

PUBLIC HEALTH CENTERS ROLE FOR THE DEVELOPMENT OF RURAL COMMUNITIES – A DECISIVE APPROACH

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INTRODUCTION:

The new agenda for Public Health Centers in India includes specialized treatment against Covid 19¹. The first case of the COVID-19 pandemic in the Indian state of Tamil Nadu was reported on 7 March 2020. The largest single-day spike (30,987 cases) was reported on 13 May 2021. The other dimensions of PHC's are to strengthen the health system, develop the human resource and build the capacity and regulate them in public health². Tamil Nadu stood as the fourth highest number of Covid confirmed cases in India after Maharashtra, Kerala and Karnataka. All 38 districts of the state are affected by the pandemic, with capital district Chennai being the worst affected³.

The state government has responded to the outbreak by following a contact-tracing, testing and surveillance model. The causes of health inequalities lie in the social, economic and political mechanisms that lead to social stratification according to income, education, occupation, gender and race or ethnicity⁴. The state has 85 laboratories approved by Indian Council of Medical Research (ICMR), capable of conducting tests. It is imperative that the government and community collectively rise to the occasion and face these challenges simultaneously, inclusively and sustainably. The government should take strict action in cases of diversion of funds and goods from social security schemes through law enforcement, community awareness and speedy redressal mechanisms⁵.

STATEMENT OF THE PROBLEM:

The Public Health Centers are giving free and good treatments for all types of peoples. When the problems are all PHC are not having the proper facilities for all kind of treatments like lack of staffs, lack of medicine, lack of infrastructure, etc., and the study about also what are the problems faced by the rural communities in PHCs.

OBJECTIVES

- To depict the role of Public Health Centers in Treating COVID 19.
- To examine the ways of rural communities on the challenges posed by COVID-19
- To portray the other health problems of the rural communities in COVID -19 spread.
- To identify the best strategies and measures executed by the PHC's for developing the rural communities.

METHODOLOGY

The study is conducted in order to measure the impacts of PHC's to treat COVID-19 pandemic. For this study PHC's (Pollachi Taluk and Dindigul District) have been identified. The purposive sample method was used for selection of rural communities. The Primary data has been collected with the prominent persons and villagers in order to ensure the proper representation of local communities.

SAMPLE

The overall sample size to be determined is restricted as 90. (Based on the convenience and availability of the respondents).

FRAMEWORK OF ANALYSIS

Simple Percentage Method and Chi-square Method has been used to analyze the data collected.

ANALYSIS AND INTERPETATION

Simple Percentage Analysis of the Respondents

EDUCATION QUALIFICATION :		
No Formal Education	12	13.33
Up To HSC	27	30
Graduate	40	44.44
More Than Graduate	11	12.22
TOTAL	90	100
TYPE OF PEOPLE WILL HAVE MORE EFFECTS IN COVID - 19:		
Children	19	21.11
Unmarried people	14	15.55
Married people	9	10
Old man's	48	53.34
TOTAL	90	100
AGE GROUP (in Years):		
Less Than 18	1	1.11
18-30	39	43.33
30-45	25	27.78
More Than 45	25	27.78
TOTAL	90	100
SPREADING of COVID-19 VIRUS :		
Outsiders	38	42.22
Not wearing masks	14	15.56
Not distance maintain	16	17.78
Lack of knowledge	22	24.44
TOTAL	90	100
PROBLEM FACED IN PHC WHILE COVID PERIOD:		
Lack of medicine	38	42.22
Lack of staff	20	22.22
Electricity problem	7	7.78
Transportation problem	25	27.78
TOTAL	90	100
KIND OF TREATMENT:		
Injection	23	25.55
Tablets	16	17.78
House rest	40	44.44
other than above	11	12.22
TOTAL	90	100
OCCUPATIONAL PROFILE :		
Employed	50	55.56
Unemployed	40	44.44
TOTAL	90	100
MOST PREFERRED HOSPITAL FOR COVID-19 TREATMENT :		
Government	66	73.33
Private	12	13.33
Ayurveda	5	5.55
Other than above	7	7.78
TOTAL	90	100
AGE GROUP OF PEOPLE HAVING MORE EFFECTS IN COVID-19 :		

