shows the number of private medical institutions in Kerala according to National Rural Health Mission (NRHM).

Table 3: Number of Private Medical Institutions of Kerala

S.No	SYSTEM OF MEDICINE	year		
		1986	1995	2004
		No.	No.	No.
1	Modern Medicine	3565	4288	4825
2	Ayurveda	3925	4922	4332
3	Homoeopathy	2078	3118	3226
4	Others	95	290	535
	Tot al	9663	12618	12918

(Source: NRHM, Kerala, State Health Action Plan, PART A, B, C 2010-11, GOK, Jan'10)

According to National Family Health Survey (NFHS) India 1998-99, Shown the quality of services received at government and private health facility. In that survey respondents said that they received the services for which they visited the facility. The median waiting time to receive services was 30 minutes overall, but was almost twice as high at public facilities (59 minutes) as at private - sector/NGO/ trust facilities (30 minutes). Both urban areas and rural areas respondents rated private sector facilities was cleaner than public - sector facilities (77.2% and 94%). Ninety seven percent of respondents who received services in private - sector said that the staff talked to them nicely, compared with 92 % who received services in a public - sector facility. These data indicate that private - sector facilities on average appear to provide better quality services than public sector facilities.

By 1990s the corporate sector had come forward to invest in a big way in expanding the private hospital sector and through this it has far outpaced the government facilities in the provision of sophisticated modalities of diagnosis and therapy. Decrease allocation to the public health sector, which results in increase privatization of health care. It is estimated that two - thirds of curative care is now in the private sector without government support [11]. At the same time, public sector itself is being subjected to internal privatization. So practically privatization and the irrational and unethical practices exercised by medical care also leading to upsurge of health care cost. Further deterioration of situation is due to the establishment of large number of self financing medical colleges.

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 89 Rs. It increased to 549 Rs in 1996 and to 722 Rs in 2004 [15]. This clearly shows the domination of private healthcare expenditure is adversely affecting the capacity of the people for better living and also leading to sort of financial and economic deprivation among them, especially among the communities at the socially and economically bottom level [11].

In Kerala patients seeking treatment from hospitals were only 87% whereas in Himachal Pradesh, Haryana and Punjab it was 94% and 68% have secured treatment from government hospitals in Himachal Pradesh According to the National Sample Survey (NSS) of 1995-96 shows the reasons for not seeking treatment shown in Table No.4. But in Kerala only 37% secured treatment from public hospitals, while 63% secured treatment from private & corporate hospitals which dominate in Kerala. Kerala state has the highest private expenditure (90.3%) compared to any other states in India which is somewhat similar with the healthcare expenditure of

Tokyo, Myanmar, Pakistan etc, where the per capita income is comparatively far better than Kerala [11].

Table 4: Reasons for not seeking treatment

Reasons	Rural %	Urban %	Combined %
No facility available/ Long wait	5.78	1.12	3.46
Lack of faith on the health providers	1.22	1.33	1.27
Financial reasons	13.07	12.68	12.88
Not considered serious	70.72	70.14	70.43
Other	9.22	14.72	11.96
Total	100	100	100

Source: PIP for Kerala Secondary Health Systems Development project

Private health facilities urge to conduct redundant investigations, tests, consultations and surgeries, as well as overcharge and overprescribe. Due to the fact that surgeries are profitable many are conducted without any regard for the patient's well being, booming of licensed and unlicensed diagnostic labs and pharmacies are also consequence of this situation. In many private hospitals there is coercion on the doctors to make certain that the beds are occupied and the hospital equipment is fully utilised. Physician or surgeon must generate the fixed amount of 'businesses. And decline admission to patients unless a certain deposit is paid before hand, despite of the severity of the patient's health status. Noteworthy that the patient may be seriously ill or an accident victim [16]. Another issue we noticed during the study was some of the private hospitals especially in rural areas, distributed expired medicines to the patients under treatment and they have no drug licence and the dispensed medicines were of low quality.

While the private medical sector has become a huge giant it functions in a much-unregulated and unaccountable manner to people or any authority, in terms of qualification of staff employed, equipment needed, administration, treatment offered and since it is now the dominant player, the absence of regulation is very dodgy for its patients. In such conditions, given that the health sector is a market where market loss occurs, quality assurance is tough to attain, and the private sector may not contribute better or even satisfactory quality of care. Hence the private health sector has to be controlled through comprehensive regulation, which required to be facilitated through the legal route. There by the private practitioners and hospitals were brought under the preview of the Consumer Protection Act, a policy which was met with great resistance from the medical fraternity. This is because the state did not take seriously the responsibility of regulating, monitoring and making the private health sector accountable [16].

