



A STUDY OF HEALTH CARE FACILITIES IN SINDHUDURG DISTRICT OF MAHARASHTRA

Dr. Sudhir Murlidhar Buva

Associate Professor & Head, Department of Geography, S. P. K. Mahavidyalaya, Sawantwadi, Dist: Sindhudurg (MS) India

ABSTRACT

Health is defined as a condition of quality of human organism expressing the adequate functioning of the organism in a given condition in genetic and environment. Healthy workforce in both industrial and agricultural sector is the backbone of any nation. It is found that the quality of Healthcare Facility during the period 2001-2019 of Sindhudurg District is comparatively poor (comparison to Bhore Norms) It is observed that the Bed-Population Ratio is high in Dodamarg, Kudal and Devgad Thasils, it is one bed for 3260, 2075 and 2121 population respectively during 2019. High Expecting Bed-Population Ratio was observed in only Kudal 173. It is noticed that during the year 2019 Doctor-Population Ratio was above 10000, which is comparatively very high. Total Expected Doctors as per Bhore Norms during 2019 Sindhudurg District of Maharashtra was observed by 311. It is noticed high Expected Doctors found in three tehsils like Kudal 62 and at the same period it was medium recorded in Sawantwadi 49, Devgad 48, Kankavli 48, Malvan 37 etc, It is found that during the year 2019 Nurse to population ratio was 2500, which is comparatively very high. Total Number of Expected Nurses as per Bhore Norms in Sindhudurg District of Maharashtra during 2019 was observed with 1557. It was high Expected Nurses-Population Ratio recorded in tehsils like Kudal 311 tehsils of Sindhudurg District.

KEYWORDS: Bhore Norms, Bed-Population Ratio (BPR), Doctor-Population Ratio (DPR), Nurse-Population Ratio (NPR), Primary Health Centre (PHC)

1. INTRODUCTION

Health is defined as a condition of quality of human organism expressing the adequate functioning of the organism in a given condition in genetic and environment. In simple words 'Health' implies the condition of a person's 'Body and Mind'. 'A Person without major physical and psychological problem can be called healthy'. Health has a bearing on man's capacity to earn his livelihood and support his family. In other words, economic development of a person depends upon good health. Healthy workforce in both industrial and agricultural sector is the backbone of a nation. Economic development affects the social and political life of habitants of the nations (Park, 2011). The health services may be analyzed in terms of community for which they serve and the health concern deals with the facilities that are the internal part of the particular health system and represent a response to the health concerns and to the health need. But it seems that health services are not examined by relating them to the community they serve and hence the uneven distributions of medical facilities are observed in many countries. There is a great need of proper health planning in relation to community as per its demands and needs.

2. STUDY AREA

Sindhudurg is one the District of South Maharashtra situated along the west coast and part of Konkan. The study region which lies between 15° 37' north to 16° 40' north latitude and 73° 19' East to 74° 13' East longitude, covers an area about 5207sq. km. and having total population 848868 persons according to 2011 census. The Sindhudurg District lies in the south part of

the Maharashtra State along the sea coast which extends north-south direction about 121 km., (Fig.No.1)

There are 736 villages and 4 towns having population density 163 persons in per sq.km. Administrative district is sub-divided into 8 Tahasils. The streams which flow from the Sahyadri towards the sea have formed basins at pace between the hill ranges and on the coastal basins. Physiographically, this area is very rugged and complex one. The height of the region varies from sea level up to 1300m.

