Micro-Level Planning for Primary HealthCare in Mysore District -A Case Study of K. R. Nagar Taluk

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ABSTRACT

Healthcare is an essential sector to develop for bettering the standard of living. Primary healthcare is the focus for action since the masses depends on this level basic health needs.   The concept of health by 'WHO' is to provide complete health facilities both in physical, mental and socially for balanced Development. Which can be ascertained not only the optimum distribution of health facilities but also a good accessibility, social desirability, economic viability and environmental sustainability. The Present study aims to Study the Primary Healthcare facilities in K.R. Nagar Taluk. The study area K.R. Nagar Taluk of Mysore District is a distinctive regional unit in terms of physical, socio, and culture. The Healthcare centers are not equally distributed and also inaccessible to the inhabitants, so these areas needs a diagnostic planning has been proposed here for balanced regional development. The Accessibility to the areas is mapped and analyzed using GIS. This Study is based on both Primary and Secondary data; Data is analyzed through simple quantitative techniques like ratios and percentage.

Keywords: Healthcare, Development, Regional, Diagnostic Planning.

1. Introduction:

Micro-Level planning means detailed planning at a lower level, usually at or below a district, which takes into account the variations in the community. Primary healthcare is Affordable, Accessible and appropriate care for the particular needs of a given population. The Primary healthcare infrastructure provides the first level of contact between the population and health care providers. A Primary Healthcare Centre (PHC) service is an important concern for increasingly growing population primarily in developing countries. The emerging population is aligned with the increasing demand for healthcare service along with all sorts of other infrastructure and public service provision required to ensure the basic quality of life. As a result, the situation might come when the existing infrastructure and public facility will not be able to provide adequate service to the expanding population. "If population grows faster either through natural growth or movement in areas facilitated with more services than others, it is possible that the facilities availability could be worsened". (Yamauchi, Chowdhury et al.2007, p.19).

This Paper describes the distribution patterns of existing Primary healthcare services in study area. It includes the optimal location of Primary healthcare centers, the relationship between existing location and their service areas and in findings we determine the areas, which have poor accessibility for certain health facility and then prepare proposals for improving such low level of healthcare accessibility for the year 2021.

2. Study Area

K.R.Nagar Taluk is one of the seven taluks in the Mysore districts. It is located between $12^0.20'$ to $12^038'$ north latitude and $76^008'$ to $76^028'$east longitude. It is bounded in the north by Hassan district, in the south by Hunsur taluk, in the east by Mandya district and in the west by Periyapatna taluk. The total geographical area of the taluk is 605.3sq.kms. It has one town, 6 hoblies, 31 gram panchayats and 176 villages as per 2011 Census. The climatic condition is congenial for industrial development. The perennial rivers Cauvery pass through this taluk.

According to census of 2011K.R.nagar taluk had 2, 52,465 Total Population, where Rural consists of 2, 18,544 and in Urban 33,921 population.
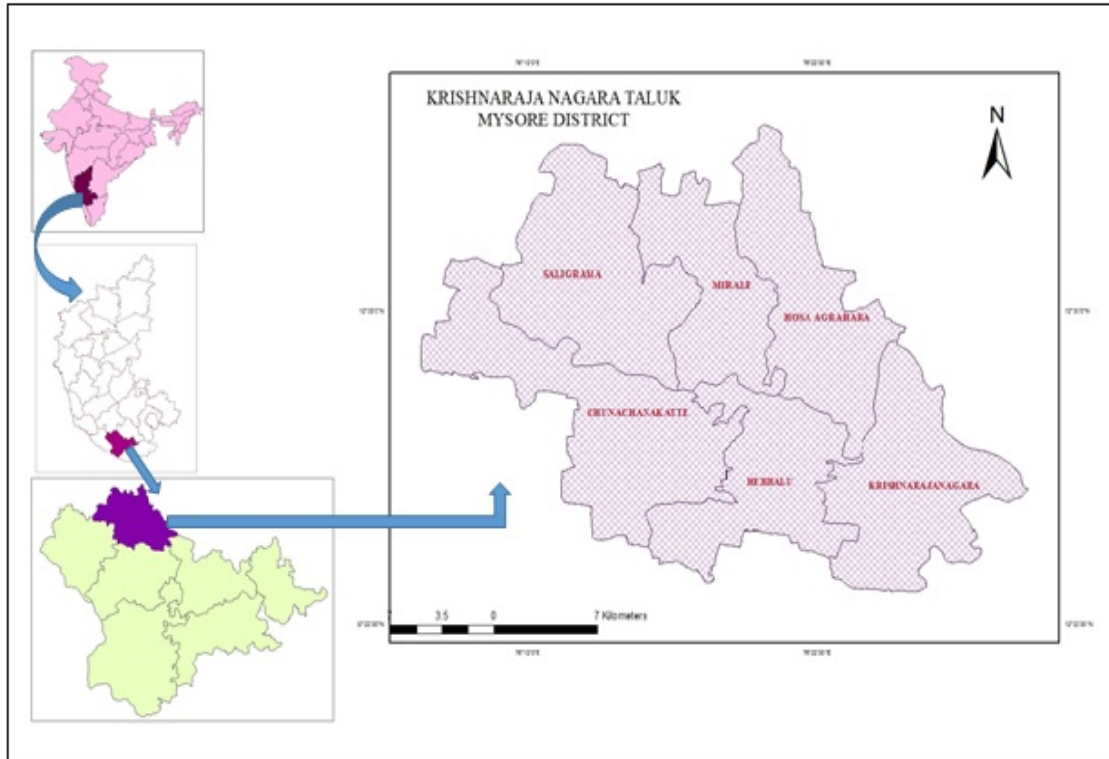