Below 18	11	12.22
Between 18 and 30	11	12.22
Between 30 and 50	26	28.89
Above 50	42	46.67
TOTAL	90	100
FAMILY INCOME (In Rupees):		
Less than Rs.10,000	9	10
Between Rs. 10,000 and Rs. 40,000	30	33.33
Between Rs. 40,000 and Rs 60,000	38	42.22
Above Rs. 60, 000	13	14.45
TOTAL	90	100

From the above tables, it is clearly seen that PHC's plays a pivotal role in giving treatments during COVID 19 Outbreak. For better clarity the researchers have also engaged with the chi-square tests. The results of the same is given as below.

Education qualification with which type of people will have more effects in Covid-19

TYPE OF PEOPLE	EDUCATION QUALIFICATION				TOTAL
	No Formal Education	Up To HSC	Graduate	More Than Graduate	
Children	0.21	0.58	0.19	1.09	2.07
Married People	1.94	1.26	0.02	0.47	3.69
Unmarried People	1.69	0	1.42	1.42	4.53
Oldman's	3.08	0.88	10.15	0	14.11
TOTAL	6.92	2.72	11.78	2.98	24.4

Education qualification and type of people will have more effects in Covid-19. From the above table it is found that the calculated value (24.4) is higher than the table value (16.91) the level of significance is 0.05. Hence, **Alternative Hypothesis is accepted**. There is association between Education qualification and people who have more effects in Covid-19.

Education qualification and age group people are more effects in Covid-19

AGE GROUP	EDUCATION QUALIFICATION				TOTAL
	No Formal Education	Up to HSC	Graduate	More than Graduate	
Below 18	0.02	0.01	0.19	0.41	0.63
Between 18 and 30	0.3	0.01	0.05	0	0.36
Between 30 and 50	0.26	0.6	0.04	0.09	0.99
Above 50	0.42	0.52	0.04	4.27	5.25
TOTAL	1	1.14	0.32	4.77	7.23

Education Qualification and group people are more effects in Covid-19. From the above table it is found that the calculated value (7.23) is less than the table value (16.91) the level of significance is 0.05. Hence, **Null Hypothesis is accepted**. There is no association between Education qualification and age group people are more effects in Covid-19.

Education qualification and spreading Covid-19 virus in rural communities

SPREADING COVID-19	EDUCATION QUALIFICATION				TOTAL
	No Formal Education	Up to HSC	Graduate	More than Graduate	
Outsiders	0	0.05	0	0	0.05
Not wearing masks	0.01	0.09	0	0.33	0.43

Not distance maintain	0	0.62	0.88	0.46	1.96
Lack of knowledge	0.04	0.4	0.6	0.67	1.71
Total	0.05	1.16	1.48	1.46	4.15

It is examined that the Education qualification and spreading Covid-19 virus in rural communities. From the above table it is found that the calculated value (4.15) is less than the table value (16.91) the level of significance is 0.05. Hence, **Null Hypothesis is accepted**. There is no association between Education qualification and spreading of Covid-19 virus in rural communities.

Education Qualification and Problem faced in PHC while Covid period

PROBLEM FACED	EDUCATION QUALIFICATION				TOTAL
	No Formal Education	Up to HSC	Graduate	More than Graduate	
Lack Of Medicine	0.33	0	0.79	1.86	2.98
Lack Of Staff	1.22	0.79	2.6	0.33	4.94
Electricity Problem	0.02	0.01	0.19	0.41	0.63
Transportation Problem	0.04	0.64	0.01	2.22	2.91
Total	1.61	1.44	3.59	4.82	11.46

The Education qualification and Problem faced in PHC while Covid period. From the above table it is found that the calculated value (11.46) is less than the table value (16.91) the level of significance is 0.05. Hence, **Null Hypothesis is accepted**. There is no association between Education qualification and Problem faced in PHC while Covid period.

