Inter-Tahsil Variation In Health Services In Kolhapur District, Maharashtra

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Abstract

Health as accepted by Indian constitution is one of the fundamental human rights. To attain a better health condition, health services play an important role in providing health facilities. Present paper is an attempt to highlights the inter tahsil variation in health services in Kolhapur District. The data used in the present study are concerned with public and public aided institutions published in district statistical abstract by government of Maharashtra. To study the spatial distribution of health care facilities, the number of health institutions per 100000 Populations has been calculated for each health care facility and four distributions – levels have been decided based on quartiles. The various graphical and distributional methods are used for showing distribution.

Key Words: Health Services, population, density of health services etc.

Introduction:

Health services include the entire governmental health care facilities, centres and services. These health care systems are intended for community wellbeing and not for income earning. The development of public health care facilities in any region results into quality of human being has also been improved. Consequently, it is essential to increase and improve the public health services for human wellbeing.

A cumulative effect of positive or negative interaction of these factors has contributed towards a spatial pattern of effective demand, and the distribution of health facilities responds to this effective demand neglecting the need of the people (Mc. Glashan N. D. 1974).

There are 26 hospitals, 63 dispensaries, 73 PHC's, 413 health sub centres, 401 available doctors, 1173 available nurses as well as 2195 number of beds, these are the Public health care services found in Kolhapur district in 2011. As health services concern, number of hospitals, primary health centers, sub-centers is increased year by year but their rate is not reasonable. Therefore, health personals are concern, number of doctors, number of nurses, and number of beds is also increasing decade by decade but their rate is not satisfactory.

Objectives:

The main objective of the present study is to study the inter-tahsil variations in the health services in Kolhapur district.

Study Area:

The study area of this paper is a small representative part of Maharashtra. The region under study extends between 15^0 17' north and $17^0 17'$ north latitudes and $73^0 40'$ east and $74^0 42'$ east longitudes and comprising 12 tahsils. Kolhapur district is enclosed by Sangli district in the north, in the south of Karnataka state in Belgaum district and in the west it is bounded by Ratnagiri and Sindhudurg districts. The district sharing 2.62 % area of the Maharashtra state.

According to 2011 census the total population of the district is 3876001. Kolhapur is the 'Historical and Religious City' is currently emerging as the largest educational center of certain cool stations, goods and services. Kolhapur district having 18 towns and 1196 villages. The highest population in Kolhapur district is Karveer, Hatkangale and Shirol tahsils. The secondary data have been collected and computed by recent research techniques and the results have been brought through tables and maps. The distribution of the total population in the urban and rural areas is 1229896 and 1050353 respectively. It will try to growth of population in Kolhapur district.
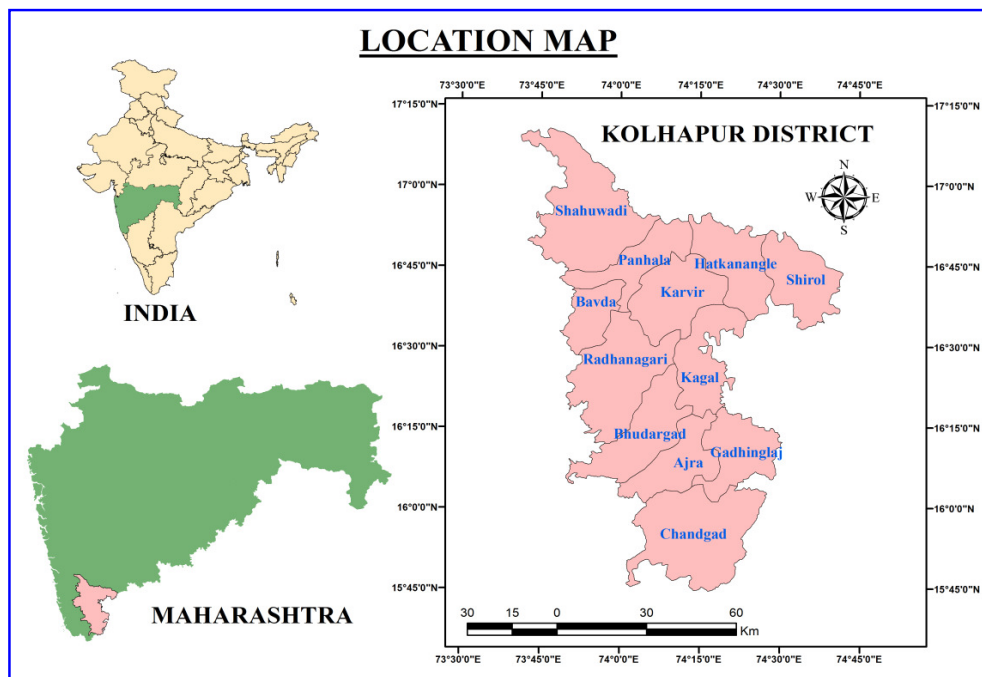