Fig: 1. Location Map of the Study Area.

3. Methodology

This study is based on availability of data related to health care services in the taluk and geographic accessibility of the health services. In this paper the factors considered for analysis are population, area and hospitals. The Primary data have been collected from field survey through the questionnaire related to infrastructure facilities in the hospitals and personal observation. The Secondary data are collected from various offices like District Health Office and Taluk health Office related to healthcare centers. Population Data collected from Census

Report for the year 2011. The base map of the study area has been geo-referenced and digitized using GIS Software and data is analyzed through simple quantitative techniques.

4. Discussion

As per Government of India, National Rural Health Mission (NRHM) policy to population norms for the provisions of Primary Health Centre in plain areas are suggested is 30,000.

The Primary Health care is the first contact point between village community and the Medical Officer. The PHCs were envisaged to provide an integrated curative and preventive healthcare to the rural population with emphasis on preventive and promotive aspects of healthcare. PHC is manned by a medical officer supported by 14 paramedical and other staff. It acts as a referral unit for 6 sub centers; it has 4-6 beds for patients. The activities of PHC involve curative, preventive, primitive and family welfare services.

4.1 Distribution of Primary Health Care in K.R. Nagar Taluk

Health facilities available in K.R.Nagar Taluk consist of Clinics run by private registered medical practitioners, public health centers and sub centers, nursing homes and hospitals. It clearly shows an uneven distribution not only in urban but also in rural areas. The total health care centers of K.R.Nagar taluk consists of one Taluk General Hospital, 14 Primary Health Centers, one Community Health Centers, 64 Sub centers, 3 Nursing Homes, 34 clinics, 44 medical stores, 176 pulse polio centers, 6 Ambulances, 16 X-ray centers, 13 lab, 4 Ayurvedic hospitals and 2 unani hospitals. K.R.nagar taluk comprises of 6 hoblies and each hobli having 2 to 4 PHC's. In this article the authors focused on spatial distribution patterns of Primary Health Centers. In the fig no.2 it shows the hobliwise Distribution of Primary Healthcare centers.
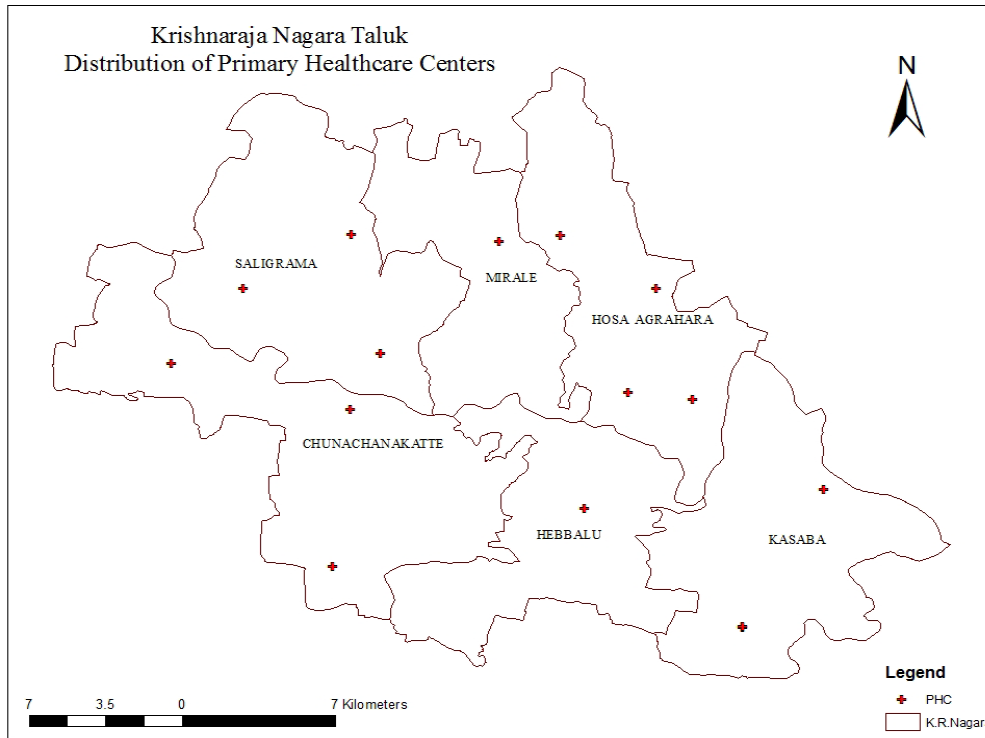
Fig: 2. **K.R. Nagar Taluk 2011.**

