ROLE OF PUBLIC HEALTH INSTITUTIONS
IN THE HEALTH CARE SERVICES OF KARNATAKA:
WITH SPECIAL REFERENCE TO MANDYA DISTRICT

1. INTRODUCTION

Karnataka state is one of the pioneer states in the country in providing comprehensive public health services to its people. Even before the concept of Primary Health Centers was conceived by the government of India, the state had already made a beginning in establishing a number of PHU's for providing comprehensive Health Care, and a delivery system consisting of curative, preventive, promotive and rehabilitation health care, to the people of the state. "HEALTH" is an asset to every person. Health is an important factor that contributes to human wellbeing and economic growth. (karnataka, 2000)

The State has so far followed policy guidelines through the framework of successive five Year Plans developed by the Planning Commission, decisions of the Central Council of Health and Family welfare, Central health legislation and national health programmes developed by Central Government. Over a period of time, separate policies at the National level have been developed for Health (1983), which was revised in 2002, Education For Health Sciences (1989), Nutrition (1993), Drug Policy (1986 and 1994), Pharmaceutical Policy 2002, Medical Council of India (MCI) guidelines (1998, 1999 and 2000), Blood Banking have served the state well in developing its health system.

A National Health Policy-2002 has been announced and provides a framework within which the Health Policy of the State Would refashions the elements therein to meet the current needs of the State. The State Health Policy would be based on the specific needs of the State and recognize regional disparities. Health is constitutionally a State subject. Health needs, defined socio-epidemiologically, vary between States and even districts, requiring more specific planning. Health expenditure is met largely by the State budget, with 82Percent of public sector expenditure on health from State Government of Karnataka and 18Percent from Central Government. A comprehensive Karnataka State Policy for the Integrated Health Development and functioning of the health sector is therefore being articulated explicitly, for the first time. The Policy, with a string emphasis on process and implementation, will be an instrument for optimal, people oriented development of health services. (India g. o., google)
Medical and Public Health Services in Karnataka

Consequent on the reorganization of States, the newly integrated areas of Karnataka state were lacking in medical and health service facilities especially, in rural and border areas of the state. To overcome this, the State Government rigorously started implementing various national and state health programmes to improve the prevailing health services in the state in a short span. The policy of expansion and successful implementation of comprehensive public health service schemes has enabled the state to occupy a unique place in the country. (Karnataka G. o., google, 2015-16)

The Department of Health and Family Welfare Services implements various National and State Health programs of Public Health importance and also provides comprehensive Health Care Services to the people of the State through various types of Health and Medical Institutions. Health Care Services are provided through the implementation of: Rural Health component of the Minimum Needs Programme, Curative Services, National Rural Health Mission (NRHM), National Leprosy Eradication Programme, National Tuberculosis Control Programme, National Programme for Control of Blindness, National Vector Borne Control Programme (NVBDCP), National Guinea Worm Eradication Programme, Prevention and control of Communicable Diseases like Diarrheal diseases, Kyasanur Forest Diseases, etc., Health Education, Training and School Health Services, Nutritional Services, National Iodine Deficiency Disorder Control Programme, Laboratory Services.

Health Infrastructure in the Public Sector

Current PHC, CHC budgets may have to be increased by 10Percent per year for five years to draw level. The proposal in the Draft NHP 2001 is timely that state health expenditures be raised to 7Percent by 2015 and to 8Percent of State budgets thereafter. Indeed the target could be stepped up progressively to 10Percent by 2025. It also suggests that central funding should constitute 25Percent of total public expenditure in health against the present 15Percent. The peripheral level at the sub center has not been (and may not now ever be) integrated with the rest of the health system having become dedicated solely to reproduction goals. The immediate task would be to look deepening the range of work done at all levels of existing centers and in particular strengthen the referral links and fuller and flexible utilization of
PHC/CHCs. Every PHC treated about 100 patients. 224 out of the 250 open 24 hour PHCs had ambulances. Every State must look for imaginative uses to which existing structures can be put to fuller use such as making 24 hours services open or trauma facilities in PHCs on highway locations etc.

The persistent under funding of recurring costs had led to the collapse of primary care in many states, some spectacular failures occurring in malaria and kalazar control. This has to do with adequacy of devolution of resources and with lack of administrative will probity and competence in ensuring that determined priorities in public health tasks and routines are carried out timely and in full. Only genuine devolution or simpler tasks and resources to panchayats, where there will be a third women members- can be the answer as seen in Kerala or M.P. where panchayats are made into fully competent local governments with assigned resources and control over institutions in health care. Many innovative cost containment initiatives are also possible through focused management - as for instance in the streamlining of drug purchase stocking distribution arrangements in Tamil Nadu leading to 30Percent more value with same budgets.

The PHC approach as implemented seems to have strayed away from its key thrust in preventive and public health action. No system exists for purposeful community focused public information or seasonal alerts or advisories or community health information to be circulated among doctors in both private practice and in public sector. PHCs were meant to be local epidemiological information centers which could develop simple community.

