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# Spatial Distribution of Specialized Doctors in Karad Taluka Dist. Satara (MH.)

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#### Abstract

The application of geographical concept and techniques to health related problems is called Medical Geography. In it includes the study of the spatial analysis of various aspects of human health problems. In India medical geography is under developed branch of geography. Capt. A.W. Hesterlow (1929) was the first researcher who throw light on the possible relationship of environmental factor and disease in southern India. After, Geddens (1942) made a very important contribution when he tried to find the relationship between the general conditions of health and population growth in India. Learmonth (1957) provided a scientific base to the researcher of medical Geography in India.

In India the foundation of medical geography was laid down in the 1930. So many research scholars have done research work on disease ecology. Someone have done research work on Geography of nutrition and disease ecology. Research work is carried out on socio-cultural aspects of health behavior and traditional medicine, health care Geography and family planning Programme. Akhtar and Nilofar Izar (1985) have studied the inequalities in the distribution of health care facilities in India. They have highlighted the imbalances in availability of health care facilities in different regions at state level. The present study attempts to analyze spatial distribution of health facilities in Karad Taluka, like dispensaries, hospitals, number of doctors in relation to their specialization. Dispensaries is a place especially charitable institution, where medicines are dispensed serving the useful health facilities in rural as well as in urban areas.

**Key words:** Distribution of specialized doctors.

#### 1. Introduction

The application of geographical concept and techniques to health related problems is called Medical Geography. In it includes the study of the spatial analysis of various aspects of human health problems. In India medical geography is under developed branch of geography.

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### 2. Objectives:

I) To study the distribution of specialized doctors in Karad Taluka.

### 3. Data collection and methodology

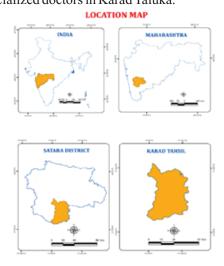
For this research paper, researcher have used a different method for study. The researchers felt that it is necessary to give the field visit for study. So the primary information is received by the field work. Secondary data collected from Panchyat Samitte, Karad and Indian Medical Association

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branch Karad. After collecting the primary and secondary data, researcher has used to come up with different statistical methods for tabulation. After that researcher attempted to show the information obtained through a map and diagrams.

## 4) Study area.

Karad Taluka is extends from 17016' north to 17033' north latitude and 73052' east to 74016' east longitude. It comprises in area of 405.8 sq. Km. Its maximum temperature is up to 420C and minimum 150 C. Annual rain fall is 700 mm and relative humidity is 85 per cent in the rainy season and climate is monsoonal type. It is favourable and healthy for human living and other living things. 5. Spatial distribution of specialized doctors in Karad Taluka.



## **5.1 Physicians**

There are 507 specialized doctors in various clinics and hospitals in Karad Taluka as well as in Karad city. There are 86 physicians are distributed unevenly in study area and per cent of it is 16.96.In Karad city and Kale PHC region there are highest no. of physician i.e. M.D (Med.) 40 and 31 physicians respectively. Because this region is highly populated and has largest no. of hospitals and dispensaries. In Vadgaon Haveli, Sadashivgada, Supane, and Umbraj PHC region has very few physicians, i.e. 1,2,4,2 physicians respectively.

#### 5.2 Dentists.

In Karad Taluka has 81 dentists out of that Karad city has 58 and Kale PHC region has 13 dentists. In Vadgaon Haveli, Sadashivgada, Supane, Umbraj and Masur PHC region has 1, 1, 1, 3 and 4 dentists respectively.

## 5.3 Surgens

There are 49 Surgen doctors, out of that in Karad City and Kale PHC region has 21, 18 surgens respectively. Supane and Umbraj PHC region has surgens i.e. 8,2 respectively. People of this PHC region goes to Karad city and Malkapur for further operational activity.

### 5.4 Obstric and Gynecologists

In specialized group of doctors the Obstric and Gynecologists comes on 4th rank which is accounts 34 in Karad Taluka. Out of that in Kale PHC region and in Karad city has 10,11 respectively. In Supane, Umbraj, PHC region has rare specialized doctors. i.e. 6, 4, 2 respectively. In Masur and Yevati has very low specialized doctors i.e. 2, 1 respectively.

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Table no.1 Specialized doctors in Karad Taluka.