Table: 1   Hobli Wise Distributions of PHC and Ratio of Health services to the Population

Sl. No.	Hoblies	Population 2011	No. of PHC	PHC POP Served 1:30,000	Doctor Ratio 1:1,000 (Population Norms Prescribed by NRHM)	ANM Ratio 1:1,000 (Population Norms Prescribed by NRHM)	Bed Ratio 1:1,000 (Population norms prescribed by NRHM)
1	**Saligrama**	53664	3	1:17888	1:4418	1:2636	1:1120
2	**Mirle**	15828	1	1:15828	1:9051	1:2715	1:2226
3	**Hosa Agrahara**	68872	4	1:17218	1:4945	1:2826	1:1236
4	**Chunchanakatte**	49526	3	1:16508	1:7831	1:1880	1:1468
5	**Hebbal**	15194	1	1:15194	1:4042	1:8084	1:4042
6	**Kasaba**	49381	2	1:24690	1:1541	1:1317	1:502
	Total	2,52,465	14	1:18033	1:3913	1:2299	1:1042

Source: Computed by Author

The above table no.1 shows that, Hobli wise distributions of Primary Health Care (PHC) and Ratio's of Health Services to the Population. Among the 6 hob lies, High concentration of PHC located in Hosa Agrahara hobli having (4) serving the population at the ratio of 1:17218, and the health workforce consists with Doctor ratio of 1:4945, ANM's with 1:2826 and Bed ratio 1:1236, followed by saligrama hobli(3) with the serving population ratio of 1:17888, and the health workforce consists with Doctor ratio of 1:4418, ANM's with 1:2636 and Bed ratio 1:1120 respectively, 3 healthcare centers exists in chunchanakatte hobli with the serving population ratio of 1:16508, and the health workforce consists with Doctor ratio of 1:7831, ANM's with 1:1880 and Bed ratio 1:1468 respectively, 4th rank in terms of population is Kasaba hobli having two PHC with the serving population ratio of 1:24690 and the health workforce consists with Doctor ratio of 1:1541, ANM's with 1:1317 and Bed ratio 1:502 respectively and lastly Mirle, Hebbal hoblies having one PHC each with serving population ratio of 1:15828 1:24690 respectively. The health workforce of Mirle consists with Doctor Ratio of 1:9051, ANM's with 1:2715 and Bed ratio 1:2226, and hebbal consists with Doctor Ratio of 1:4042, ANM's with 1:8084 and Beds are 1:4042 respectively. It can be observe in the above table, though there is high population but the available Primary health care services are less according to NRHM norms, so here regional imbalance in the distribution of Primary healthcare centers among the Hoblies of K.R.nagar taluk is observed.

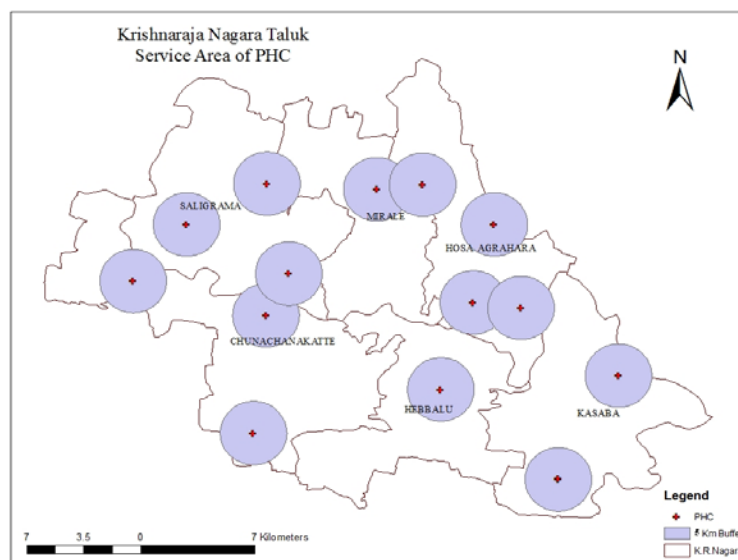Fig No 3 explains, the service area of Primary Health Care Centers and it's inter land.