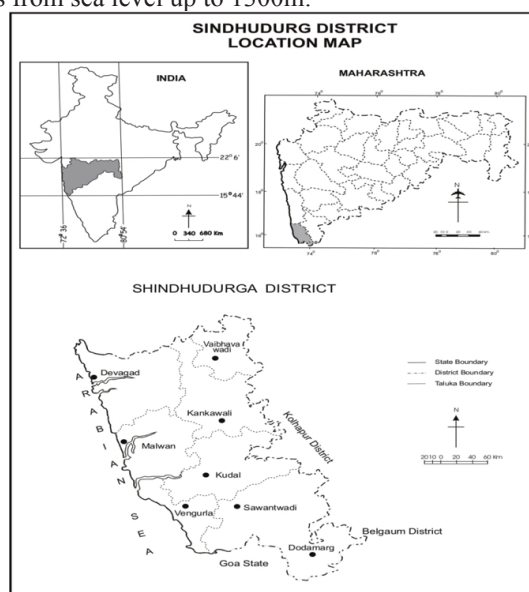


Fig.No.1

3. OBJECTIVES

The main objectives of the present study are:

1. To study the Bed-Population Ratio in Sindhudurg District.
2. To study the Doctor-Population Ratio in Sindhudurg District
3. To study the Nurse-Population Ratio in Sindhudurg District.

4. DATA COLLECTION AND METHODOLOGY

The study is mainly based on secondary data. The secondary data was collected from the District Census Handbook, District Gazetteers, Vital Statistics Office of Pune, Socio-economic Abstract of Sindhudurg District.

The work load factors deal with, Bed Population Ratio (BPR), Doctor Population Ratio (DPR) and Nurse Population Ratio (NPR). All these indices are calculated with the norms suggested by the Bhore Committee (1946) and the ratio was calculated with the help of McGlashan formula (1).

$$\text{Work load} = \frac{\text{Population served in '00'}}{\text{General use of patient's beds}} \quad (1)$$

5. RESULTS AND DISCUSSION

1. Bed Population Ratio in Sindhudurg District of Maharashtra in 2001

Total Existing Bed Population Ratio Sindhudurg District of Maharashtra was registered by 1012 during 2001. It was high Bed-Population Ratio observed in four tehsils of the Sindhudurg District like in it observed Devgad 1216 and during the same time in Malvan 1215 Bed-Population Ratio. Medium Bed-Population Ratio in Vaibhavwadi 1151, Sawantwadi 1007. The low Existing Bed-Population Ratio was observed in Kankavli 837, Dodamarg 834, Vengurla 762 and Kudal 753.

Total Expecting Bed-Population Ratio in Sindhudurg District of Maharashtra during 2001 was recorded by 976. High Expecting Bed-Population Ratio was in Sindhudurg District of Maharashtra recorded in Kudal 170 and Sawantwadi 166. Medium Expecting Bed-Population Ratio observed in Kankavli 154, Devgad 139, Malvan 130. Low Expecting Bed-Population Ratio in Sindhudurg District registered in Vengurla 98, Dodamarg 56, Vaibhavwadi 54, respectively.

1.1. Bed-Population Ratio in Sindhudurg District of Maharashtra in 2019

Total Existing Bed-Population Ratio during 2019 in Sindhudurg District of Maharashtra was found with 918. Out of the eight tehsils it was High existing Bed-Population Ratio observed in Dodamarg 3260, Kudal 2075 and Devgad 2121. At the same period Medium existing Bed-Population Ratio observed in Vaibhavwadi 1044 and Kankavli 1008. It observed that low Existing Bed-Population Ratio was in Malvan 745, Sawantwadi 647 and Vengurla 217 tehsils.

Total Expecting Bed-Population Ratio in Sindhudurg District of Maharashtra as per Bhore Norms during 2019 was noticed with 866. High Expecting Bed-Population Ratio was observed in only Kudal 173. Medium Expecting Bed-Population

Ratio found in various tehsils like Sawantwadi 138, Devgad 134, Kankavli 132 and Malvan 104. It is important that low Expecting Bed-Population Ratio was recorded in four tehsils like Vengurla 82, Dodamarg 54, Vaibhavwadi 49, respectively.

