

# A STUDY ON PERCEPTION OF WOMEN ON SELECT BLOCK PRIMARY HEALTH CENTERS TOWARDS UTILIZATION OF MATERNAL SERVICES

*(with reference to Coimbatore District)*

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**Abstract:** Health itself is an important factor in everyone's life and women health is more important as it affects a family as such. The Public health care system is inevitable for maintaining the basic health, particularly for the economically weak people both in rural and urban areas. But their role and functioning is quite bothering when compared to private sector hospitals. This paper attempts to measure the perception of women patients on select Block Primary Health Centers (BPHCs) towards maternal services in Coimbatore District. 100 women from 2 blocks Karamadai and Sarcarsamakulam of Coimbatore district were interviewed on Tuesdays and Wednesdays when they approach for either maternal or child care services. The data was analyzed using simple percentage and ANOVA. Out of the sample population, 86% of them had taken more than 8 ANC visits, 72% have not spent any out of pocket expenditure towards medical expenditure and only 38% travelled more than 3 kilometers to reach the PHCs. Thus this study reveals that the delivery and utilization of maternal and child services in Coimbatore district is highly satisfactory. Ensuring service of a doctor round the clock, cleanliness in campus, availability of drugs and equipments will further improve perception and satisfaction of women.

**Keywords:** Block Primary Health Centers (BPHCs), Maternal Services, Ante Natal Care (ANC).

## INTRODUCTION

Health is considered as an important element of happy living. Due to changing life style and break through from our traditional life practices, there is a huge dip in the health of the people immaterial of their economic status. Nowadays a bundle of life style diseases are playing a major role in affecting public health in general. The health industry is becoming more sophisticated to cater the needs of people who want to maintain their status. Private players invest a huge amount in infrastructure and advanced equipments to take up a considerable market share of the healthcare industry. Hospitality is improved to a great extent to make the customers to have a home like feeling in the hospital. On the other hand, the improvements public health care system is quite bothering when compared to corporate run multi specialty hospitals. The tertiary care is quite sound when compared to primary and secondary care sectors. This weak condition of public health care may be due to reasons like inappropriate allocation of public expenditure towards health care; only 1.4% of GDP is spent for public expenditure (Economic survey 2017-18), lack of sufficient personnel due to vacant posts, lack of interest to work in rural and tribal areas due to lack of proper infrastructure (Rural Health Statistics 2017), lethargy & bribe by health personnel and lack of awareness among the public. The general opinion is though the system is good, the delivery channel which comprises of the medical personnel, doctors and the proper infrastructure need to be revamped for effective delivery.

Basically the public health system in each district is divided into different tiers. The rural public health system is administered by a 3 tiered structure with CHCs at the top, PHCs at the middle and SCs at the bottom line which is governed by National Rural Health Mission (NRHM) under IPHS guidelines.

For the purpose of rural health administration, every district is divided into blocks. Coimbatore district has 12 blocks and each block has a block PHC (Fig. 1) and additional PHCs.

**Figure 1: Block PHCs in Coimbatore district**

S.No	Name of the block	Name of block PHC
1	Karamadai	Karamadai
2	Sarcarsamakulam	Sarcarsamakulam
3	Madukkarai	Arisipalayam
4	Kinathukadavu	Nallattipalayam
5	Pollachi (North)	Negamum
6	Pollachi (South)	Kanjampatti
7	Anamalai	Periapodu
8	Thondamuthur	Pooluvapatti
9	Periyanaickenpalayam	Thaliyur
10	Sulur	Somanur
11	Sultanpet	V.Chandrapuram
12	Annur	Pogalur

Source: Office of the Deputy Director Health Services & Family Welfare Department, Coimbatore

### STATEMENT OF THE PROBLEM:

Health which was overlooked on the grounds of economic status is now experiencing a drastic shift from its position. Due to changing lifestyles, ailments are growing day by day. People of all segments are now keen in seeking medical care for health problems. Anyhow, no one can deny the role of economic status in health seeking behavior. There is a difference based on geography and economic status. But the notable fact is that health industry is growing at a great pace taking advantage of the life style diseases and change in attitude of health seeking behavior. Private sector has introduced an array of medical, hospitality services and technology. Now as a researcher the question of role of public sector arises with respect to the rural and urban poor. In the rural health care system, the Sub Centres and Primary Health Centres are the first point of contact for all ailments. Amongst such population, the women and children are considered as even more vulnerable section. In this context this study was taken to study the perception of women towards the Block level Primary Health Centers (BPHCs) with maternal services in particular, as maternity and infant care is more important in a women's life.

