Research Article

SPATIAL ANALYSIS AND UTILIZATION OF HEALTH CENTERS IN PANDHARPUR TAHSIL OF SOLAPUR DISTRICT

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Abstract:

Better health is central to human happiness and well being. It also makes an important contribution to economic progresses as healthy population live longer is more productive. The biggest enemy of health in the developing world is poverty. Because of this to provide much health care services to rural areas central and state government has established primary health center in the state. Spatial analysis of utilization PHCs to give clue of how the utility of primary health centers served in relation to patient view.

This paper studies the performance of utilization of primary Health Centers in the Pandharpur tahsil of solapur district. patient age, sex, annual income, marital status, Cleanness, ventilation, diseases- symptoms wise distribution, satisfaction level of services provide in the PHCs are the enabling factor taken in to consideration for understanding the utility of PHCs. Observational study done in an all eight PHCs. A total of 35 medical and 50 Para-medical staff were interviewed with per tested questioners. For qualitative data, 25 respondents were selected. Group study and data analyzed by using statistical methods. This study is based on Primary source i.e. field work. Secondary data collected from Public Health department of Solapur District. Present study gives an idea of real situation of utilization of Health Care service Delivery and helps to remove problems in Primary Health Center in Pandharpur tahsil of Solapur District and also helps to planners, Health scientists and research scholars. Further, this study has shown that there is a need of policy change regarding working style of Primary Health Centers.

KEYWORDS:

Utilization, Health Center, Population, Respondent,

INTRODUCTION:

The concept of Primary Health Center was first introduced by planning committee of Indian national concerns chaired by Jawaharlal Nehru in 1940. The Bhore committee in 1946 gave the concept of to provide as services close to the people as possible and integrated curative and preventive health care to the rural population. The central council of health as its first meeting held in January 1953 had recommended the establishment of primary health centers, community development blocks to provide comprehensive health care to the rural population. In Solapur district there are 77 primary health centers and 431 sub-centers are well distributed.

Primary care at patient usually prefer to the same primary care doctor for routine check-up and every time they require an initial consultation about new complaint. Primary Health Care as defined by the 'World Health organization' in 1978 is "Essential health care based on practical scientifically sound and socially acceptable method and technology universally accessible to all in the community through their full participation at an affordable cast and geared toward self-reliance and self-determination."

In the term of utilization of health services, however a number of complexes and often interrelated variable appear to exert influences. Author Suhas Exleys and wood (1983), Joseph and Philips (1984) have pointed out that utilization like access is influenced not only by the relative location of facilities and

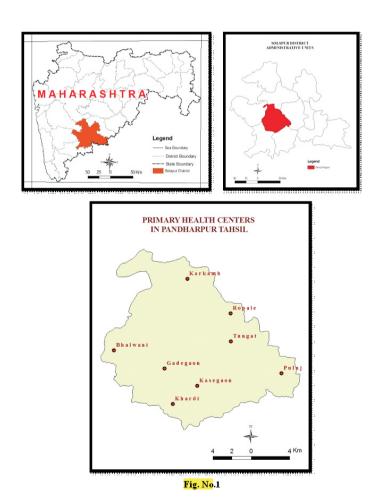
potential patients but by characteristics Such as patient age, sex, annual income, marital status, education, family size, religion and Cleanness, ventilation, call bell, toilet, recreation, drinking water, visitor etc. These variable can constrain accessibility and almost always variable can be remarkably difficult to ascertain. Distribution of beneficiaries of PHCs according to type of ailments, diseases- symptoms wise distribution, satisfaction level of services provide in the PHC, behavior of PHCs staff these are the parameter taken in to consideration for understanding the utility of primary health centers throughout in Pandharpur tahsil of solapur district.

Humans are important resource for the country. Healthy, educated and long live population is important for the nation because of this population the other states are not attack on our nation. In the PHC gave advice about the prevention of the health and the diseases. use of Health services is perhaps one off the most contentious areas of research in the medical and social science.

STUDYAREA

Especially tahsil Pandharpur is located at central part of Solapur district. Pandharpur is a famous pilgrim's center in western Maharashtra. The location at any place indicate the absolute and relative location that place. Absolute location of Pandharpur tahsil is in between coordinate 170 40 30".North latitude and 75019 36" East longitudes. It covers an area of 1303 sq.km. And nature of area lies mostly rural. According to 2001census Pandharpur tahsil involved 95 villages.

The Pandharpur tahsil comprises the whole geographical area of 95 villages. These tahsil bounded by Madha tahsil to north, Mohal to the north-east, Malshiras tahsil to the north-west, Sangola and Mangalwedha lies respectively to the South-east and South-west of Pandharpur tahsil. Area of Pandharpur tahsil forms the western edge of the Deccan plateau physiography of entire area is evenly often with exposed basalt. Pandharpur tahsil waving a plateau region. The average altitude is 458 meters above the mean sea level.