Fig. 1

Data Base and Methodology:

The present research work is based on the secondary data obtained from District Statistical Abstract of Kolhapur district-2011 and official records of Kolhapur Zilla Parishad. Other various sources of secondary data have been utilized such as Internet and books etc.

The distributional pattern of public health care facilities is to be investigated at tahsil level. The units like Hospitals, Dispensaries, P.H.C., and P.H.S.C available are also considered for this study. The data used in the present study are concerned with public and public aided institutions published in district statistical abstract by government of Maharashtra. To study the spatial distribution of health care facilities, the number of health institutions per 100000 Populations has been calculated for each health care facility and four distributions – levels have been decided based on quartiles. The various graphical and distributional methods are used for showing distribution.

The collected data, has been analyzed by using Arc-GIS software for understanding comparison, quartile technique have been used for dividing the parameters in different ranges to obtain the levels of distribution.

HEALTH CARE SYSTEMS:

In Kolhapur district, the system of health care facilities is mainly based on the modern allopathic system of treatment rendered through a system of hospitals, dispensaries and primary health centers.

118
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1. Hospital:

Hospital plays an important role in providing the preventive, promotive and rehabilitative services to local community including training and research (Agnihotri, R.C.1995). The organizational system of hospitals consists of regional hospital, district hospitals and local hospitals. There are 26 hospitals in the study area.

2. Dispensaries:

Dispensaries are fourth order medical facilities providing normally outdoor treatment with the help of one physician and one pharmacist. Dispensaries are mainly concerted in the rural areas. There are 63 dispensaries in the district.

3. Primary Health Centers:

Primary health center play an important role in the health care system emphasizing preventive rather than curative services. It provides the first contact care to villagers. The PHCs implement all the national programmes and schemes under public health and family welfare. Primary health centre extends both outdoor and indoor treatment facilities as well as field services such as vaccination, family health care, family planning, blindness and leprosy control etc. (Agnihotri, R. C.1995). There are 73 primary health centers in the study area.

4. Health Sub-centers:

Each primary health center commands over four to five sub-centers. The sub center is the peripheral outpost of the existing health delivery system in rural areas. The main functions of the sub-centers are maternity and child health, collection of vital statistics, treatment of minor ailments, immunization, prevention of malnutrition and health education in respect of common communicable diseases, family planning services and counseling etc. There are 413 Health sub-centers in the study area existing mainly in rural areas.

DISTRIBUTION OF HEALTH CARE FACILITIES:

To study the spatial distribution of public health care facilities, the number of health institutions per 100000 populations has been calculated for each health care facility. (Table 1) and four distribution–levels have been decided on the basis of quartiles.

Table No. 1

Kolhapur District

Population Density of Health Care Facilities-2011

Sr. No.	Tahsils Name	(Per 100000 Populations)			
		Hospital	Dispensary	Primary Health Centre	Health Sub-Centres
1	Shahuwadi	0.54	2.15	4.31	19.93
2	Panhala	0.77	0.39	2.31	15.42
3	Hatkanangle	0.50	1.98	1.00	5.69
4	Shirol	0.51	0.77	1.79	8.44
5	Karveer	0.67	2.51	0.87	4.82
6	Gaganbavda	2.80	0.01	5.59	27.95
7	Radhanagari	1.00	1.50	3.00	19.03
8	Kagal	0.73	1.45	1.82	12.35
9	Bhudargad	0.67	1.33	3.33	19.95
10	Ajara	0.83	2.49	3.33	22.45
11	Gadhinglaj	0.89	0.44	2.21	15.50
12	Chandgad	0.53	0.01	3.20	17.63
District Total		0.67	1.63	1.86	10.66

Source: District Statistical Abstract-2011 Compiled by researcher.

1. Hospital-Population Density:

Hospital-Population density in Kolhapur district is 0.67 hospitals per 100000 persons, which is extremely less than the average state of Maharashtra.