### OBJECTIVES OF THE STUDY:

1. To analyze the perception of the women visiting PHCs towards the quality of maternal services in 2 block PHCs in Coimbatore district.
2. To find out the relationship between the socio- demographic variables and its effect on perception towards maternal services.

### METHODOLOGY:

- *Area of study:* Out of 12 blocks in Coimbatore district, randomly 2 blocks located next to each other i.e., karamadai and sarcarsamakulam were selected.
- *Sample selection:* 100 women were equally selected i.e., 50 women each from Karamadi block PHC and Sarcarsamakulam block PHC who have fully or partially utilized the PHCs for maternal or child care.
- *Tool for data collection:* Interview schedule was used as the survey was done in rural areas.
- *Tools for analysis:* Percentage analysis and ANOVA were applied to analyse the collected data and draw inferences.

**REVIEW OF LITERATURE:**

Related studies regarding primary health centre services and maternal services are sequentially listed down as foreign, Indian, Tamil Nadu and Coimbatore based studies.

**Aziz Ismail & Essa (2017)** assessed the quality and the satisfaction of of antenatal services at 7 MCH centres in El – Beheira Governorate. Cost of services and psychological care were rated as highly satisfied. Overall ANC care and overall process were considered unsatisfied by more than 50% of women due to reasons like location, lack of adequate staff, inadequate waiting space, ventilation and cleanliness. **Timane et al. (2017)** chose 250 mothers of Sokoto metropolis, Nigeria to assess their satisfaction level on four aspects viz., registration process, health personnel related aspects, availability of facilities and overall outcome. All aspects of maternal and child health services were scored as satisfied by more than 60% of the respondents. Longer waiting time, lack of cleanliness in toilets, higher cost of drugs, insufficient personnel and physical facilities were the few inconveniences reported.

**Kumari et al. (2009)**, the study revealed that infrastructure facilities and quality parameters should be strengthened at primary level to avoid more stress on the tertiary health facilities. In spite of lack of accessibility patients travel a long distance to the tertiary health structure in order to get better services than at other lower levels of health facilities. The time involved in registration, consultation, non availability of clean drinking water and unhygienic toilets were considered as major issues at the health centres at primary level. **Kumar et al. (2016)** conducted a study in tertiary care hospital in Ranchi and have opined that the quality of hospital services can be effectively measured by assessing satisfaction and perception of the patients. The results of the study prove contrary to the general belief that government services are always sub standard. Overall satisfaction towards various facilities were perceived as good. 72% of the patients belong to lower socio economic group and they were highly satisfied with behaviour, time spent for examining and punctuality of the doctors but less satisfied with the presence of doctors.

**Dheepa, Gayathri, & Karthikeyan (2015)** conducted a study in 6 districts of Tamilnadu including coimbatore to determine service quality in the Government hospitals by measuring satisfaction based on service quality dimensions. The study concludes that a significant relationship exists between the service quality dimensions viz., Tangibles, Reliability, Assurance, Responsiveness, Empathy and patient satisfaction. Apart from discontent in certain services where expectation exceeds the current availability respondents have expressed satisfaction in most services.

**Sugunadevi (2017)** in her paper has assessed the quality antenatal clinics in 10 subcenters of coimbatore district through a questionnaire based on standards on antenatal care services of manual by Ministry of Health and Family Welfare. The study shows that the subcenters in Tamilnadu gets a better score for the mentioned standards by the Ministry. It is recommended that additional funds should be invested in improving infrastructural facilities and providing training for the workers. **Sadhasivam, Kavitha, & Saranya (2017)** attempted to study the level of satisfaction of 940 women patients about the primary health centres in 10 villages of coimbatore district. The study aims at analysing the relationship between the facilities in the PHCs and the frequency of visit by the women. On analysing the facilities of the PHCs the most driving factors towards PHCs are cost free treatment and communication by the doctors combined with good transportation facility and cost free medicines. Further the schemes and financial support by the government also has been scored satisfied to an extent. The most bothering factors are cleanliness and crowd. The study concludes that government should create awareness, motivate people to utilise the PHCs and the schemes offered in a right manner. With the primary motive of measuring the service quality of select primary health centres **Sumathi (2016)** conducted a study in 12 PHCs of 4 blocks of the coimbatore district. The analysis of the hypothesis revealed that opinion on ability of treatment by the doctors doesn't vary with the gender but depends upon the skill of the doctor. Similarly both the genders don't have a different opinion on the time spent by the doctors for treatment and on the advice and quality of treatment. On the whole the respondents opined as 'fairly satisfactory' towards the quality of services.