OBJECTIVES

This study is undertaken in eight primary Health Centers in Pandharpur Tahsil. The objectives of this paper are:

- 1. To Study the spatial Pattern of primary Health Center and sub-Centers in the study region.
- 2. To assess the utilization of Primary Health Centers in Panadharpur Tahsil

DATA BASE AND METHODOLOGY

Present study mostly relies on the Primary data collected through PHC Staff, patients, local leader's etc.collected by means of field work, case study, Secondary data collected through Public Health Department Solapur and PHCs records of pandharpur Tahsil. The study is undertaken during total 8 PHCs. With the help of P.J.clerk and Evinace (1954) nearest neighbor analysis technique identifying the pattern of health centers. Apart from these graphs and diagram are used for showing the health aspect.

Distribution of PHCs and Sub Centers in Pandharpur Tahsil:

There are total eight primary health centres and forty three sub-centres are well distributed in Panadharpur tahsil.

A) Pattern of PHCs & sub-Centers in Pandharpur tahsil:

As per IPHS norms every 30,000 population for one PHCs and six sub center. In the study region there are eight PHCs and forty -three sub center. In Pandharpur tahsil pattern of PHCs found with the help of P.J.clerk and Evinace (1954) nearest neighbour analysis generally found near about random it means uneven distribution of primary health center. Factor influence on said pattern belonging population having a grater village may be occur in north-east to south -east direction of to study region an instead village come under this PHCs cover area north-west and south -west and remaining part sub center may be come under main PHCs that's why while concerning to random it means uneven pattern conclude in the study area concerning to main eight health center.

Sr. No	Particular	Total	Total Distance (in km)	Total Area	Rn Value
1	PHC	8	12.8	1303Sq.km	0.56
2	Sub	43	29.8	1303Sq.km	0.24
	Centers				



Fig. No.2

3

Utility of PHCs-Beneficiaries View (Patient View):

			Aliment of Respondent							
Sr · N o	PHC Name	No. Benefici aries	Delivery Case	Respirato ry Related Diseases	Water Borne Diseas es	Vaccin e Preven Table Diseas es	Injur y	Gyn ae	Cold , Cou gh And Feve r	Other
1	Karkamb	25	5	1	5	3	3	3	3	2
2	Rople	25	4	2	5	3	3	2	1	5
3	Tungat	25	4	1	5	3	5	2	4	1
4	Puluj	25	5	3	3	4	1	2	4	3
5	Khardi	25	2	2	2	8	4	2	4	1
6	Kasegaon	25	3	1	2	3	0	3	6	7
7	Gadegaon	25	1	3	4	4	2	4	4	3
8	Bhalawani	25	4	2	3	4	0	5	4	3
	Total	200	28	15	29	32	18	23	30	25
	Percentag e	100	14	7.5	14.5	16	9	11.5	17	12.5

Source – Based on field work.

Others: Include cases of influenza, paralysis, meningitis, diabetes, family planning urinary problem, weakness, high blood pressure, eye, skin, etc.

Above table shows distribution of beneficiaries of PHCs according to type of ailments during 2009-10. The profile of beneficiaries reveals that a maximum of 17 percent of beneficiaries have sought the treatment for minor ailments like cold cough, favor. In the pandharpur tahsil this is followed by the cases suffering from waterborne disease (14.5%), delivery case (14%), vaccine preventable disease (16%), other (13%), Gynae (11.5%), Injury (9%) respiratory disease (7.5%) respectively.

Table 2
Distribution of Beneficiaries of PHCs according to sex during 2010-2011

Sr. No	Name of PHC	No. of Beneficiaries	5	Sex
			Male	Female
1	Karkamb	25	5	15
2	Ropale	25	7	18
3	Tungat	25	4	21
4	Puluj	25	7	18
5	Khardi	25	6	19
6	Kasegaon	25	8	17
7	Gadegaon	25	5	20
8	Bhalawani	25	9	16
Total		200	56	144
Percentage		100	28	72

Source: Complied by Researcher

It can be seen from table no. 4.5 distribution of beneficence of PHCs according to sex during 2009-10. The sex profile of sample beneficences it is found that of the total beneficences 72% are female and

28% male. This indicates that female is more than male.

Table 3 Distribution of Respondent (Patient) to their age

Age	No.of.Respondent	percentage
0-10	04	02
11-20	19	9.5
21-30	30	15
31-40	38	19
41-50	44	22
51-60	65	32.5
	200	100%

Source - Complied by Researcher

Above table reveal that---

0-10 age group of patient belonging 02%, 10-20 age group of patient belonging 9.5% 2,0-30 age group of patient belonging 15%, 30-40 age group of patient belonging 19%, 40-50 age group of patient belonging 22%, Above 50 age group of patient belonging 32.5%. These are the general distribution of patient.

Table 4 Professional Class in the society (annual income) Distribution of Respondent by Annual income.

