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#### ORIGINAL ARTICLE





## "A STUDY OF SPATIAL DISTRIBUTION OF HELATH CARE FACILITIESIN OSMANABAD DISTRICT"

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#### **Abstract:**

Health care is defined as the active process by, which on individual achieves physicial and mental well being. Health is one of the basic determinants of social well being and development of human resources. Availability of health care facilities may not be regarded as good indicates of human resource development until and unless their optimum distribution and allocation with sync to threshold population and range of goods. Government provides healths facilities to the masses, but their unplanned distribution brings wide gaps leading to regional in balances and in equalities in socioeconomic development. An attempt has been made to study the spatial distribution of health care facilities care facilities and their performance in Osmanabad district.

#### **KEYWORDS:**

Health care, world health organization, community health centre, immunization facilities.

#### INTRODUCTION:

An investment on health is an investment on men improving the quality of his life. It is always says that, "Health Is Wealth". This type of slogans can be seen always in every developing countries like India, in the world. Health does not simply mean absence of disease or infirmity, but the overall well being of an individual horizontal and vertical linkages have, therefore to be established among all the interrelated with protected water supply, family planning and maternity and child care, this is the main agenda for any government across the country. For achievement of above development activities. Indian government since its inception establishes several welfare plans including the five years plans for the welfare of its people. The Ministry of Health and Family welfare looks after above activities in India.

Good Health is an important contributor to economic productivity and economic growth. It Is depends on three aspects (i) the out environment (ii) the style of living (iii) Health care. The Almata Declaration (1978) "Health for all by 2000 A D" cannot be executed simply be expanding the supply of rural preventive oriented health facilities. It also required interventions increasing peoples demand for health services. Osmanabad district in not far behind on the field of health care facilities. At present, district has 24 (2006-07) hospitals and number of bed were 869,42 primary Health Centre, 204 Primary Health Sub Centers. Beside this the state government has run family planning centers in the district.

#### **OBJECTIVES:-**

The present paper is aimed to study the spatial distribution of health care facilities at different level and their performance in the study region.

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#### **DATABASE AND METHOD USE:-**

The work is entirely based on secondary data, which is obtained from various sources. Data regarding the availability of various health care facilities are collected from socio-economic review and district statistical abstract of osmanabad district and district medical and health officer osmanabad. The collected data is processed and presented in the form of table.

#### STUDY AREA:-

Osmanabad district is situated between 17 degree 3 min. to 18 degree 42 min N. latitude and 75degree 11min. to 76degree 47min. E longitude. It is surrounded by Beed district in the north, Latur district in the east, Karnataka state in the south east Solapur district in the south west and Ahmednagar district in the North West. It is comprise eight tahsils, namely Omerga, Lohara, Tuljapur, Osmanabad, Kalamb, Wash, Bhoom and Paranda Tahsils, Osmanabad district has an area of 7569 Sq.Km. and population 14,86,586 as per the 2001 census. The district account for 2.46% of the area of the state and 1.62% of the population, most of the district lies on the Balaghat plateau. The plateau region rises rather steeply from the plains in the west and slopes gently towards the east. It is narrow and high in the Northwest, but broader and lower in the south-east. The climate of the district is generally dry, except during the monsoon season. The year may divide four seasons. The average annual rainfall in the district is about 740 mm

#### **RESULT AND DISCUSSION:-**

The distribution of health care services in the district throw light on the general health and available medical facilities. The health care facilities within in the district under study as whole are meager, as compared to total population. The various health care facilities in the district are shown In the table-1. Table-1 indicate the trends of health care facilities in the district since 1960-61 to 2006-07.

Table -1. Trends Of Health Care Facilities in Osmanabad District (1960 -61 to 2006-07)

	Health Care Facilities						
Year	Clinic	Hospital	P.H.C.	P.H.S.C.	Bed	Ratio of Bed per	
						one population	
1960-61	14	02	N.A.	N.A.	250	21	
1670-71	32	03	15	N.A.	364	18	
1980-81	33	03	35	N.A.	610	32	
1990-91	11	08	41	N.A.	72	70	
2000-01	14	08	42	N.A.	869	59	
2004-05	14	10	42	204	869	58	
2005-06	14	10	42	204	869	58	
2006-07	14	10	42	204	869	58	