## ANALYSIS AND INTERPRETATION

## I. PERCENTAGE ANALYSIS

The following are the results of percentage analysis

**Table 1: Demographic profile of the mothers visiting Block PHCs (n=100)**

S.No	Variables	Groups	Percentage (%)
1.	Age (in years)	21-23 yrs	31
		24-26 yrs	41
		27-29 yrs	22
		30-33 yrs	6
2.	Education of the respondents	No formal education	6
		Primary education	52
		Middle school level	18
		Higher secondary level	13
		Diploma/ Graduate	7
		PG & above	4
3.	Occupation of the respondents	Homemaker	19
		Self employed	11
		Daily/weekly labourer	47
		Salaried	8
		Farming & allied activities	15
4.	Family income per month (in ₹)	Upto ₹5,000	32
		5,000 - ₹10,000	45
		10,000 - ₹15,000	14
		15,000 - ₹20,000	9
5.	Number of ANC visits during last pregnancy	3-5 times	7
		6-8 times	7
		9-11 times	26
		12-14 times	60
6.	Amount of medical expenditure (from pregnancy till delivery)	Nil	72
		Medicines	8
		Diagnostic services	17
		Blood and Utility kits	3
7.	Distance of PHC from residence	Less than 1 km	42
		1 -3 Kms	20
		Above 3 Kms	38

The socio-demographic profile revealed the following characteristics of the women respondents. The women aged between 21 to 33 years visited PHCs for maternal and child health services. 24-26 years constituted the major population (41%) followed by 21-23 years who formed 31% of the sample population and 30-33 years constituted only 6% of the population. Majority 52% of the women had at least primary education, only 6% had no formal education and 11% were educated up to graduation/diploma/ PG level. Only 19% were homemakers and the rest were doing some activity for their livelihood. 47% were daily/ weekly laborers and 15% were involved in farming and allied activities. The highest percentage of population, 45% falls into the income group of ₹5,000 – ₹10,000 p.m. and 32% into income group of up to ₹5,000 p.m. 60% of the women have taken 12-14 Ante-Natal Care (ANC) visits during their last delivery and only 14% of them have visited 3-8 times, which is not much a bothering count. Out of the 28% of respondents who spent some out of pocket expenditure towards medical expenditure, 17% spent for better diagnostic services and 8% for medicines. 42% of the respondents were located within a kilometer from the PHC and 38% travelled more than 3 kilometers to reach the PHCs.

Table 2: Perception of mothers on Block PHCs (n=100)

S.No	Parameters of perception	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Total (%)
<b>1</b>	<b>Doctors behavior:</b>						
a)	Doctor pays attention to medical complaints	4	7	11	49	29	<b>100</b>
b)	Sufficient time is spent by the doctor	19	12	7	12	50	<b>100</b>
<b>2</b>	<b>Attitude of nurses:</b>						
a)	Pleasant attitude is shown by nurses	9	5	3	30	53	<b>100</b>
b)	Nurses attend every need promptly	4	15	12	50	19	<b>100</b>
<b>3</b>	<b>Infrastructure:</b>						
a)	Sufficient beds are available	5	5	9	61	20	<b>100</b>
b)	Clean, hygienic water & toilets are ensured	5	17	9	14	55	<b>100</b>
<b>4</b>	<b>Availability of drugs &amp; equipments:</b>						
a)	Essential drugs are available	16	12	7	41	24	<b>100</b>
b)	Scanning and other equipments are available	13	4	13	49	21	<b>100</b>
<b>5</b>	<b>Maternal service:</b>						
a)	24 hours service is provided	6	13	3	66	12	<b>100</b>
b)	Service of skilled birth attendant during delivery	16	5	10	16	53	<b>100</b>

The perception of the respondents were measured based on 5 parameters with 2 criterions under each factor and rated using five point rating scale and the results are discussed below.