Annual Income	No. of Respondent	% of respondent
<25000	110	55
25000-5000	60	30
50000	30	15
Total	200	100 %

Source – Complied by Researcher

The result from survey show 55.5% respondent (Patient) income are less than 25,000 R.s and very few patient come to PHC (15%) in come over 50,000 and 30% patient comes between Rs. 25 - 50,000 annual income.

Table 5 **Diseases- Symptoms wise distribution**

Sex	Acute Disease	Chronic Disease
Male	80	40
Female	35	35
Percentage	71.5	28.8

Source - Complied by Researcher

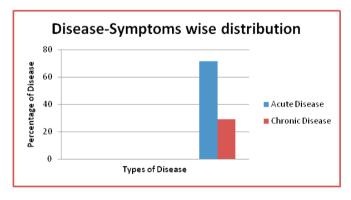


Fig.3

The maximum 71.5% respondent are come to PHC of acute disease and only 28.5% patient of chronic disease because chronic disease any treatment to be given in PHC. Medical Officer gives advice to go another hospital because disease passes primary stage, however there are chronic diseases.

Table 6
Depict satisfaction level of services Provide in the PHC

Services	Excellent	Very Good	Good	Fair	Poor
Attended by Mo	37	89	23	31	20
Regular Review	43	47	56	33	21
Regular investigation	26	87	29	34	24
Regular treatment	89	88	31	25	10
Advise	56	83	22	24	15

Source - Complied by Researcher

Table 7
Percentage of satisfaction level of Communication behavior of PHC Staff

level	Excellent	Good	Marginal	Fair	Poor
listens	7.5	53.0	13	14	12.5
Time spend explain	6.5	54.5	15	14	10
Advise Resion	6.5	43.5	23	16	11
Total average	6.5	47	22.5	19	6

Source – Complied by Researcher

Depict satisfaction level of services provide in the PHC and Behavior only 6.5% respondent say about community behavior excellent followed (47%),(22.5%) marginal, (19%) flair, (6%) poor. Among there listen level 7.5% patient becoming excellent and 12.5% say about poor concerning to listen. (See table no. 4.11).

Table 8
Depicts patient satisfaction respondent facilities provided to in patient (Cleanness, ventilation, call bell, toilet, recreation, drinking water visitor etc)

Particular	Excellent	Good	Fair	Poor
No. of respondent	12	34	83	71
% of respond	6	17	41.5	3.55

Source - Complied by Researcher



Fig.4

It can be seen from the table 4.11 that the response of beneficiaries not only corroborate the finding about weakness of delivery system 6 percent of beneficiations / patient belonging to excellent 17 % patient good, 41.5% fair and a few 3.55% respondent are found poor to be dissatisfied with the functioning or facility provide like cleaner, reiteration, lull bell, toilet, drinking water etc.

Further, of dissatisfied beneficiaries amount have a complained about m/p.m/state of PHCs. The main reason for dissatisfaction included non availability of medical and paramedical staff not examined by doctor, proper attention not given. The second reason for dissatisfaction of patient is the non availability of medical in PHCs. About 66.67% of the patient expressed their view.

CONCLUSION

In the present day, utility of PHC increasing day by day however concluding remark on thus health practice as utility. Administrative staff can play in important role in health promotion disease prevention by calling patterns to schedule routine preventive care and distribution health questionnaires and educational materials in the waiting room. Offer appropriate follow to screening by giving patients the result of their test with health behavior tips, arranging an appointment to share the result of the test, providing counseling or group education opportunities, or linking patients with appropriate community resurges. All "Assured Service" as envisaged in the PHC available which includes routine, preventive primitive, curative and emergency care in addition to all the national health programmers. Appropriable guidelines for each national programmer for management of routine and emergency cases are being provided to the PHC. All the support service to fulfill the above objectives will be strengthened at the PHC level.

The following requirement's are being projected based on the basis of 40 patients per doctor per day the expected number of beneficiaries for maternal and child health care and family planning and about 60% utilization of the available indoor/observation bed's (6bed's) It would be a dynamic process in the sense that it the utilization goes up the standard's would be further upgraded. As regard's two manpower one more medical officer (may be from lady doctor) and two more staff nurses of is in the PHC to make it 24*7 services - delivery center. Regarding the 4th grade some patient are unsatisfied. They claim that those staff does not listen to them or ignores their request. While asking, those staff about these they said that it is impossible for them to give importance to each and every patient as the number is very less. The sex profile of sample beneficences it is found that of the total beneficences 72% are female and 28% male. This indicates that female is more than male 0-10 age group of patient belonging 02%, 10-20 age group of patient belonging 9.5%2,0 - 30 age group of patient belonging 15%, 30 - 40 age group of patient belonging 19%,40 – 50 age group of patient belonging 22%, Above 50 age group of patient belonging 32.5%. the response of beneficiaries not only corroborate the finding about weakness of delivery system 6 percent of beneficiations / patient belonging to excellent 17 % patient good, 41.5% fair and a few 3.55% respondent are found poor to be dissatisfied with the functioning or facility provide like cleaner, reiteration, lull bell, toilet, drinking water etc.

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