Tertiary hospitals had been given concessional land, customs exemption and liberal tax breaks against a commitment to reserve beds for poor patients for free treatments. No procedures exist to monitor this and the disclosure systems are far from transparent, redressed of patient grievances is poor and allegations of cuts and commissions to promote needless procedure are common.

Taking into account the size of the burden, the clinical and public health services cannot be shouldered for all by government alone. To a large extent this health sector reform in India at the state level confirms this trend. The distribution of the burden, between the two sectors would depend on the shape and size of the social pyramid in each society.

There is no objection to introduce user fees, contractual arrangements, risk pooling, etc. for mobilization of resources for health care. But, the line should be drawn not so much between public and private roles, but between these institutions
and health care run as businesses or run in a wider public interest as a social enterprise with an economic dimension. In a market economy, health care is subject to three links, none of which should become out of balance with the other - the link between state and citizens' entitlement for health, the link between the consumer and provider of health services and the link between the physician and patient. (Laveesh, 2005)

National Urban Health Mission

The Union Cabinet gave its approval to launch a National Urban Health Mission (NUHM) as a new sub-mission under the over-arching National Health Mission (NHM). Under the Scheme the following proposals have been approved

One Urban Primary Health Centre (U-PHC) for every fifty to sixty thousand population. One Urban Community Health Centre (U-CHC) for five to six U-PHCs in big cities.

- One Auxiliary Nursing Midwives (ANM) for 10,000 populations.
- One Accredited Social Health Activist ASHA (community link worker) for 200 to 500 households.

The estimated cost of NUHM for 5 years period is Rs.22,507 crore with the Central Government share of Rs.16,955 crore. Centre-State funding pattern will be 75:25 except for North Eastern states and other special category states of Jammu and Kashmir, Himachal Pradesh and Uttarakhand for whom the funding pattern will be 90:10.

The scheme will focus on primary health care needs of the urban poor. This Mission will be implemented in 779 cities and towns with more than 50,000 population and cover about 7.75 crore people. This programme objectives are; reduction in infant mortality rate, maternal mortality ratio, universal access to reproductive health care, and convergence of all health related interventions.

The existing institutional mechanism and management systems created and functioning under NRHM will be strengthened to meet the needs of NUHM. City wise implementation plans will be prepared based on baseline survey and felt the need. Urban local bodies will be fully involved in implementation of the scheme.
NUHM aims to improve the health status of the urban population in general, particularly the poor and other disadvantaged sections by facilitating equitable access to quality health care, through a revamped primary public health care system, targeted outreach services and involvement of the community and urban local bodies. (India)

**Women’s Health in India**

Women’s health in India can be examined in terms of multiple indicators, which vary by socioeconomic standing and culture. To adequately improve the health of women in India multiple dimensions of wellbeing must be analyzed in reaction to global health averages and also in comparison to men in India. Currently, women in India face a multitude of health problems, which affect the aggregate economy’s output. Addressing the gender, class or ethnic disparities that exist in creation of quality human capital and increased level of savings and investment.

India as a middle income group of united survey. India is worst country in the world in the terms of gender inequality. The 2011 United Nations development HDR ranked India 132 out of 187 in terms of gender inequality. The value of this multidimensional indicator, Gender inequality index (GII) is determined by numerous factors including maternal mortality rate, adolescent fertility rate, educational achievement and labour force participation rate. Gender inequality in India is exemplified by women’s lower likelihood of being literate, counting their education and participating in the labour force.

The role that gender plays in healthcare access can be determined by examining resource allocation within the household and public sphere. Gender discrimination begins before birth: females are the most commonly aborted sex in India. If a female fetus is not aborted, the mother’s pregnancy can be a stressful experience, due to her family’s preference for a son. Once born daughters are prone to being fed less than sons, especially when there multiple girls already in the household. As women mature into adulthood, many of the barriers mortality rate, adole preventing them from achieving equitable levels of health stem from the low status of women and girls in Indian society, particularly in the rural and poverty affected areas. Women are also seen as less valuable to a family due to marriage obligations. Although illegal, Indian cultural norms often force payment of a dowry to the
husband’s family. The higher future financial burden of daughters creates a power structure that favors sons in household formation. Additionally, women are often perceived as being in capable of taking care of parents in old age, which creates even greater preference for sons over daughters.

**Family Welfare Mother and Child Health Programme**

Family Welfare Programme is renamed as Reproductive and Child Health (RCH) from Oct.1997 and it is being implemented in the State as a 100Percent Centrally Sponsored Scheme. Karnataka deserves a special mention in the history of Family Planning Medical and Public Health Services 419 Programme due to the pioneering steps taken as early in 1930’s by the Maharaja of Mysore by ordering establishment of Birth Control Clinics one at Vani Vilas Hospital, Bangalore and the other at Cheluvamba Hospital, Mysore. Further, in the implementation of the programme, Karnataka has been fairly successful, scaling more heights than many a major state. In many of the demographic indicators, Karnataka has bettered the national average. The important goals of the Family Welfare and MCH Programmes (RCH Programme), as set in the National Population Policy 2000 by 2010 are as follows: Reduce infant mortality to below 30 per 1000 live births, Reduce maternal mortality to below 100 per one lakh live births.

