

A STUDY ON PERFORMANCE OF PRIMARY HEALTH CENTRE IN VILLAGES WITH SPECIAL REFERENCE TO COIMBATORE CITY

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Abstract

The Primary Health Centre (PHC) is the basic structural and functional unit of the public health services in developing countries. A study has been attempted to evaluate the services of Primary Health Centre and to make awareness among those who are not availing the services. Out of 14 total blocks in Coimbatore district, researcher has selected 4 blocks. Under these 4 blocks 12 Primary Health Centre have been selected for data collection..300 Patients of both Men and Women of the above said primary health centre have been selected as respondents and 50 Healers/Practitioners also have been selected as respondents for this study. Convenient sampling is employed to choose the blocks. Primary data was collected with the help of a structured questionnaire from the respondents. Secondary data was also collected from Text books, booklets, magazines, research articles websites etc., This study emphasis the opinion of the patients on various aspects such as general medical care, interpersonal communication, psychological aspects, maternal and child health care and basic infrastructure facilities available in the primary health centres in villages of Coimbatore city. This study reveals that around 83% of population are availing the services provided by the primary health centre.

Key words: health care services interpersonal communication, PHC, public health.

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INTRODUCTION

The Primary Health Centre (PHC) is the basic structural and functional unit of the public health services in developing countries. PHCs were established to provide accessible, affordable and available primary health care to people, in accordance with the Alma Ata Declaration of 1978 by the member nations of the World Health Organisation (WHO).

In South Asia, PHCs are the basic first-line units providing primary health care. Theoretically, there is one PHC for every 30,000 of population. Each PHC has five or six sub-centres staffed by health workers for outreach services such as immunization, basic curative care services, and maternal and child health services. PHCs generally consist of one or more doctors, a pharmacist, a staff nurse, and other paramedical support staff.

In India, PHCs form a basic part of the health care system. The Medical Officer appointed to run the PHC must be a MBBS degree holder. In addition to the provision of diagnostic and curative services, the Medical Officer acts as the primary administrator for the PHC.

STATEMENT OF THE PROBLEM

Individuals and families make choices about the treatment of illness, and the consequences of these choices affect the prevailing patterns of illness. Because health care exists in a cultural context, most health care systems are pluralistic, reflecting the complexities of the cultural system. This pluralism is common in developing nations where indigenous aspects of health care are being replaced or integrated with cosmopolitan health care. Within pluralistic health care systems, people may utilize services exclusively, successively, or simultaneously from lay, folk, or professional sectors. It is this plurality that enables a person to experiment with new therapies in search of an effective cure.

1.3 OBJECTIVES OF THE STUDY

- 1) To evaluate the services of primary health centres in villages of Coimbatore city.
- 2) To compare the personal factors of the respondents with the services provided by the Primary health centres

- 3) To determine the factors influencing the services provided by the primary health centre in villages of Coimbatore
- 4) To offer some suggestions on the improvement of the services provided by the primary health centres

1.4 HYPOTHESIS

Based on the above objectives, the following research hypotheses were framed.

1. There is no gender difference in the ability of doctors in diagnosing diseases
2. There is no gender difference in the opinion on doctors take enough time with the patient
3. There is gender difference in the opinion on doctors take enough time with the patient .

METHODOLOGY

This chapter on research design and methodology describes the research setting and procedures followed in the selection of the sample from villages, development of the survey instrument, collection of quantitative and qualitative data, and data analysis.

POPULATION OF THE STUDY

The following are the villages selected for the collection of data for further analysis. These villages have been selected randomly to study the performance of Primary Health Centres. Around 12 Primary Health Centre out of 14 blocks of Primary Health Centres have been selected from the Coimbatore district for the study purpose.

SAMPLING TECHNIQUE

Out of 14 total blocks in Coimbatore district, researcher has selected 4 blocks namely S.K. Muthur, Kolarpatty, Arisipalayam, and Nalletipalayam.. Under these 4 blocks 12 Primary Health Centre have been selected for data collection. The selected Primary Health Centre are Podanur, Sundakkamuthur, Thirumalayam Palayam, Madukkarai, Arisipalayam, Sokanur, Kinathukadavu, Kanjampatti, Nalletipalayam, Kolarpatti, Zaminuthukuli, Myleripalayam. 300 Patients of both Men and Women of the above said primary health centre have been selected as respondents and 50 Healers/Practitioners also have been selected as respondents for this study. Convenient sampling is employed to choose the blocks. Primary data was collected with the help of a

structured questionnaire from the respondents. Secondary data was also collected from Text books, booklets, magazines, research articles websites etc.