No.	Name of Tehsil	2001		2019	
		Existing Bed-Population Ratio	No. of Expecting Bed as per Bhore Norms	Existing Bed-Population Ratio	No. of Expecting Bed as per Bhore Norms
1	Vaibhav wadi	1151	54	1044	49
2	Devgad	1216	139	2121	134
3	Kankavli	837	154	1008	132
4	Malvan	1215	130	745	104
5	Kudal	753	170	2075	173
6	Vengurla	762	98	217	82
7	Sawant-wadi	1007	166	647	138
8	Dodamarg	834	56	3260	54
Sindhudurg District		1012	976	918	866

Source: Socio Economic Review and Statistical Abstract, 2001-2002 and 2019-2020

Table No. 1: Distribution of Bed-Population Ratio in Sindhudurg District of Maharashtra in 2001 and 2019

2. Doctor-Population Ratio in Sindhudurg District of Maharashtra in 2001

Total Existing Doctor-Population Ratio during 2001 in Sindhudurg District of Maharashtra was noticed with 11432. It is observed that high Existing Doctor-Population Ratio was in only Malvan 10607 Thasil. Medium Existing Doctor-Population Ratio recorded in four tehsils like Devgad 8353, Vaibhavwadi 8058, Kankavli 7272, Sawantwadi 7094 respectively. It is noticed that low Existing Doctor-Population Ratio was in, Vengurla 6799, Dodamarg 6254 and Kudal 4779, tehsils of Sindhudurg District.

Total Number of Expected Doctor-Population Ratio as per Bhore Norms during 2001 in Sindhudurg District of Maharashtra was observed by 347. It is noticed high Expected Doctors found in two tehsils like Kudal 61, Sawantwadi 60, respectively. While it was medium Expected Doctor-Population Ratio recorded in Kankavli 55, Devgad 50, Malvan 47 tehsils of Sindhudurg District respectively. It is notable that low Number of Expected Doctors was observed in four tehsils of Sindhudurg District. which are Vengurla 35, Dodamarg 20, Vaibhavwadi 19, etc.

No.	Name of Tehsil	2001		2019	
		Existing Doctor -Population Ratio	No. of Expecting Bed as per Bhore Norms	Existing Doctor -Population Ratio	No. of Expecting Bed as per Bhore Norms

1	Vaibhav wadi	8058	19	6264	18
2	Devgad	8353	50	10992	48
3	Kankavli	7272	55	4100	48
4	Malvan	10607	47	6988	37
5	Kudal	4779	61	3620	62
6	Vengurla	6799	35	4086	29
7	Sawant-wadi	7094	60	5085	49
8	Dodamarg	6254	20	6113	20
Sindhudurg District		11432	347	10600	311

Source: Socio Economic Review and Statistical Abstract, 2001-2002 and 2019-2020

Table No.2: Distribution of Doctor-Population Ratio in Sindhudurg District 2001and 2019

2.1. Doctor Population Ratio in Sindhudurg District of Maharashtra in 2019

Total Existing Doctor-Population Ratio in Sindhudurg District of Maharashtra during 2015 was found with 10600. It is observed that high Existing Doctor-Population Ratio in only Devgad 10992 tehsils of Sindhudurg District, at the same period it was medium recorded in Malvan 6988 Vaibhavwadi 6264,Dodamarg 6113,Sawantwadi 5085, tehsils of Sindhudurg District respectively. It is notable that low Existing Doctor -Population Ratio noted in three tehsils like Kankavli 4100, Vangurla 4080, Kudal 3620, etc.

Total Expected Doctors as per Bhore Norms during 2019 Sindhudurg District of Maharashtra was observed by 311. It is noticed high Expected Doctors found in three tehsils like Kudal 62 and at the same period it was medium recorded in Sawantwadi 49, Devgad 48,Kankavli 48, Malvan 37 etc, It is notable that low Number of Expected Doctors was observed in Vengurla 29, Dodamarg 20, Vaibhavwadi 18 etc.

