PUBLIC HEALTH CENTERS ROLE FOR THE DEVELOPMENT OF RURAL COMMUNITIES – A DECISIVE APPROACH (WITH SPECIAL REFERENCE TO SAMATHUR AND NALLAMPALLI PANCHAYATH)

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INTRODUCTION:

The new agenda for Public Health Centers in India includes specialized treatment against Covid 19[1]. 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 health[2]. 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 affected[3].

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 ethnicity[4]. 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 mechanisms[5].

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 located in Samathur and Nallampallyin Treating COVID 19.
- To examine the challenges faced by rural communities in facing COVID-19
- To portray the other health problems of the rural communities in COVID -19 spread.
- To identify the 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 (Samathur and Nallampalli Panchayath) have been identified. The purposive sample method was used for selection of rural communities. The Primary data has been collectedduring November to January 2022-23 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. (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 Calculation Analysis		
AGE GROUP (IN YEARS)	**NO. OF RESPONDENTS**	**TOTAL**
LESS THAN 18	1	1.1
18 – 30	36	40
30 – 45	51	56.6
MORE THAN 45	2	2.3
TOTAL	90	100
EDUCATIONAL QUALIFICATION	**NO. OF RESPONDENTS**	**TOTAL**
NO FORMAL QUALIFICATION	23	25.6
UPTO HSC	10	11.1
GRADUATE	39	43.3
MORE THAN GRADUATE	18	20
TOTAL	90	100
OCCUPATIONAL PROFILE	**NO. OF RESPONDENTS**	**TOTAL**
EMPLOYED	76	84.4
UNEMPLOYED	14	15.6
TOTAL	90	100
RANGE OF INCOME	**NO. OF RESPONDENTS**	**TOTAL**
LESS THAN Rs.10,000	2	2
Rs.10,000 – Rs.40,000	25	27.7
Rs.40,000 – Rs.60,000	37	41.4
ABOVE Rs.60,000	26	28.9
TOTAL	90	100
HOW COVID-19 SPREADS	**NO. OF RESPONDENTS**	**TOTAL**
OUTSIDERS	2	2.2
NOT WEARING MASKS	28	31.1
NOT DISTANCE MAINTAN	34	37.7
LACK OF KNOWLEDGE	26	29
TOTAL	90	100
TYPE OF PEOPLE	**NO. OF RESPONDENTS**	**TOTAL**
CHILDREN	2	2.2
MARRIED PEOPLE	55	61.1
UNMARRIED PEOPLE	2	2.2

OLDMAN'S	31	34.5
TOTAL	90	100
AGE GROUP (IN YEARS)	**NO. OF RESPONDENTS**	**TOTAL**
LESS THAN 18	1	1.1
18 – 30	7	7.8
30 – 50	45	50
MORE THAN 50	37	41.1
TOTAL	90	100
KIND OF TREATEMENT	**NO. OF RESPONDENTS**	**TOTAL**
INJECTION	14	15.6
TABLETS	35	38.9
HOUSE REST	41	45.5
TOTAL	90	100
PROBLEMS	**NO. OF RESPONDENTS**	**TOTAL**
LACK OF MEDICINE	27	30
LACK OF STAFF	33	37.7
ELECTRICITY PROBLEM	3	3.3
TRANSPORTATION PROBLEM	27	30
TOTAL	90	100
HEALTH CENTRE	**NO. OF RESPONDENTS**	**TOTAL**
GOVERNMENT	73	81.1
PRIVATE	16	17.8
OTHER THAN ABOVE	1	1.1
TOTAL	90	100

From table it is examined that one respondent (1.1%) age group is less than 18 years, while 36 respondents (40%) age group is between 18 to 30 years. From the 90 respondents 51 (56.6%) age group is between 30 to 45 years and the remaining two respondents (2.3%) age group is more than 45 years. Hence it is found that majority 51 respondents age group is between 30 – 45 years.

Table depicts 23 respondents (25.6%) don't have formal qualification, while 10 respondents (11.1%) qualified up to HSC. From the 90 respondents 39 (43.3%) qualified up to graduate, the remaining 18 respondents are qualified more than graduate. Hence it is found that majority 39 respondents are qualified up to graduate.

From table it is seen that 76 respondents (84.4%) are employed, remaining 14 respondents (15.6%) are unemployed. Hence it is found that majority 76 respondents are employed.

From the above table it is been inferred those two respondents (2%) income range is less than Rs.10,000, while 25 respondents (27.7%) family income ranges between Rs.10,000 & Rs.40,000. From the 90 respondents 37 (41.4%) family income ranges between Rs.40,000 & Rs.60,000, the remaining 26 respondents (28.9%) family income ranges above Rs.60,000. Hence it is found that majority 37 respondents family income ranges between Rs.40,000 & Rs.60,000.