Age Group and Kind of Treatment in PHC

KIND OF TREATMENT	AGE GROUP (in Years)				TOTAL
	less than 18	18-30	30-45	More than 45	
Injection	0.02	1.05	0.14	1.17	2.38
Tablets	4	0	0.27	0.25	4.52
House rest	0.84	0.81	0	0.78	2.43
Other than above	0	0.35	0	1.35	1.7
Total	4.86	2.21	0.41	3.55	11.03

Age group and kind of treatment given in PHC. From the above table it is found that the calculated value (11.03) is less than the table value (16.91) the level of significance is 0.05. Hence, **Null Hypothesis is accepted**. There is no association between Age group and kind of treatment will give in PHC.

Occupational Profile and kind of treatment given in PHC

KIND OF TREATMENT	OCCUPATIONAL PROFILE		TOTAL
	Employed	Unemployed	
Injection	0.09	0.1	0.19
Tablets	1.37	1.5	2.87
House rent	0.68	0.75	1.43
Other than above	0.11	0.13	0.24
TOTAL	2.25	2.48	4.73

Occupational Profile and kind of treatment will give in PHC. From the above table it is found that the calculated value (4.73) is less than the table value (7.81) the level of significance is 0.05. Hence, **Null Hypothesis is accepted**. There is no association between occupational profile and kind of treatment given in PHC.

Occupational Profile and which health center is most preferred for Covid-19 treatment.

PREFERRED HEALTH CENTER	OCCUPATIONAL PROFILE		
	Employed	Unemployed	TOTAL
Government	0.03	0.03	0.06

Private	0.27	0.29	0.53
Ayurveda	0	0.43	0.43
Other than above	0	0	0
TOTAL	0.3	0.72	1.02

The Occupational Profile and which health center is most preferred for Covid-19 treatment is analyzed. From the above table it is found that the calculated value (1.02) is less than the table value (7.81) the level of significance is 0.05. Hence, **Null Hypothesis is accepted**. There is no association between occupational profile and most preferred health center for Covid-19 treatment.

Family income and which health center is most preferred for Covid-19 treatment.

PREFERRED HEALTH CENTER	FAMILY INCOME				
	Less than Rs.10000	Between Rs.40000 and Rs. 60000	Between Rs.10000 and Rs. 40000	Above Rs.60000	TOTAL
Government	0.49	0.04	0.09	0.07	0.69
Private	5.43	0.3	1.2	0.46	7.39
Ayurveda	0	0	0.19	7.38	7.57
Other than above	0	0	1.96	0	1.96
TOTAL	5.92	0.34	3.44	7.91	17.61

Family income and which health center is most preferred for Covid-19 treatment is studied. From the above table it is found that the calculated value (17.61) is more than the table value (16.91) the level of significance is 0.05. Hence, **Alternative Hypothesis is accepted**. There exists association between Family income and most preferred health center for Covid-19 treatment.

FINDING OF THE STUDY

Simple Calculation Method

- Majority of the respondents 40 (44.44%) are Graduate
- Majority 39(43.33%) of the respondents age group is between 18 and 30
- Majority of the respondents 50 (55.56%) are Employed
- Majority of the respondents says Oldman's 48 (53.35%) are more effects in the Covid-19.
- Majority of the respondents says Outsiders 38(42.22%) are spreading Covid-19 virus in rural communities.
- Majority of the respondents says Lack of Medicine 38 (42.22%) problem do you faced in PHC while covid period.
- Majority of the respondents use Government Health Centre 66 (73.33%) for Covid-19 treatment.
- Majority of the respondents says more than 50 age group people are more effects in covid-19.
- Majority of the respondents (42.22%) family income is Between Rs. 40,000 and Rs 60,0000

Chi Square

- There is association between Education qualification and people who have more effects in Covid-19.
- There is no association between Education qualification and age group people are more effects in Covid-19.
- There is no association between Age group and kind of treatment given in PHC.
- There is no association between Education qualification and Problem faced in PHC while Covid period.
- There is no association between occupational profile and most preferred health center for Covid-19 treatment.
- There is an association between Family income and most preferred health center for Covid-19 treatment.

RECOMMENDATIONS

- To improve supply of medicine to every PHC at a correct time.
- To improve transportation facilities for PHC
- Give more preference to Oldman's in Covid treatment.
- Improve infrastructure of PHC in rural areas.
- To make availability of doctors for convenience to the patients.
- Improve treatment facilities in PHC in rural areas.

References

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