3. Nurses Population Ratio in Sindhudurg District of Maharashtra in 2001

Total Existing Nurses-Population Ratio Sindhudurg District of Maharashtra during 2001 registered by 2012. It is observed that high Existing Nurses-Population Ratio recorded in three tehsils which are Malvan 2537 and Devgad 2506 etc, While medium Existing Nurses Population Ratio was observed in Vengurla1964, Sawantwadi 1960, Kankavli 1867, Vaibhavwadi 1860 etc. It is notable that low Existing Nurses - Population Ratio was noted in three tehsils like Dodamarg 1668, Kudal 1378 respectively.

Total Number of Expected Nurses as per Bhore Norms in Sindhudurg District of Maharashtra during 2001 was 1738. It was observed that high Expected Nurses-Population Ratio recorded in four tehsils which are in Kudal 306, Sawantwadi 298, Kankavli 276 and Devgad 251,at the same period it was medium in Malvan 233, Vengurla 177, etc. It is notable that low Expected Nurses - Population Ratio was noted in four tehsils like Dodamarg 100, and Vaibhavwadi 97 respectively.

No.	Name of Tehsil	2001		2019	
		Existing Nurse -Popula- tion Ratio	No. of Expecting Bed as per Bhore Norms	Existing Nurse -Popula- tion Ratio	No. of Expecting Bed as per Bhore Norms
1	Vaibhav wadi	1860	97	1462	88
2	Devgad	2506	251	2519	242
3	Kankavli	1867	276	1143	238
4	Malvan	2537	233	1527	186
5	Kudal	1378	306	635	311
6	Vengurla	1964	177	1184	147
7	Sawant-wadi	1960	298	1344	247
8	Dodamarg	1668	100	1397	98
Sindhudurg District		2012	1738	1809	1557

Source: Socio Economic Review and Statistical Abstract, 2001-2002 and 2019-2020

Table No.3: Distribution of Nurse Population Ratio in Sindhudurg District 2001and 2019

3.1. Nurses Population Ratio in Sindhudurg District of Maharashtra in 2019

Total Existing Nurses-Population Ratio in Sindhudurg District of Maharashtra during 2019 was found with 1809. It is observed that high Existing Nurses -Population Ratio recorded in only Devgad 2519, at the same period it was Medium in Malvan 1527, Vaibhavwadi 1462, Dodamarg 1397,Sawantwadi 1344, it is found that low Existing Nurses-Population Ratio was noted in three tehsils like Vengurla 1184, Kankavli 1143 and Kudal 635 tehsils of Sindhudurg District.

Total Number of Expected Nurses as per Bhore Norms in Sindhudurg District of Maharashtra during 2019 was observed with 1557.It was high Expected Nurses-Population Ratio recorded in tehsils like Kudal 311 tehsils of Sindhudurg District. During the same period medium Expected Nurses registered in Sawantwadi 247, Devgad 242,Kankavli 238, Malvan 186, tehsils. It is noticed that low Expected Nurses-Population Ratio was noted in four tehsils like Vengurla 147, Dodamarg 98, Vaibhavwadi 88 respectively.

6. CONCLUSIONS

1. It is found that the quality of Healthcare Facility during the period 2001-2019 of Sindhudurg District, is comparatively poor (comparison to Bhore Norms).
2. It is observed that the Bed-Population Ratio is high in Dodamarg, Kudal and Devgad thasils, it is one bed for 3260,2075 and 2121 population respectively during 2019.
3. It is noticed that during the year 2019 Doctor -Population Ratio was above 10000, which is comparatively very high.
4. It is found that during the year 2019 Nurse to population ratio was 2500, which is comparatively very high.

7. SUGGESTIONS:

1. As per Bhore Norms Bed-Population Ratio have to be minimum 20 Beds per PHC.
2. As per Bhore Norms Doctor-Population Ratio have to be minimum 5 Doctors per PHC
3. As per Bhore Norms Nurse-Population Ratio have to be minimum 20 Nurse per PHC.

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