TOOLS USED FOR ANALYSIS

The statistical tool used to analyze the data are

- ✓ ANOVA
- ✓ Factor Analysis

SCOPE AND LIMITATIONS

This micro-study focused on the performance of Primary Health Centre with special reference to Coimbatore District. Therefore, the data were area-specific and were not expected to be generalizable over an entire region that is as culturally heterogeneous as India. The people in these villages may or may not have shared similar values, experiences, and intellectual orientations of people in other Indian villages.

REVIEW OF LITERATURE

Magm (1967). Similarly improvement in the health status of Kerala is generally attributed to the widespread network of health care system in rural areas and its higher utilization rate and/or the public health programs undertaken by the state

Narayanan, 1997 & Nair 1974 “, suggested that the extension of primary health centers and public health measures in the state led to the decline in infant and child mortality rates in the 1950s and subsequently to fertility decline in 1960s On the other hand, Panikar (1975)⁶⁵, pointed out that mortality rates had already declined substantially prior to the 1950s and proposed that main factors behind the mortality decline in Kerala were the high priority given to preventive and promotive measures in the health care system, female literacy, better

utilization of health care services and the success of public health measures which were introduced on a large scale by the princely States of Cochin and Travancore. He argued that the relative contribution of modern health facilities was small.

A **United Nations (1975)** study on Kerala's health development concludes that "the achievement of Kerala in lowering mortality rate and rising life expectancy to almost the levels of more developed countries must be attributed largely to the widespread net work of health services and the scales on which they are used.

An all encompassing hypothesis was provided by **Ratcliff (1977)** who saw changes in Kerala's demography as a result of broader socio- economic and political development. **Paniker and Soman (1984)**, laid equal emphasis on public health and medical care services. While the first phase of health status improvement was attributed to preventive health measures against infectious diseases, in the second phase, the stress was on the expansion of medical care system with low rural urban disparities and small size of the catchment areas. They recognized the contribution of land reforms, public distribution system, literacy and housing to the reduction in socio- economic inequalities and better

utilization of health care services but attributed health improvement mainly to the health care services. The role of social factors in Kerala's mortality and fertility decline is highlighted in Nag's comparison of that state with West Bengal (**Moni Nag, 1983**) ". Nag drew attention to the early introduction of public health measures, including sanitation and immunization in Travancore Cochin during the nineteenth century and to the absence of such measure in West Bengal. Nag attributed the high health status to the social development in terms of wider distribution of health care services in the rural areas and their greater utilization, better transportation facilities, higher living especially among women and political awareness all resulting from the public policy.

COMPARISON OF GENDER WITH THE OPINION ON TREATMENT PROVIDED IN THE PRIMARY HEALTH CENTRE

This section describes the comparison of gender with the opinion on the treatment provided in the Primary Health Centre between Groups and within the groups. For this purpose, the researcher has applied ANOVA test.

The following hypothesis was framed and tested.

H₀ : There is no gender difference in the ability of doctors in diagnosing diseases .

Alternative hypothesis:

H₁ : There is gender difference the ability of doctors in diagnosing diseases .

Level of significance:

If $\alpha = 5\%$, $F = 0.05$ (two sided) = 3.87 with 1 degree of freedom.

ABILITY OF DOCTORS IN DIAGNOSING DISEASES					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.549	1	.549	1.143	.286
Within Groups	143.564	299	.480		
Total	144.113	300			

* Significant at 5% level

Interpretation

From the above table it is understood that the calculated F-value (1.143) is less than the critical F-value (3.872) at the significant level of 0.04. Therefore the null hypothesis is accepted. Hence it is concluded that there is no significant difference between the gender and the ability of doctors in diagnosing diseases.

Hence there is no gender difference in the ability of doctors in diagnosing diseases.