Specialization	Name of PHC Centres													
Of Doctors	V-4	Shada	Supane	Rethare	Kale	Indoli	Umbraj	Masur	Yeva	Kole	Helgao	Karad	Tot	Percent
	Vadgan Haveli	shivegad							ti		n		al	
Physician	1	2	4	0	31	0	2	0	0	0	0	46	86	16.96
Dentists	1	1	1	0	13	0	3	4	0	0	0	58	81	15.97
Surgens	0	0	8	0	18	0	2	0	0	0	0	21	49	9.66
Gynecologist	0	0	6	0	10	0	4	2	1	0	0	11	34	6.7
Pediatrics	0	0	1	0	5	0	4	2	0	0	0	21	33	6.5
Orthopedics	0	0	6	0	8	0	2	0	0	0	0	13	29	5.71
Ophthalmology	0	0	2	0	5	0	0	0	0	0	0	13	20	3.94
Homeopathic	0	2	0	0	0	1	1	0	1	0	0	14	19	3.74
Cardiologists	0	0	9	0	4	0	0	0	0	0	0	3	16	3.15
Anesthesian	0	0	3	0	2	0	0	0	0	0	0	9	14	2.76
Ultralogists	0	1	0	0	1	0	1	0	0	0	0	11	14	2.76
ENT	0	0	3	0	5	0	0	0	0	0	0	6	14	2.76
Radiologists	0	0	1	0	4	0	0	0	0	0	0	8	13	2.56
Ayurvedic	0	1	0	0	1	0	3	0	0	0	0	6	11	2.16
Pathologists	0	0	1	0	2	0	0	0	1	0	0	5	9	1.77
Skin Specialist	0	0	0	0	3	0	0	0	0	0	0	6	9	1.77
Gastroscopists	0	0	2	0	2	0	0	0	0	0	0	4	8	1.57
Psychiatrics	0	0	1	0	3	0	0	0	0	0	0	4	8	1.57
Neurologists	0	0	1	0	3	0	0	0	0	0	0	3	7	1.38
Cancer specia.	0	0	2	0	2	0	0	0	0	0	0	3	7	1.38
Urologists	0	0	3	0	2	0	0	0	0	0	0	2	7	1.38
CT Scan	0	0	1	0	1	0	0	0	0	0	0	3	5	0.98
Physio-thera.	0	0	0	0	1	0	0	0	0	0	0	4	5	0.98
Plastic Surgen	0	0	1	0	1	0	0	0	0	0	0	2	4	0.78
Nephrologists	0	0	1	0	1	0	0	0	0	0	0	0	2	0.39
Hematologists	0	0	1	0	1	0	0	0	0	0	0	0	2	0.39
Medical Cons.	0	0	0	0	0	0	0	0	0	0	0	1	1	0.19
Total	2	7	58	0	129	1	22	8	3	0	0	277	507	100
Percentage	0.39	1.38	11.43	0	25.44	0.19	4.33	1.57	0.59	0	0	54.63	100	

Source: field work, Panchyat samitte, Karad and Indian Medical Association branch Karad. (2019)

**<sup>5.5</sup> Pediatrics** -In Karad Taluka and Karad city has total 33 pediatrics. Out of that in Karad city has 21 pediatrics and in Supane, Kale, Umbraj Masur PHC region has low pediatrics i.e. 1, 5, 4, 2 respectively.

**<sup>5.6</sup> Orthopedics-** In study area are 29 orthopedics doctor. Out of that 13 ortho doctors are in Karad city and 8 ortho doctors are in Kale PHC region because this area is more populated than other PHC region.

Supane and Umbraj PHC region has less specialized doctor.