The major concentration of hospital services is observed in Radhanagari and Gaganbavda as compared to total population. Out of 26 hospitals in the district, 3 (11.54 per cent) hospitals are concentrated in these two tahsils. There two tahsils observed high hospital population density, whereas six tahsils viz. Karveer, Panhala, Kagal, Gadhinglaj, Bhudargad and Ajra have observed moderate hospital population density. While, remaining four tahsil like Shahuwadi, Hatkanangle, Shirol and Chandgad have found low hospital population density.

2. Dispensary-Population Density:

In Kolhapur district dispensary population density is 1.63 dispensaries per 100000 populations. As the tahsil having low urban population posses the high dispensary concentration and it is also commonly to be found in rural areas of the district.

The tahsil like Karveer, Hatkanangle, Shirol, Shahuwadi, Radhanagari, Kagal, Bhudargad and Ajra from the areas of high dispensary population density, while Panhala and Gadhinglaj having moderate dispensary density. Gaganbavda and Chandgad tahsil observed low dispensary population density in the district.

3. PHCs-Population Density:

Kolhapur district observed higher PHCs-Population density i.e. 1.86 as compared to density of Maharashtra State (1.61). In the district, six tahsils of western hilly region like Shahuwadi, Gaganbavda, Radhanagari, Bhudargad, Ajra and Chandgad found that high PHCs population density (Above 3), whereas Karveer and Hatkanangle tahsil observed low density (Below 1).

The moderate density shows in 4 tahsils with PHCs population density between 1 to 3. In rural health care services, PHCs role is very crucial. The tahsils with higher percentage of rural population shows high PHC density.

4. HSCs-Population Density:

In Kolhapur district, density of health sub center and population is high i. e. 10.66 HSCs per 100000 populations, which is very high as compared to Maharashtra (9.42).

Health sub-centers play a very crucial role in providing health care services to the rural and backward areas. Most of the western part of the Kolhapur district have hilly and backward as compared to eastern plain and developed area. HSCs population density of Kolhapur district is very high as compared to other densities of health services in the district. Mainly concentration of health sub centres is observed in eight tahsils viz. Shahuwadi, Panhala, Gaganbavda, Radhanagari, Bhudargad, Ajra, Chandgad and Gadhinglaj. Out of 413 health sub centres in the district, 250 (60.53 per cent) health sub centres concentrated in these eight tahsils.