**Source:** District medical and Health Officer, Osmanabad.

N.A.-Not available, P.H.C.- Primary Health centre, Health P.H.S.C.- Primary Health Sub-Centre
In the year 1960-61, (table-1) there was 14 clinic and 02 Hospital in the district as against 14 clinics
and 10 hospitals in the year 2006-07. The highest number of Clinic was recorded (33) in the year 1980-81
and lowest (11) in 1990-91. Hospitals provide their services to the surrounding hinterland. Sometimes the
doctors of primary health centers and these hospitals refer the complicated and serious cases. Hospital is
generally facilitated by the infrastructure facilities. Among these residential medical officer and
paramedical staff, operation theatre, well-equipped lab, X-ray unit, sizable number of beds.

The Bhore committees in 1946 have the concept of primary Health Centre as a basic health unit to provide an integrated curative and preventive health care to rural and tribal people. According to the National Health Plan one Primary Health Centre Should provide its services to about 2000 population in





hilly, tribal and backward areas for getting more coverage. In the year 1970-71, there were recorded 15 Primary Health Centre in the district as against 42 Primary Health Centre in 2006-07, Total number of P.H.S.C. were registered 204 in the year 2006-07. Primary Health Sub-Centre is the peripheral outpost of the primary Health Centre. They are being established on the basis of one primary Health Sub-Centre for 5000 population in general.

The availability of number of beds in various clinics, hospitals and primary health centre are recorded small numbers. There was found 21 beds per one lakh population in 1960-61 as against 58 beds in the year 2006-07.

#### TAHSIL WISE DISTRIBUTION OF MAJOR HEALTH CARE FACILITIES:-

Tahsil wise health care facilities have been given in table-2 where the uneven distributions of health care facilities are notices in the district during the year 2006-07. 10 hospitals 14 clinic, 42 primary health care centers, 204 primary health sub-centers etc. served the entire district. Beside this 91 doctors and 294 nurses are working in various health centers (table-2).the aim.

Table -2 Tables wise Distribution of Health Care Facilities in Osmanabat Dist. (2000 -07)								
Tahsil	Hospitals	Clinics	P.H.C.	P.H.S.C.	Doctors	Nursing	Bed	
					Doctors	Staff	Strength	
Parand	la	01	02	04	19	09	27	74
Bhoon	n	01	01	05	21	09	25	48
Washi	i	01	-	02	16	05	22	12
Kalam	b	01	02	06	27	15	40	78
Osmanal	bad	02	04	10	42	22	66	411
Tuljapı	ır	01	02	07	32	15	46	118
Lohar	a	01	-	04	18	08	29	24
Omerg	ga	02	03	04	29	08	39	104
Total		10	14	42	204	91	294	869

Table -2 Tahsils wise Distribution Of Health Care Facilities in Osmanabad Dist. (2006 -07)

#### **Source:**

- i) District medical and Health Officer, Osmanabad.
- ii) Socio-economic review of Osmanabad.

Of these agents of health services in promoting maintaining, monitoring and restoring the health of peoples in the district. The highest number of hospitals and clinics are (06) observed in Osmanabad tahsil and lowest numbers are noticed in Washi and Lohara tahsils in the year 2006-07 Osmanabad tahsil is ranked first in number of P.H.C. and P.H.S.C. during the same period, whereas lowest numbers are marked in Washi tahsil. There are 91 doctors employed in various health centres and treated nearly about 8,62,900 patients (table-3). The doctor ratio per one lakh population in the distriction is about 16 and doctors ratio per one lakh patients are marked 09, with regard to bed strength, there are 869 bed in the district, whereas bed strength per one lakh population in the are 58 and per one lakh paients it is 115. On average 2364 patients are being treated per day, at various health centers in the Osmanabad district.

#### TAHSIL WISE PATIENTS TREATED IN 2006-07:

In Osmanabad district, Hospitals, Primary Health Center and primary health sub-centers are geographically situated in a different places.