COMPARISON OF GENDER WITH THE OPINION ON DOCTORS TAKE ENOUGH TIME WITH THE PATIENTS

The opinion on doctors takes enough time with the patients in the Primary Health Centre and the gender is compared using ANOVA. The following hypothesis was framed and tested.

H₀ : There is no gender difference in the opinion on doctors take enough time with the patient .

Alternative hypothesis:

H₁ : There is gender difference in the opinion on doctors take enough time with the patient .

Level of significance:

If $\alpha = 5\%$, $F = 0.05$ (two sided) = 3.872 with 1 degree of freedom.

DOCTORS TAKE ENOUGH TIME WITH THE PATIENTS					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.741	1	.741	1.119	.291
Within Groups	198.116	299	.663		
Total	198.857	300			

* Significant at 5% level

INTERPRETATION:

From the above table it is understood that the calculated F-value (1.143) is less than the critical F-value (3.872) at the 5% level of significant. Therefore the null hypothesis is accepted. Hence it is concluded that there is no significant difference between the gender and the doctors take enough time with the patients.

Hence there is no gender difference on the doctors take enough time with the patients.

COMPARISON OF GENDER WITH THE OPINION ON DOCTORS GIVE GOOD ADVICE AND TREATMENT

H₀: There is no gender difference in the doctor gives good advice and treatment to the patients of Primary Health Centre .

Alternative hypothesis:

H₁ : There is gender difference in the doctor gives good advice and treatment to the patients of Primary Health Centre .

.Level of significance:

If $\alpha = 5\%$, $F = 0.05$ (two sided) = 3.872 with 1 degree of freedom.

DOCTORS GIVE GOOD ADVICE AND TREATMENT
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	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.440	1	.440	.691	.406
Within Groups	190.490	299	.637		
Total	190.930	300			

* Significant at 5% level

INTERPRETATION:

From the above table it is understood that the calculated F-value (0.691) is less than the critical F-value (3.872) at the 5% level of significant. Therefore the null hypothesis is accepted. Hence it is concluded that there is no significant difference between the gender and the doctors gives good advice and treatment to the patients.

Hence there is no significant difference between gender and the doctors give good advice and treatment to the patients.

FACTOR ANALYSIS

KMO and Bartlett's Test

	Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.825
Bartlett's Test of Sphericity	Approx. Chi-Square	2668.588
	df	136
	Sig.	.000

In above table two tests namely, Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's Test of Sphericity has been applied to test whether the relationship among the variable has been significant or not.

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy shows the value of test statistic .825 which means the factor analysis for the selected variable is found to be appropriate or good to the data. Bartlett's Test of Sphericity is used to test whether the data are statistically significant or

not with the value of test statistic and associated significance level. The result of the test shows that there is significant relationship among the variable chosen.

Factor Extraction

Using the Principle Component Analysis two factors have been extracted based on the variance. The variance explained by the initial solution, extracted components, and rotated components are displayed in the table below.

Table 4.5.1

Factor Extraction

Total Variance Explained							
Component	Initial Eigen values	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	32.377	5.504	32.377	32.377	5.504	32.377	32.377
2	19.066	3.241	19.066	51.443	3.241	19.066	51.443
3	9.090	1.545	9.090	60.533	1.545	9.090	60.533
4	6.157	1.047	6.157	66.689	1.047	6.157	66.689