- Doctors' behavior:** Regarding doctors the sample population showed a very positive perception. 49% of them 'agree' that the doctor pays attention to medical complaints. 50% 'strongly agree' that the doctor spends sufficient time with them, whereas 19% 'strongly disagree' stating that enough time is not spent by doctor.
- Attitude of nurses:** Perception on nurse services also was very high. 53% 'strongly agree' with the parameter that pleasant attitude is shown by nurses and 50% 'agree' that nurses attend every need.
- Infrastructure:** 61% 'agree' with availability of beds and 55% 'strongly agree' with the availability of clean drinking water and hygiene of the toilets. Only 5 % 'strongly disagree' with the infrastructure availability.
- Availability of drugs & equipments:** 41% and 49% of the respondents agree that drugs and necessary equipments are available at all times and 28% do not agree about availability at all times.
- Maternal service:** High level of agreeability is expressed towards both the components of maternal service parameter. 53% 'strongly agree' with the presence of skilled birth attendant during delivery and 66% 'agree' with round the clock availability of maternal service.

## II. ANOVA

The following are the hypotheses framed and inferences derived based on ANOVA test.

- Null Hypothesis ( $H_0$ ): There is no significant relationship between age, education qualification, occupation, family income per month, number of Ante-Natal Care (ANC) visits during last delivery, amount of medical expenditure spent during delivery, distance travelled to reach PHC and the perception towards the maternal services of Block PHCs.
- Alternative Hypothesis ( $H_1$ ): There is significant relationship between age, education qualification, occupation, family income per month, number of Ante-Natal Care (ANC) visits during last delivery, amount of medical expenditure spent during delivery, distance travelled to reach PHC and the perception towards the maternal services of Block PHCs.

**Table 3: ANOVA - Demographic variables and Perception on Block PHCs by mothers**

S.No	Variable	Calculated 'F' Value	Table value	Inference
1.	Age	18.178	3.992	Significant
2.	Educational qualification	5.053	2.311	Significant
3.	Occupation	0.821	2.467	Not Significant
4.	Family income per month	6.132	3.992	Significant
5.	Number of ANC visits	25.119	3.992	Significant
6.	Amount of medical expenditure	4.703	3.992	Significant
7.	Distance from residence	0.361	3.090	Not Significant

On the basis of above analysis the following results were derived. ANOVA test was applied and results were obtained on 1% and 5% level of significance. The calculated 'f' value was compared with the critical value and based on the results the relationship between demographic variables and perception of the women patients on maternal services of Block PHCs was assessed.

The analysis revealed that the calculated value is greater than the table value for the demographic factors like age, educational qualification, family income per month, number of ANC visits during last delivery and amount of medical expenditure incurred during last delivery. Hence the null hypothesis ( $H_0$ ) is rejected. The alternative hypothesis ( $H_1$ ) holds good stating that the above factors affect the perception score either in a positive or negative way. The results were contrary to the study by (Mohanraj, 2015) which shows variables like education level, community, size of family, occupational status and income level do not influence the satisfaction level.

Conversely, for factors like occupation of the respondents and distance travelled from residence the calculated value is lesser than the table value thereby accepting the null hypothesis ( $H_0$ ). Hence, these factors have no impact on the perception of the women respondents towards maternal services offered in Block PHCs.

## DISCUSSION

The study shows that majority (72%) were in the average reproductive age group of 21 years- 26 years. Majority 52% of the women had only primary education and 81% were doing some activity for their livelihood. The highest percentage of population, 45% falls into the income group of ₹5,000 – ₹10,000 p.m which shows the poor economic status of the majority of the women visiting PHCs. 86% of them had taken more than 8 ANC visits, which is much higher than the required number of visits which is 5 ANC visits. 72% have not spent any out of pocket expenditure towards medical expenditure from pregnancy till delivery which is very different from other states, where out of pocket expenditure is very high. Out of the 28% of respondents who spent some out of pocket expenditure, 17% spent for better diagnostic services, which needs little improvement and maintenance. 42% of the respondents were located within a kilometer from the PHC and 38% travelled more than 3 kilometers to reach the PHCs, which shows that distance is not a very important factor when quality becomes the measuring factor for better perception.