Fig: 3. **Krishnaraja Nagara Taluk**

Table: 2   Hobli Wise Distribution of Projected Population and Future Requirement of PHC

Sl. No.	Hoblies	Population 2011	Projected Population by 2021	No of PHC 2011	Proposed PHC (As per NRHM) 2021 1:30,000	Total
1	Saligrama	53664	1,34,160	3	2	5
2	Mirle	15828	55,398	1	1	2
3	Hosa Agrahara	68872	2,06,616	4	3	7
4	Chunchanakatte	49526	2,47,630	3	1	4
5	Hebbal	15194	24,310	1	2	3
6	Kasaba	49381	1,23,452	2	2	4
	Total	**2,52,465**	**7,91,566**	**14**	**11**	**21**

Source: Computed by Authors based on Projected Population of the year 2021

In the above table no. 2 we can observe that, the required number of PHC have been proposed to achieve the balanced in the region development of health facilities till 2021, keeping in view the number of facilities existing in 2011. It would be help the policy maker, planner and administrator to make allocation health facilities in this taluks.

4.2 PHC Planning of K.R.Nagar Taluk:

An Attempt has been made to understand the requirement and availability of Primary Health facilities and its distribution in the study area. The functional gap has been calculated on the basis of existing population as per census 2011 and projected population of 2021, at the existing population growth rate. The gaps are examined through quantitative techniques. It helps in assessing the additional requirement of facilities within the complementary region and directs in determining new locations to attain a balanced regional development.   The optimal locations of the new and additional facilities have been selected, keeping in view the accessibility of the

people and their viable functioning for balanced development of the region. Fig no. 4 explains the existing and Proposed Location of Primary HealthCare Centers in the study area,
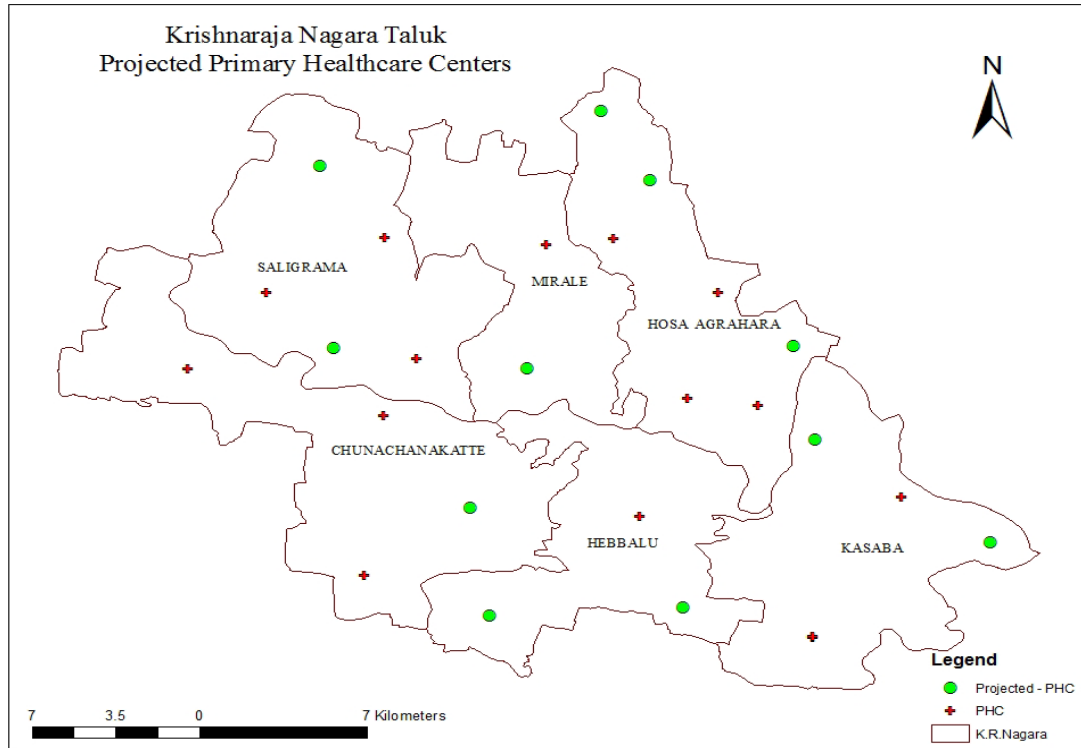

Fig: 4

5. Conclusion:

Health and nutritional status are two important aspect of human development and this is closely related to availability of healthcare facilities. Here the health facilities proposed for spatial planning in the study area. This will help in achieving the balanced regional development in terms of health facilities and also to serve adequately to the complementary region.

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