Deficiencies in the system also adversely affect the private sector. It is pointed out that many private hospitals in Kerala employ young medical practitioners who do not possess the required medical council registration. Many of them are doctors who had graduated from Russian or Chinese medical colleges. Such doctors need to get a licence from the Medical Council of India. However, the licence test is pretty tough and those who cannot pass the test often opt for working at private hospitals at much lower salaries [20]. And most of the private institution does not have sufficient teaching facilities for proper training. Lack of training among doctors to clinically examine and diagnose a patient is also one of the reasons for unwarranted investigations. Higher pays and salaries in private sector have been attracted by the medical graduates to employ there than in public sector. For creating a better health care system in a reciprocally beneficial manner a meeting on public and private co - operation was held in Jan 2003 through which the government made necessary regulations over the private sector. That includes registration of health care facilities and the number of health personnel, and accreditation of hospitals with a certain level of standard [17]. In 2005, the state bounced back with a threefold increase in the budget to revitalize the rural health delivery systems under the private eco system.

Current Developments and Drawbacks in Kerala Health care system

To renovate the public health system efficiently and to reverse the downward trend was the main strategy of the government during the 11th five year plan. This was sought to be achieved by the Health Department via number of steps like; filling the vacant post of doctors in the public health system thereby minimising the dearth of doctors in the state, and substantially raising their salaries and benefits. Reinforcing large majority of public institutions with better infrastructure facilities and installing modern/improved equipments.

The Government of Kerala constituted Kerala Medical Services Corporation (KMSCL) with the primary objective of making available quality medicines, surgical items and other hospital requisites to all the patients through the public health care networks and for that purpose procure the medicines at most economical rates. Streamlining the public health system particularly by improving Public Health Centres and Community Health Centres through judiciously utilizing the NRHM funds. Investing heavily in strengthening medical education/teaching and the infrastructure in Medical College Hospitals [21].

The Karunya Community Pharmacy under the control of Community Pharmacy Services (CPS) division of KMSCL is a bold intervention of Govt. of Kerala to reduce the Out-of-Pocket expenditure of the common man, mostly because of the huge expenditure on medicines. Karunya community pharmacy has already started innovative approaches in drug sales by introducing novel schemes named Loyalty discount cards and Family medicine cards which will be a model to adapt for the similar community pharmacies in other states. Family Medicine Card Scheme is designed to provide more value and customized service.

It guarantees home delivery of medicines at the same rate available at KCP outlets with additional 2% discount. Loyalty card offers additional 2% discount to the customers (1 % as direct discount and 1% as bonus point on every 100 rupees. Up on accrual of 250 bonus points, it can be redeemed in the next purchase which gives a discount of rupees 200/-).

Karunya benevolent fund treatment offered for kidney problems, heart disease, brain related disease, and cancer. And these treatment facilities were offered in three govt hospitals, two co-operative hospitals, three self financing hospitals and 45 non government hospitals.

Kerala is the first state to implement the union government's initiative to supply free generic medicine to patients through government hospitals from November 1st, 2012. A significant increase in the number of outpatients has been reported from the General Hospitals in Thiruvananthapuram, Ernakulam and Kozhikode following the launch of the free generic medicines scheme. Officials of the Kerala medical services corporation (KMSCL) declared that many patients from private hospitals are returning to government hospitals for free generic medicines and they said that there is a 50 to 100 percentage increase in the number of outpatients at these hospitals. Before the launch of the scheme, the General Hospital at Thiruvananthapuram used to get 2,000 patients a day, and now it is almost 3,000 and there is huge demand for medicines. Currently the free generic medicines supply is

exploited by the private lobbies and mediators since no mandatory guidelines are followed for the issue of expensive medicines, especially cancer drugs. And the government ordered to mention the generic name of medicine in prescriptions; the companies who follows unethical marketing are targeting medical shops since the

pharmacist can decide which brand medicine should be dispensed to the customers.