The perception of the respondents based on the ratings shows that 50% 'strongly agree' that doctors spends enough time and 49% 'agree' that the doctor pays attention to medical complaints. It is similar to another study which states human aspects like concern, sympathy and understanding could improve satisfaction (Naruka and Chittora, 2014). 53% 'strongly agree' with the parameter that pleasant attitude is shown by nurses and 50% 'agree' that nurses attend every need properly. Regarding infrastructure 61% 'agree' with availability of beds and 55% 'strongly agree' with the availability of clean drinking water and hygiene of the toilets. 41% and 49% of the respondents agree that drugs and necessary equipments are available at all times and 28% do not agree that drugs are available at all times. 53% 'strongly agree' with the presence of skilled birth attendant during delivery and 66% 'agree' with round the clock availability of maternal service

The ANOVA table reveals that the demographic factors like age, educational qualification, family income per month, number of ANC visits during last delivery and amount of medical expenditure incurred during last delivery affect the perception towards the BPHCs whereas, occupation of the respondents and distance travelled from residence does not play any role in affecting the perception of women seeking maternal or child care.

## CONCLUSION

The number of Ante-Natal Care (ANC) visits shows the effective utilization of PHCs to a great extent as in the present study 86% have taken more than 8 visits which means they have completed the entire ANC schedule. Surprisingly 72% have not spent any money towards medical expenditure from pregnancy till delivery which is very different from other states, where out of pocket expenditure is very high. Also it is understood that the type of occupation and distance are not important factors when quality becomes the measuring factor for better perception. This study throws light on the fact that the public health system in Coimbatore is far better compared to other parts of the country as most of them have expressed positive perception towards various parameters. Even though the system is same everywhere, the active role of people on the delivery side viz., Village Health Nurses (VHNs), Auxiliary Health Nurses (AHNs) along with responsible doctors and dedicated nurses are the reasons behind such positive perception. Very few issues like maintenance of facilities/ equipments in good working condition, improving the cleanliness of the campus and presence of a duty doctor round the clock needs attention from the authorities.

## REFERENCES

1. Aziz Ismail, N. A., & Essa, R. M. (2017). Pregnant Women's Satisfaction with the Quality of Antenatal Care at Maternal and Child Health Centers in El-Beheira Governorate. *IOSR Journal of Nursing and Health Science* , 6 (2), 36-46.
2. Timane, A. J., et.al (2017). Clients' satisfaction with maternal and child health services in primary health care centers in Sokoto metropolis, Nigeria. *Edorium J Matern Child Health* , 2, 9-18.
3. Kumari, et. al (2009). Study on patient satisfaction in the government allopathic health facilities of Lucknow district, India. *Indian Journal of Community Medicine:Official Publication of Indian Association of Preventive and Social Medicine* , 34 (1), 35-42.
4. Kumar, et.al (2016). An assessment of patients satisfaction with services obtained from a tertiary care hospital in Ranchi, India. *Journal of Dental and Medical Sciences* , 15 (4), 129-134.
5. Dheepa, T., Gayathri, N., & Karthikeyan, P. (2015). Patient's satisfaction towards the quality of services offered in government hospital in western districts of Tamil Nadu. *International Research Journal of Business and Management* , VIII (1).
6. Sugunadevi, G. (2017). Quality of antenatal care services at subcentres: an infrastructure, process and outcome evaluation in a district in Tamil Nadu. *International Journal of Community Medicine and Public Health* , 4 (11), 4071-4077.
7. Sadhasivam, P., Kavitha, S., & Saranya, R. (2017). A Study on the level of satisfaction of women on the performance of Primary Healthcare Centres in Coimbatore District. *International Journal of Management Studies* , IV (4), 35-43.
8. Sumathi, A. (2016). A Study on Service Quality of Primary Health Centres with special reference to Coimbatore City. *International Journal of Science and Engineering Research* , 4 (5), 43-47.
9. Naruka, N. S., & Chittora, S. (2014). A Study on patient satisfaction: with special reference to government hospital patients of Bundi in Rajasthan. *Professional Panorama* , 2 (1), 40-47.
10. Mohanraj, P. (2015). Assessment of Primary Health Center services and client's satisfaction. *ICTACT Journal on Management Studies* , 1 (3), 154-157.
11. Economic survey 2017-18. Social infrastructure, employment and human development. Ministry of Finance, Government of India, volume 2, pg 168.