Table-3 Tahsil wise Patients Treated In Osmanabad District (20007)

Sr.No.	Tahsil	Patients Treated				
	Tansn	Indoor Patients	Outdoor Patients			
1	Paranda	454	36			
2	Bhoom	430	40			
3	Washi	254	42			
4	Kalamb	614	81			
5	Osmanabad	3941	724			
6	Tuljapur	793	104			
7	Lohara	180	23			
8	Omerga	566	336			
Total		7232	1397			

**Source :** District Medical and Health Officer, Osmanabad.

When a patient is serious or needs treatment under the supervision of medical staff, he should be admitted in indoor. It is excepted that, every primary health centre should be facilitated by indoor patients department that includes words and required number of beds. Nearly about 1,39,700 (16.18 table-3) patients were treated as a indoor patients in the year 2006-07. The highest number of indoor patients were treated (51.82%) in Osmanabad tahsil and lowest in Lohara tahsil (1.64%) in the same year whereas in Paranda tahsil 454, Bhoom 430, Kalamb 614 Tuljapur 793 and Omerga tahsil 566 patients were treated as indoor patients.

Every primary centre has O.P.D. facilities. However the number of outdoor patients investigated daily is varying. It is clear from the table-3 that in about 72,320 (83.01% to total patients treated.) patients were treated as outdoor patients in the year 2006-07. The highest number of outdoor patients (54.90%) were treated in Osmanabad tahsil and lowest in Lohara tahsil (2.48%) during the same year followed by Tuljapur (10.96%), Kalamb (8.49%), and Omerga (7.82%) tahsil etc.

#### PATHOLOGICAL LAB:-

Generally various primary tests of Urine, stools, bloods, spit etc. have been conduction in a pathological. In order to get perfect diagnosis of patients the service of pathological units is quite essential. In general every tahsil has 3 or 5 laboratories to five pathological laboratory.

#### OPERATION THEATRE:-

In the study region, some primary health centers have the facilities of operation theaters. Each tahsil has one operation theatre and mainly perform minor surgery and family planning operation.

#### **IMMUNIZATION FACILITIES:-**

To prevent the incidents of disease the life span, immunization is carried out at various stages. Following immunization facilities are available in every primary health centre of the study area. Which includes TT for tetanus, BCG for tuberculosis, D.P.T. for Diphtheria pertusis and Tetanus, polio drops for polio and measles.



Table-4 The Programes of Vaccine Implemented Under maternity and child care in Osmanabad District (200607)

Tahsil						Tetanus		
	D.P.	Polio	B.C.G.	Measles	D.T.	10	16	Pregnant
						years	Years	Women
Paranda	2959	1317	1317	2691	3580	3700	3015	2900
Bhoom	2618	2593	2593	2590	3347	3404	2697	2788
Washi	1457	1795	1795	1512	2291	2275	2076	1991
Kalamb	4050	3568	3568	3726	4033	4307	3849	3970
Osmanabad	6490	6416	6416	6045	6805	6841	6735	6604
Tuljapur	5540	5425	5425	5155	5978	576	5547	5708
Lohara	2159	2246	2246	2253	2540	2646	2249	1900
Omerga	4824	4860	4860	4763	5687	5019	4033	4231
Total	30097	28220	28,220	28735	34261	33928	31120	31195

**Source :** District Medical Officer, Osmanabad.

Table-04 Indicates the vaccinations programes which is implanted in the district during the year 2006-07. It is observed that primary health centers tries to complete annual target of various does and vaccinations. In Osmanabad district 2,45,776 were immunized during 2006-07. The maximum was done in osmanabad (52,352) and minimum in washi tahsil (15,192) under D.P.T. programmes 30,097 people were vaccinated with maximum performance in osmanabad (6490) tahsil and lowest in Washi tahsil (1457) Polio drops were given to children through health centre and also through pulse polio immunization programme especially children below 5 years of age. Through Health Centre about 28,220 children's were covered in all tahsils of the district. To control tuberculosis the district medical authorities are performing BCG vaccinations mainly on new born. In Osmanabad nearly 28,220 were benefited by this vaccination in the year 2006-07. Osmanabad tahsil performed highest number (6416) of vaccinations and Paranda tahsil reported lowest number (1317). The measles immunization was available to about 28,735 children with highest performance in Osmanabad tahsil (6045) and lowest in Washi tahsil (1512) under the tetanus programme nearly about 96,245 in fants children and pregnant women were vaccinated during the year 2006-07.

#### **CONCLUSION:-**

To conclude the health care facilities scenario of the osmanabad district which included hospitals, P.H.C., P.H.S.C., pathological lab, etc reveled that there is an inequality in the spatial distribution of heath care facility in the district. The achievement of immunization programmes was not uniform in the study area. Some tahsils recorded more cases and some tahsils achieved very few cases.

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