Government took new initiative through sponsored insurance schemes (Rashtriya Swasthya Bhima Yojana (RSBY), Arogya shri, etc.) under which government buy the insurance on behalf of the people / target group for providing cashless services for inpatient care, mainly surgeries. These schemes have widened access by

including private sector facilities too. But their impact on addressing the three critical issues of the health sector – equity, quality & efficiency has not been addressed. The single payer system of universal health coverage also has its faults and its critics. However it diminishes the business aspect of medicine; it diminishes the administrative costs and it streamlines the health care. A comprehensive health policy which lays emphasis on Improving health of women, adolescent girls, tackling problems of anaemia, malnutrition, prevention of non- communicable diseases, pharmaceutical policy for the state, state council for laboratory medical sciences, network of trauma care, emergency medicine centres, family medicine course for all fresh MBBS doctors and pro – people initiatives were formulated on the year 2013.

Quality health care at affordable cost for the poor was the state's primary concern in the health sector. 'Arogya theertham' a comprehensive health policy was being up by the government. This health package was designed specifically to address the health concerns of coastal communities and government is going to implement 'Kanya Suraksha' – a health package for girls, 'Kazhcha' a scheme which offers free cataract surgeries to the poor, 'Madhuram Balyam' an innovative scheme specifically designed to address the needs of children from Below Poverty Line (BPL) families with Type I diabetes (Juvenile diabetics, by providing insulin free of cost and a direct cash transform system). New born baby blood testing scheme started in govt hospital in 2013 for finding out genetic disorders. Kerala has broken new ground with a palliative care policy that aims at covering every bed ridden citizen in the State – rich or poor, down to the last rung. The Arogya Keralam Palliative Care project is being touted as India's first and the only government initiative of its kind in entire Asia.

The introduction of e-Health will add another feather to Kerala's public health refinement. This is a first of its kind initiative in the entire country. It envisage a central data server which would have all health & demographic data of the population and which would be linked to the HMIS (Health Management Information System) projects of all health institutions in the state, right down to the level of sub centres. The e-health initiative has two arms; a central data server which holds the health data of all citizens & the second part of the project is the computerization of all health institution to link all wings inside a hospital administration process. Floating dispensaries and the online reporting mechanism started on April 2009; which facilitates timely and accurate reports and generate quality information. These floating dispensaries provide services at two districts of Kerala; Alappuzha and Ernakulam.

Kerala Accreditation Standard for hospitals (KASH) which is a state level initiative which include better amenities to patients, implementing better patient care and management systems, standard treatment protocols and procedures, good infection control policies etc. were undertaken at the taluk hospitals, two community health centres and two public health centres each in every district in the state is taken up for infrastructure upgrading and quality improvement programmes.

The state government has come out with standard treatment protocol for diabetics and hypertension in order to manage these conditions more cost effectively and efficiently. This is aimed to ensure an optimum level of care, using low cost yet effective drugs with the least side effects. Kerala state plans a pilot project to revamp public health sector which envisages sub-centres as service delivery centres, The PHC are to be equipped with more facilities

and manpower to deliver most of the health care requirements of the community and the PHC will have at least 3 doctors and 4 staff nurses [22].

Government hospital for women and children Thycaud; Trivandrum got NABH (National Accreditation Board for Hospitals and Healthcare) accreditation for the first time in India. In the year 2011, Ernakulam General Hospital and in 2012, Cherthala Taluk hospital (Alapuzha District) got national accreditation. Taluk hospital of Punalur a town in Kollam district has becoming a model for other govt hospitals, through their various new activities, one of which is the radio station program, in which the patients and care givers

were relaxed and given information through music and other programmes such as health tips, prayer songs, health development classes, various notices regarding hospital, health notices, information exchange between the wards, treatment help out, blood donation aid etc.

Some of the present issues of government hospitals which we identified are mentioning here. In most of the government hospitals have no proper bed facilities; if there is proper bed facilities and equipment, there will be the lack of doctors and other paramedical staffs. Due to this pathetic situation patients are forced to go to private laboratories which are charging high. Even the ambulance services were not in proper condition in most of the government hospitals.

Government mental health hospitals are also facing the shortage of doctors and insufficient infrastructure for treatment and rehabilitation. The main health threat Kerala faces now a days is because of the reprehensible waste disposal management. Reports shows that the half a kilometre diameter of all government hospital's surroundings in Kerala are highly prone to infections because of highly polluted water, air and food. Infections due to micro organisms are another major issue in government hospitals. In April 2007; 36 new born babies died due to the infections at SAT Hospital Thiruvananthapuram which shows that there are no proper guidelines for the infection control.