Table depicts 2 respondents (2.2%) said because of outsiders, while 28 respondents (31.1%) said because of not wearing masks. From the 90 respondents 34 (37.7%) said because of no distance maintaining, the remaining 26 respondents (29%) said because of lack of knowledge. Hence it is found that majority 34 respondents said because of no distance maintained.

The table above signifies two respondents (2.2%) said children are more affected, while 55 respondents (61.1%) said married people more affected. From the 90 respondents, 2 (2.2%) said

unmarried people affected more, the remaining 31 respondents said old men. hence it is found that majority 55 respondents said married people more affected by Covid-19.

From table it is seen that one respondent said less than 18, while 7 respondents (7.8%) said between 18 to 30. From 90 respondents, 45 (50%) said between 30 to 50, the remaining 37 respondents (41.1%) said more than 50. Hence it is found that majority 45 respondents said 30 to 50 age group people are more affected by Covid-19.

From table it is seen that 14 respondents (15.6%) said injection, while 35 respondents (38.9%) said tablets. From the 90 respondents, remaining 41 respondents (45.5%) said house rest. Hence it is found that majority 41 respondents said house rest is the first aid treatment given in PHC.

From the above table it is been inferred those 27 respondents (30%) said lack of medicine, while 33 respondents (37.7%) said lack of staff. From the 90 respondents, 3 (3.3%) said electricity problem, the remaining 27 respondents (30%) said transportation problem. Hence it is found that two majority 27 respondents said lack of medicine and transportation problem faced during Covid.

The table above signifies 73 respondents (81.1%) said government, while 16 respondents (17.8%) said private. From the 90 respondents, the remaining one respondent (1.1%) said other than above. Hence it is found that majority 73 respondents said government health centre is preferred for Covid-19 treatment.

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

EDUCATION QUALIFICATION	WHICH TYPE OF PEOPLE				
	CHILDREN	MARRIED	UNMARRIED	OLDMAN'S	TOTAL
NO FORMAL QUALIFICATION	0.47	3.43	0.51	6.04	10.45
UPTO HSC	0.22	0.12	2.76	0.6	3.7
GRADUATE	0.02	0.14	0.86	0.49	1.51
MORE THAN GRADUATE	0.4	3.27	0.9	5.42	9.99
TOTAL	1.11	6.96	5.03	12.55	25.65

Source: Primary Data

Education qualification and which type of people will have more effects in Covid-19. From the above table it is found that the calculated value (25.65) 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 which age group people are more effects in Covid-19.

Source: Primary Data

EDUCATION QUALIFICATION	WHICHAGE GROUP				
	<18	18 – 30	30 - 50	50<	TOTAL
NO FORMAL QUALIFICATION	0.25	1.78	4.89	3.14	10.06
UPTO HSC	0.11	6.45	1.8	0.19	8.55
GRADUATE	1.36	0	0.11	0.05	1.52
MORE THAN GRADUATE	0.2	0.11	1	1.75	3.06
TOTAL	1.92	8.34	7.8	5.13	23.19

Education qualification and which age group people are more effects in Covid-19. From the above table it is found that the calculated value (23.19) 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 which age group people are more effects in Covid-19.

Education qualification and spreading Covid-19 virus in rural communities.

EDUCATION QUALIFICATION	HOW COVID-19 SPREADING				
	OUTSIDERS	NOT WEARING MASKS	NO DISTANCE MAINTAING	LACK OF KNOWLWDGE	TOTAL
NO FORMAL QUALIFICATION	0.51	2.4	12.26	4.79	19.96
UPTO HSC	0.22	1.14	0.15	0.26	1.77
GRADUATE	0.02	0.67	2.22	0.66	3.57
MORE THAN GRADUATE	0.9	0.06	2.12	2.77	5.85
TOTAL	1.65	4.27	16.75	8.48	31.15

Source: Primary Data

Education qualification and spreading Covid-19 virus in rural communities. From the above table it is found that the calculated value (31.15) 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 spreading Covid-19 virus in rural communities.

Education qualification and Problem faced in PHC while Covid period.

Source: Primary Data

EDUCATION QUALIFICATION	PROBLEM FACED				
	LACK OF MEDICINE	LACK OF STAFF	ELECTRICITY PROBLEM	TRANSPORTATION PROBLEM	TOTAL
NO FORMAL QUALIFICATION	1.21	2.47	0.76	0.01	4.45
UPTO HSC	1.33	0.03	0.33	1.33	3.02
GRADUATE	0.45	0.36	2.22	0.24	3.27
MORE THAN GRADUATE	0.36	1.02	0.6	3.91	5.89
TOTAL	3.35	3.88	3.91	5.49	16.63

Education qualification and Problem faced in PHC while Covid period. From the above table it is found that the calculated value (16.63) 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 What kind of treatment will give in PHC.