Karnataka State has credited itself extremely well in the implementation of the Reproductive and Child Health Programme. More than 2.47 crore births have been averted since inception. The other notable achievements are given here: Fall of crude birth rate from 41.6 in 1961 to 20.1 in 2006, Decline of crude death rate from 22.2 in 1961 to 7.1 in 2006, Reduction in infant mortality rate from 95 in 1971 to 48 in 2006, Decrease in General Fertility Rate in rural areas from 154.9 in 1972 to 90.1 in 1999 and in urban areas from 124.9 to 67.8. The findings of the National Family Health Survey –III, (2005-06), reveal that Karnataka has inched forward to a total fertility rate of 2.1, an infant mortality rate of 43. The effective couple protection rate has gone up to 60.60 by 2005-2006 as per official reports. (Karnataka G. o., Google)
1.2 Research Gap

From the review of literature it is learnt that majority of them dealt with macro level health care services in India. Some studies focused on Public health care utilization in Karnataka. None of the studies estimate utilization of health care services in the study area namely Mandya district in terms of utilization of health care services in different socio-economic regions. Hence the study has been tried to fill this gap.

1.3 Statement of the problem

Health is the most important and one of the components of human development. Most of the democratic governments have tried to provide healthcare services with public allocation on health. As a result public healthcare services have been grown to serve needy people. Karnataka is one of the states of India considerably played significant role in provisions of healthcare services. Accordingly, in the present study an attempt has made to examine the resource allocation for healthcare services like development of both physical and human infrastructures of health. An attempt has also made to examine the performance of physical and human infrastructures of health in Karnataka. At the same time, the utilization of institutional provisions of healthcare services have also examined in the present research work.

1.4 Objectives

1. To discuss the implications of health policies and programmes in India and Karnataka

2. To analyze of healthcare services across regions in Karnataka

3. To analyze the impact of resource allocation on healthcare infrastructure in Karnataka

4. To evaluate the role of public health institutions in providing health care services in Mandya district.
1.5 Hypotheses

1. Resource allocations have made positive impact on development of public healthcare institutions
2. There is positive relationship between economic development and human healthcare infrastructure
3. There is regional disparity in availability of healthcare infrastructures.
4. Access the hospitals depends on distance
5. There is significant difference in availability of doctors.

1.6 Methodology

On the basis of the objectives and hypotheses, the following methodology has been adopted in the study. The study has based on both primary and secondary data. Primary data has collected from sample respondents in the study area. The secondary data have collected from the published document, NRHM, NSSO, RCH, Karnataka Economic Survey, Karnataka at a Glance, Indian Economic Survey. Karnataka performance budget and many others.

A. Study Region: Mandya district of Karnataka has chosen for the study. Even though Mandya district has made a progress in agriculture sector, it has remained backward in other areas. During 2011, out of 30 districts of Karnataka, it was ranked at 19 in Human Development Index. It was ranked 21 in health, 18th in education and 20th in income (Government of Karnataka 2011). Hence, this district has chosen to study the impact of public health services of people in Mandya district.

B. Sampling Design

Stratified random sampling has been used to select the samples and 450 respondents have surveyed for the purpose.

Initially 750 respondents had surveyed and according to the need of the study, respondents had restricted to 450 in order to give equal representation to region and other dimension used in the analysis.
Distribution of Sample Respondents

Mandya District

Mandya Taluk  Pandavapura Taluk  K.R.Pet Taluk

150 respondents  150 respondents  150 respondents

C. Secondary Data Analysis:

The present analysis has used time series data. The objective of the study is to analyze the performance of healthcare service and not to forecast the values. Therefore, normality tests have been conducted to test the normality of data. After testing the normality, the data have been used for analysis. Data have presented in the form of graphs and tables wherever necessary. CAGR (computed with log linear exponential function) has used to analyze the performance of the healthcare. Regression models used to measure the impact of PCGSDP, (Percapita Gross State Domestic Product) revenue expenditure and capital expenditure on physical and human healthcare infrastructures. Dummy variable regression models used to measure the regional disparities in health infrastructure development.

An attempt has been made to analyze the disparity in provision of healthcare services in Karnataka. Karnataka has been divided into four groups based on administrative division. Availability of hospitals and availability of beds have been considered for disparity analysis. The parameters have converted to ratio form and calculated number of people per hospital and per bed. The census 2011 population data has used for conversion. The dummy variable regression technique has been used for the disparity analysis.

D. Field Study Analysis

The major objective of this chapter is to identify the health status of people in Mandya district. The major dimensions, namely, Taluk, age, gender, education, income, social group and occupations have been used for the analysis. Based on these dimensions, the health status of people have been measured. The major tools and techniques used for the analysis are cross tabulation and chi-square test.
1.7 Chapter Scheme

Chapter-1: Introduction
Chapter-2: Review of Literature
Chapter-3: Health Policies and Programmes of India and Karnataka
Chapter-4: Healthcare Infrastructure Development in Karnataka
Chapter-5: Institutional provisions healthcare services in Mandya district
Chapter-6: Major Findings and policy imperatives.