According to the state unit of the Indian Medical Association, there are 40,000 quacks practising modern medicine across the state, especially in villages. Three such fake doctors were arrested by the police in Malappuram district and one in Pathanamthitta district. The Kerala State Consumer Disputes Redressal Commission has directed the Travancore - Cochin Medical Councils Kerala (TCMC-K) to instruct doctors to display their medical council registration numbers on their signboards and to quote the register number in all prescriptions and all case sheets. This would help patients to get information about the whereabouts of the doctor and also to check if the doctor had the competency and possessed the required qualifications [20].

CONCLUSION

Kerala State has achieved finest basic health indicators as collated to the other states of India but confront crucial challenges of morbidity and other health inequalities. State of Kerala is in the direction of initiating and main-streaming of the social determinants of health. Government health policy amendment have to focus in the sphere where they failed to acquire effective health determinants and there by seizing health inequalities. This will aid to accomplish the future better. The state government formulate a new health policy on 2013 which focus on equitable and affordable healthcare to all. Kerala's healthcare sector has undergone radical changes in the last few decades.

The people often compare facilities and technologies available in the public sector institutions with those available in the private sector with the obvious aftermath of adding to the dissatisfaction of the beneficiaries. So a comprehensible policy with technology up-gradation and technology diffusion at all levels should be initiated to co-exist with upcoming and rapidly expanding hi-tech private institutions and to satisfy the increased expectation of the people. All levels of health sectors must be maintained and provided with better infrastructure, adequate staffs, equipment, drinking water, sanitation, drainage, environmental cleanliness, proper waste

disposal management, rational and cost effective treatment and reduction of morbidity (both chronic and communicable). For better public investment and funding for preventive healthcare services proper taxation and regulation of private healthcare should be carried out with due legislation and a monitoring unit to assess and examine the functioning of PHCs is also necessary. Steps must be undertaken for ensuring the availability of doctors, para-medical staff, utilization of equipments and its reliability in all PHCs and hospitals by the government and public authorities.

Other essential policy measures to be carried out for revitalizing the health care system of Kerala are by conducting Community health

services, environmental and health awareness programmes, education and communication campaigns through drama and other folk media, mass media, including electronic media, print materials and other support activities with NGO participation, which provides precise information on family planning and, better nutrition, environmental and preventive healthcare programmes for urban, rural and tribal slums.

Through this various initiatives, innovations, health policy and thereby overcoming the draw backs of health inequality, Kerala has the capacity to bring back the glory of health and be a model for other states and pave way for a better healthy future.

REFERENCES

1. Stephen M Sammut & Lawton R Burns, Meeting the challenges of healthcare needs in India: paths to innovation cover story, *Insight*, cover story, Balance of care, Volume No 9, 2011; Issue 2.
2. Park K. Health Care in India, Parks Text book of Preventive and Social Medicine. M/s Banarsidas Bhanot publishers, 20th Edition, 2009; Page no: 806.
3. Ramesh Bhat, Analysis of public expenditure on health using state level data Indian Institute of Management Ahmedabad. 2004; 4-30.
4. R.Srinivisan, Health Care In India - Vision 2020, Issues And Prospects, Planning commission, Govt of India, 2012.
5. Varatharajan D, Thankappan & Sabeena Jayapalan, Assessing the performance of primary health centres under decentralized government in Kerala, India; *Health Policy and Planning*, 2004; 19(1): 41-51.
6. Ashokan A. Structure and Growth of Health care in Kerala, Chapter 3. 2010; www.shodhganga.inflibnet.ac.in
7. V Raman kuttu, Historical analysis of the development of health care facilities in Kerala State, India, *Health Policy And Planning*, 2008; 15(1): 103-109.
8. Rene Veron, The New Kerala Model: Lessons for sustainable development, *World Development* No 29, No 4, 2001; pp 601-617.
9. Daivadanam. Pathways to catastrophic health expenditure for acute coronary syndrome in Kerala: 'Good health at low cost?', *BMC Public Health*, 2012; 12:306.
10. Suryanarayana M.H., Morbidity and Health Care in Kerala: A Distributional Profile and Implications, Working Paper -2008; 004.
11. Gangadharan K. Problems and Determinants of Urban Health with Special Reference to Kerala, Chapter 3, 2010; shodhganga.inflibnet.ac.in.
12. Ekbal B, Narayana D., Thankappan KR. Social Determinants of Health in Kerala State, *Health Sciences*, 1(2)2012; JS002.
13. Kunhikannan T.P., Aravindan K.P, Changes in Health status of Kerala 1987- 1997, Discussion Paper No. 20, 2000; June.
14. Aravindan KP., Kerala Padanam: Keralam Engane Jeevikkunnu? Kerala Engane Chinthikkunnu?. Kozhikode: Kerala Sastra Sahitya Parishad. 2006.
15. Benson Thomas, M. & Rajesh, K., Decentralisation and Interventions in Health Sector: A Critical Inquiry into the Experience of Local Self Governments in Kerala, Working Paper 271, 2011; Institute For Social And Economic Change. Bangalore.
16. Sunil Nandraj, Unhealthy Prescriptions: The Need for Health Sector Reform in India, *The Newsletter of the International Clearing house of Health System Reform Initiatives (ICHSRI)*, 1997; April-June, pp. 7-11.
17. Koji Nabae, The Health Care system In Kerala- Its Past Accomplishments and New Challenges, *Journal of National Institute of Health*, 2003; 50(2).
18. Health System in India, Crisis & Alternatives Towards the National Health Assembly II, Booklet 2, 2006; National Coordination Committee, Jan Swasthya Abhiyan.
19. Dilip T.R., Role of Private Hospitals in Kerala: An Exploration, Working Paper 400, Centre for Development Studies (CDS), June 2008; 9-15.
20. Basheer K.P.M., Doctors to be made to show registration, The Hindu, Trivandrum Edition, 2013; March 26.