AGE GROUP	KIND OF TREATEMENT – FIRST AID				
	INJECTION	TABLET	HOUSE REST	OTHERS	TOTAL
LESS THAN 18	0.15	1.01	0.45	0	1.61
18 - 30	0.02	1.78	1.77	0	3.57
30 - 45	0.1	1.71	1.97	0	3.78
MORE THAN 45	1.53	0.06	0.91	0	2.5
TOTAL	1.8	4.56	5.1	0	11.46

Source: Primary Data

Age group and What kind of treatment will give in PHC. 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 Age group and kind of treatment will give in PHC.

Occupational Profile and what kind of treatment will give in PHC.

OCCUPATION	KIND OF TREATEMENT				
	INJECTION	TABLET	HOUSE REST	OTHERS	TOTAL
EMPLOYED	0.11	0.08	0	0	0.19
UNEMPLOYED	0.63	0.44	0.02	0	1.09
TOTAL	0.74	0.52	0.02	0	1.28

Source: Primary Data

Occupational Profile and what kind of treatment will give in PHC. From the above table it is found that the calculated value (1.28) 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 will give in PHC.

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

OCCUPATION	HEALTH CENTRE				
	GOVERNMENT	PRIVATE	AYURVEDA	OTHERS	TOTAL
EMPLOYED	0	0.01	0	0.03	0.04
UNEMPLOYED	0.01	0.1	0	0.15	0.26
TOTAL	0.01	0.11	0	0.18	0.3

Source: Primary Data

Occupational Profile and which health center is most preferred for Covid-19 treatment. From the above table it is found that the calculated value (0.3) 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 andmost preferred health center for Covid-19 treatment.

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

INCOME RANGE	HEALTH CENTRE				
	GOVERNMENT	PRIVATE	AYURVEDA	OTHERS	TOTAL
LESS THAN Rs.10,000	0.23	1.2	0	0.02	1.45
Rs.10,000 - Rs.40,000	0.52	2.85	0	0.27	3.64
Rs.40,000 - Rs.60,000	0.29	1	0	0.41	1.7
ABOVE Rs.60,000	0.04	0.56	0	1.85	2.45
TOTAL	1.08	5.61	0	2.55	9.24

Source: Primary Data

Table 9 it is seen that Family income and which health center is most preferred for Covid-19 treatment. From the above table it is found that the calculated value (9.24) is less than the table value (16.91) the level of significance is 0.05.Hence, **Null Hypothesisis accepted.** There is no association between Family income andmost preferred health center for Covid-19 treatment.

FINDING OF THE STUDY

Simple Calculation Method

- ✓ Majority of the respondent's age group is 30 - 5451(56.6%)
- ✓ Majority of the respondents is Graduate 39 (43.3%)
- ✓ Majority of the respondents is Employed 76 (84.4%)
- ✓ Majority of the respondents income range is Rs.40,000 – Rs.60,000 37 (41.4%)
- ✓ Majority of the respondents saidno distance maintained34 (37.7%) are spreading Covid-19 virus in rural communities
- ✓ Majority of the respondents saidmarried people55 (61.1%) are more effects in the Covid-19
- ✓ Majority of respondents said 45 (50%) 30 – 45 age group peoples are more affected by Covid-19
- ✓ Majority of respondents said 41 (45.5%) house rest is the first aid treatment given by PHC
- ✓ Majority of respondents said 27 (30%) transportation and lack of medicine is the problem faced during Covid-19
- ✓ Majority of respondents said 73 (81.1%) preferred government health center for Covid-19 treatment

Chi-Square

- ✓ There is association between Education qualification and people who have more effects in Covid-19.
- ✓ There is association between Education qualification and which age group people are more effects in Covid-19.
- ✓ There is association between Education qualification and spreading Covid-19 virus in rural communities.
- ✓ There is no association between Education qualification and Problem faced in PHC while Covid period.
- ✓ There is no association between Age group and kind of treatment will give in PHC.
- ✓ There is no association between occupational profile and kind of treatment will give in PHC.
- ✓ There is no association between occupational profile andmost preferred health center for Covid-19 treatment.
- ✓ There is association between Family income andmost preferred health center for Covid-19 treatment.

SUGGGESTIONS

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

REFERENCES

1. "84% of the deceased had co-morbidities: Minister". *The Hindu. Special Correspondent. 26 May 2020.*
2. *Chandna, Himani (17 April 2020). "Tamil Nadu is containing Covid-19 well, and it is not following Bhilwara model"*
3. *"Guess which day saw the highest number of Covid-19 deaths in Tamil Nadu?". The New Indian Express.*
4. *"Over 35% Tamil Nadu coronavirus cases linked to Koyambedu market in Chennai". The Indian Express. 14 May 202.*
5. *"Tamil Nadu Prepares for Stage Two of Coronavirus Outbreak With More Home Quarantines, Surveillance". News18. 28 March 2020*
https://en.wikipedia.org/wiki/COVID-19_pandemic_in_Tamil_Nadu.