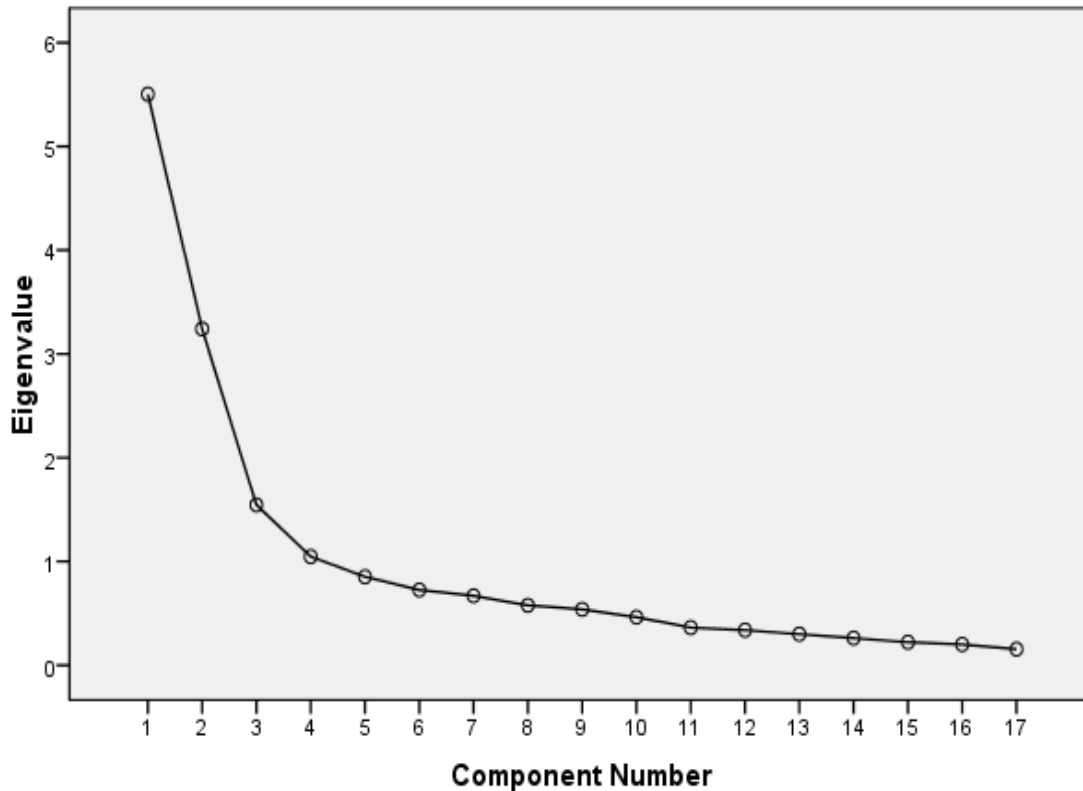
The Four factors extracted together account for 66.689 percent of the total variance (information contained in the original seventeen variables). This is pretty good, because we are able to economize on the number of variables (from 17 we have reduced them to 4 underlying factors).

Scree Plot

The Scree plot is the diagrammatic representation of the total variance explained based on the variance in the Eigen values of the 17 components using Principle Component Analysis. This chart states the high influence of the five factors based on their Eigen values greater than 1.

We find that the four factors extracted together account for 66.689 percent of the total variance. Hence we have reduced the number of variables from 17 to 11 underlying factors.

Scree Plot



Rotated Component Matrix

Since the idea of factor analysis is to identify the factors that meaningfully summarize the sets of closely related variables, the rotation phase of the factor analysis attempts to transfer initial matrix into one that is easier to interpret. Varimax rotation method is used to extract meaningful factors. The more influencing factors are infrastructure facilities expected by the patients, expectations on laboratory, cleanliness and consultation.

FINDINGS SUGGESTIONS AND CONCLUSION

FINDINGS

It is revealed that out 300 respondents 243 respondents are using the services of Primary Health Centre when they feel sick ($n=81.1\%$). No statistically significant differences between the socio

economic factor like educational qualification, gender, age and income level of the respondents and the separate room for examination demonstrated by the study. For study purpose the researcher has applied the ANOVA the statistical tool to achieve the objective. The following are the inferences from the analysis.

There is no significant difference between the gender and the ability of doctor in diagnosing diseases

There is no significant difference between the gender and the doctor takes enough time with the patients of primary health centre.

SUGGESTIONS

- ✓ The performance and utilization of services of Primary Health Centre can be improved by providing adequate infrastructural facilities of the primary health centre
- ✓ The personnel of Primary health centre are requesting the facilities like quarters, building, beds and Equipments, appointment of adequate faculty to the primary Health Centre
- ✓ Advanced equipments and training to handle the same to be provided nurses and practitioners of the primary health centres to serve the society better.

CONCLUSION

An attempt has been made in the present study to investigate the performance of selected Primary Health Centre in villages with Special Reference to Coimbatore District.

The analysis of performance of Primary Health Centre includes the analysis of the opinion of the patients of Primary Health Centre on selected terms such as emergency Care, Pharmacy, Bed, Power Supply, ambulance etc. The study reveals that the performance of the Primary Health Centre in Villages with Special Reference to Coimbatore District is fairly satisfactory during the study period.

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