While two tahsils viz. Karveer and Hatkanangle have observed low HSCs population density and remaining two tahsil like Shirol and Kagal have observed moderate HSCs population density.
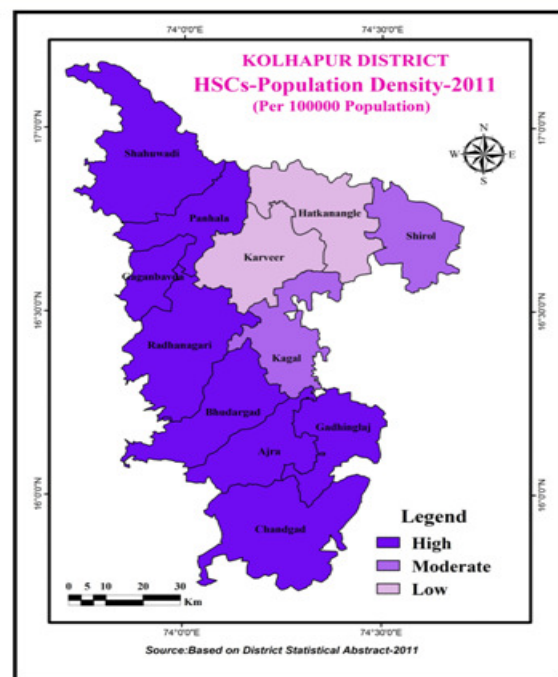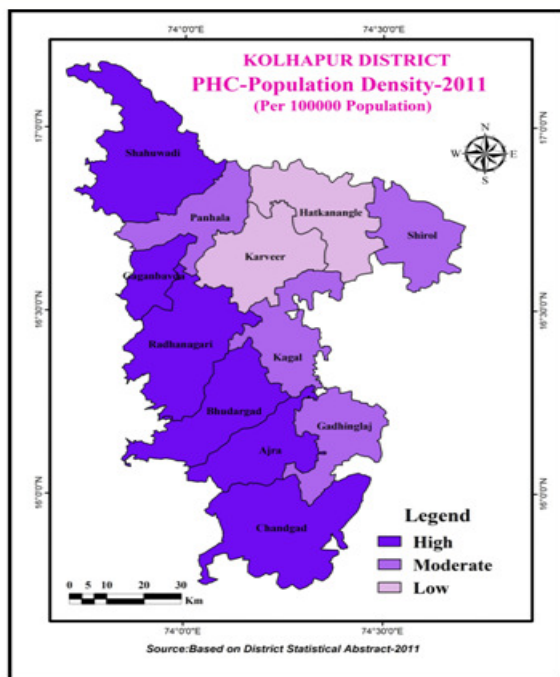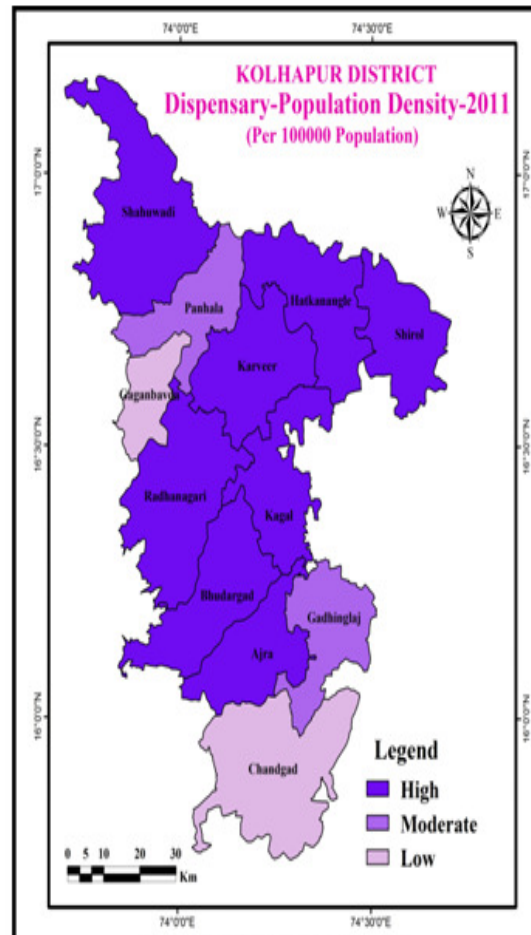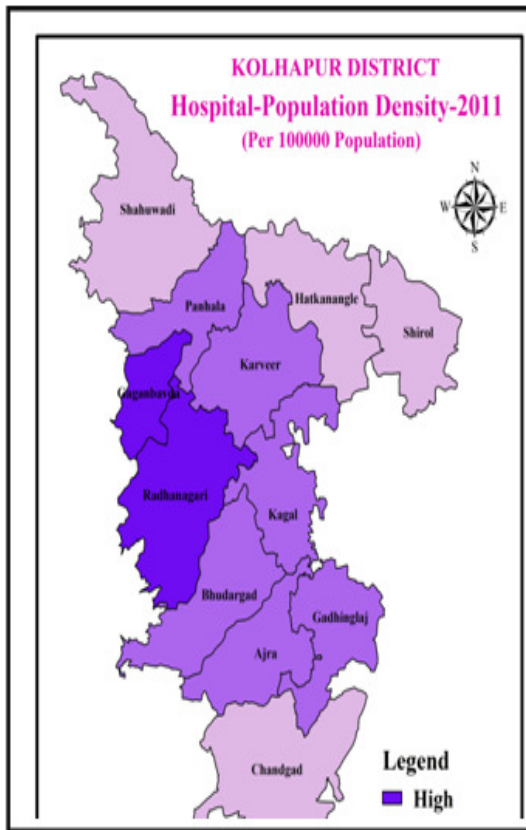
Fig. 4

Fig.5

Conclusion:

This research paper shows the important findings of inter-tahsil wise spatial distribution of health services in Kolhapur district. The whole analysis is based on population density of health care services available in the district.

It is found that the availability of health services in the district is inadequate from all standards. This Study considered major medical facilities, such as Hospital, Dispensary, Primary Health Centers and Health Sub-centers. The distribution of Primary Health Centre is not same in Kolhapur district. As per the norms one Primary Health Centers per 30,000 persons in rural area and 20,000 persons in tribal area. There is no ideal situation in any tahsil of the district. Therefore, there is need of establishment of Primary Health Centers and Health Sub-centers according to the norms in the study region.

Lack of specialized treatment facilities and quality of it is a common phenomenon in rural area in the study region. In Kolhapur, district uneven distribution of health care facilities caused by geographical and social condition of the district as well as political issues, economical condition of the state.

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