21. Economic Review. Medical and Public Health, Chapter 12,2010; 11-32, Kerala State Planning Board, Govt. of Kerala.
22. The Hindu, Hypertension, diabetes protocols in Kerala soon, Trivandrum edition. December 14,2012;Page : 3.
23. Achin Chakraborty. Kerala's Changing Development Narratives, Occasional paper - 5, Institute of Development Studies Kolkata Calcutta University. Alipore Campus (Block A, 5th Floor) Reformatory Street, Kolkata.2004.
24. Benson Thomas M., Changes in mortality in Kerala, India: Some emerging Concerns; *Universal Journal of Education and General Studies*, Vol. 1(8), 2012; pp.234- 241.
25. Concept Paper on Kerala Secondary Health System Project. Dept of Health and family welfare. Govt. of Kerala.August. 1-17, 2003.
26. Economic Review. Chapter 13, Health, Kerala State Planning Board. Thiruvananthapuram, Govt. of Kerala 2011.
27. Ekbal B., Kerala's health sector crying for cure, *Kerala Calling*,May 2006;37-39.
28. Gangadharan K., Policy reforms and healthcare system in Kerala, *Journal of Health and Development*, vol. 4, 2008; no. 1 & 1.
29. Health at a glance, Government of Kerala; Health services department, Health information cell directorate of health services.2011; Thiruvananthapuram.
30. Mathrubhoomi, Kidappilaya arogya mekhala,Trivandrum edition; 2012; Page no:4.
31. Michael,E.J. & Singh,B., Mixed signals from Kerala's improving health status, *The Journal of the Royal Society for the Promotion of Health*,2003; 123: 33.
32. Narendra Gupta, Rattan Chand, Amardeep Singh Bhatia, Sh. Sunil Nandraj & Jacob, K.S.,2nd Common Review Mission,25th November- 2nd December 2008; Kerala, National Rural Health Mission.
33. National Rural Health Mission (NRHM), Program Implementation Plan, Kerala.2012; 4-15.
34. Pinaki Chakraborty, Lekha Chakraborty, Amar Nath, H.K. & Sona Mitra Financing Human Development in Kerala: Issues and Challenges, Draft Report for comments, National Institute of Public Finance and Policy, New Delhi.2010.
35. Slim Haddad, Katia Sarla Mohindra, & Kendra Siekmans. "Health divide" between indigenous and non-indigenous populations in Kerala, India: Population based study, *BMC Public Health*, 2012; 12:390.
36. Soman D.R, The time bombs that ticks...The future of Kerala's health. *Kerala Calling*, 2004; 26-28.
37. Thresia, C.U., & Mohindra, K.S. Public Health Challenges in Kerala and Sri Lanka: *Economic & Political Weekly EPW*, July 30 2011; vol xlvi no 31.
38. Twelfth Five Year Plan 2012- 2017; Govt. of Kerala; State Planning Board Thiruvananthapuram. Govt. of Kerala.
39. Udaya S Mishra, Understanding Health Inequity in Decentralized Health System of Kerala State, India,1999; Centre for Development Studies, Prasanth nagar Rd, Ulloor, Trivandrum 695 011, Kerala, India.