- **5.7 Ophthalmology-** In study region there are 20 ophthalmologist. Out of that 2 ophthalmic in Supane, 5 are in Kale PHC region and in Karad city has 13 ophthalmic doctors.
- **5.8 Homeopathic** Homeopathic treatment is much different than allopathic and Ayurvedic treatments. In Karad Taluka has 19 homeopathic doctors and they are distribute in uneven and percentage of it is 3. Out of that very low proportion of Homeopathic is in Sadashivgada, Indoli, Umbraj, Yevati i.e. 2, 22, 1 respectively. In Karad city are 14 Homeopathic doctors.
- **5.9 Heart specialist** -Heart specialists are uneven distributed in Karad Taluka and their proportion is also low. In Karad Taluka has 16 heart specialists and per cent of heart specialist is only 1.15. In Supane, Kale, PHC region has 4 and 9 heart specialists respectively. In Karad city there are only 3 heart specialist doctors.
- **5.10** Anesthesian In study region Anesthesian doctors are 14 and proportion of it is only 2.76 percent to the total doctors. In Supane, Kale PHC region specialists doctor has 3, 2 respectively. In Karad city has 9 Anesthesian doctors.
- **5.11 Ultralogists-** In study region Ultralogists doctors are 14 and per cent of it is 2.76 to the total doctors. These types of doctors are very much distributed in uneven in Karad Taluka. In Sadashivgada, Kale, and Umbraj PHC region has only 1 specialized doctors respectively. In Karad city has 11 Anesthesia doctors in various hospitals. And they visit to many hospitals at the time of operation. These type of doctors concentrated in Karad City.
- **5.12 ENT** ENT 14 specialist's doctors distributed in Karad Taluka to total doctors and per cent of it is 2.76 to the total percent. In Supane and Kale PHC region has only 3, 5 doctors respectively and in Karad city has 6 doctor. Remaining PHC regions has without specialized doctors.
- **5.13 Radiologists** In study region total 13 Radiologists are distributed. Percentage of it is 2.56 to the total percentage. In Supane and Kale PHC region has only 1, 4 specialized doctors respectively. In Karad city has 8 Radiologists to the account of total.
- **5.14 Ayurveda** In study region has total 11 Ayurvedic doctors and per cent of it is 2.16. Sadashivgada, Kale and Umbraj PHC region has only 1, 1, 3 specialized Ayurvedic doctors respectively. In Karad city has 6 Ayurvedic doctors to the total.
- **5.15 Pathologists-** In study region are only 9 specialized doctors. Out of that Supane, Kale and Yevati PHC region these doctors distributed 1, 2 and 1 respectively. In Karad city 5 Pathologists doctors are distribute in various hospitals.
- **5.16 Skin specialists-** In study region 9 skin specialists are found in only city region. Per cent of it is 1.77 to the total percent. In Kale PHC region and in Karad Taluka there are 3, 6 doctors respectively.
- **5.17 Gastroscopists** There are 8 Gastroscopists doctors distributed in Karad Taluka and per cent of it is 1.57 to the total percent. In Supane and Kale PHC region has 2 specialized doctors respectively. 4 Gastroscopists are found in Karad city. In remaining PHC region are not found specialized doctors.
- **5.18 Psychiatrics-** There are 8 Psychiatrics are found in Supane, Kale PHC region and Karad City and percent of it is 1.6. In Supane 1, Kale 3 and in Karad city found 4 psychiatrics.
- **5.19** Neurologists- In study region found only 7 Neurologists and percentage of it is 1.38 to the total percentage. In Supane and Kale PHC region are found only 1,3 specialist doctor respectively. In Karad City 3 Neurologists are found and they serve in various hospitals in Karad city.
- **5.20 Urologists-** There are 7 Urologists found in Karad Taluka and percentage of it is 1.38. In Supane and Kale PHC region has 3, 2 specialized doctors respectively and In Karad city has 2 Urologists.
- **5.21 Cancer specialists** In Karad Taluka the cancer specialist doctors are distributed unevenly. There are 7 specialized doctors of it and percentage of it is 1.4 to the total percent. In Supane and Kale PHC region specialized doctors has 2, 2 respectively and in Karad city has 3 cancer specialists.
- **5.22** C.T. Scan C.T. Scan specialists are distributed in uneven in Karad Taluka. Proportion of it is very low. In Karad Taluka 5 C.T. Scan specialized doctors are found and per cent of it is 0.98. In Supane

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and Kale PHC region found 1 respectively. In Karad city 3 C.T. Scan specialized doctors are found. They serve in Shree Hospital, Krishna Hospital and Sahyadri super specialty hospital.

- **5.23 Physio-Therapists** Only 5 Physio-therapists are found mainly in Kale PHC region and Karad city and percentage of it is 0.98 to the total. In Karad city 4 specialists are found and they serve in various hospitals in Karad Taluka.
- **5.24 Plastic Surgen-** In study region are total 6 plastic Surgen and percentage of it is 0.78. In Supane and Kale PHC region found 1 respectively. In Karad city there are 4 plastic Surgen and they serve in various dispensaries and hospitals.
- **5.25 Nephrologists**-In Karad Taluka Nephrologists are found in very rare. Total 2 Nephrologists are found in Supane and Kale PHC region and Percentage of it is 0.39. These doctors are serve in Sahyadri super speciality hospital and Krishna hospital and research center, Malkapur.
- **5.26 Hematology** In Karad Taluka only 2 Hematologists are found and per cent of it is 0.39 to the total percent. They found in Supane and Kale PHC region.
- **5.27 Medical Consultant** Medical consultant are found only in Karad city. There is 1 medical consultant and i.e0.19 per cent to the total per cent. In remaining part of Karad Taluka there is not a Medical consultant.

#### 6. Conclusion:

- i) There is no physician in Rethare (Bk.), Indoli, Masur, Yevati, Kole and Helgaon PHC region.
- ii) In Rethare (Bk.), Indoli, Yevati, Kole, and Helgaon PHC region there is no dentists.
- iii) In Vadgaon Haveli, Sadashivgada Rethare (Bk.), Indoli, Masur, Yevati, Kole and Helgaon PHC region is not a Surgeon.
- iv) Sonography and Diagnostic centers are scarce.

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