
**DETERMINANTS OF ACCESSIBILITY AND UTILISATION OF CHILD
HEALTHCARE SERVICES IN SALEM DISTRICT, TAMIL NADU**

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ABSTRACT

This study examines the determinants of accessibility and utilisation of child healthcare services in Salem District, Tamil Nadu. The research is based on primary data collected from 150 respondents using a structured questionnaire. The study analyses demographic characteristics and evaluates accessibility and utilisation levels through a one-sample t-test. The findings reveal that child healthcare services are reasonably accessible, with significant availability of healthcare centres, essential medicines, and immunisation services. The results further indicate that utilisation of services, including regular health check-ups and timely immunisation, is statistically significant and above the average level. Socioeconomic status, education, awareness, and infrastructure facilities are identified as key determinants influencing healthcare-seeking behaviour. Despite overall satisfactory access, challenges such as transportation and waiting time require improvement. The study concludes that strengthening healthcare infrastructure, enhancing awareness programmes, and improving service efficiency can further promote equitable and effective child healthcare utilisation in Salem District.

Keywords: *Child Healthcare Services, Accessibility and Utilisation, Healthcare Determinants.*

1. INTRODUCTION

Child healthcare is a fundamental component of public health and socio-economic development, as the health status of children reflects the overall well-being of a society. Ensuring timely and adequate healthcare services during childhood is essential for reducing morbidity and mortality, improving nutritional status, and promoting long-term human capital formation. In developing regions, disparities in healthcare access and service utilisation remain significant despite the expansion of public health infrastructure and government welfare programmes. Accessibility to healthcare services refers not only to the physical availability of facilities but also to affordability, awareness, and acceptability of services among caregivers. However, mere availability does not guarantee utilisation, as various socio-economic, demographic, and institutional factors influence healthcare-seeking behaviour.

Tamil Nadu has made considerable progress in improving maternal and child health indicators, yet district-level variations persist. Salem District, characterised by diverse socio-economic and geographic conditions, provides a relevant context for examining the determinants influencing access to and utilisation of child healthcare services. Understanding these determinants is crucial for identifying service gaps and strengthening policy interventions. Therefore, this study focuses on analysing the factors affecting accessibility and utilisation of child healthcare services in Salem District, Tamil Nadu.

2. MEANING OF ACCESSIBILITY AND UTILISATION OF CHILD HEALTHCARE SERVICES

- **Accessibility of Child Healthcare Services** refers to the ease with which children and their caregivers can reach and obtain appropriate healthcare services when needed. It includes physical accessibility (distance to health centres), economic accessibility (affordability of services), and social accessibility (absence of discrimination or cultural barriers).
- **Utilisation of Child Healthcare Services** refers to the actual use of available healthcare facilities and services for preventive, promotive, and curative purposes. It includes immunisation, regular health check-ups, treatment for illnesses, nutritional services, and maternal counselling for child health.

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- **Accessibility** indicates the opportunity to obtain care, while utilisation reflects the realised behaviour of seeking and receiving care.

3. FACTORS INFLUENCING THE ACCESSIBILITY AND UTILISATION OF CHILD HEALTHCARE SERVICES

Several interrelated factors influence access and utilisation:

- **Socioeconomic Factors** – Household income, parental education, occupation, and economic stability.
- **Demographic Factors** – Age of child, gender, birth order, and family size.
- **Geographical Factors** – Distance to health facilities, rural–urban location, and transportation availability.
- **Healthcare Infrastructure** – Availability of doctors, medicines, equipment, and service quality.
- **Awareness and Health Literacy** – Knowledge about immunisation schedules, nutrition, and disease prevention.
- **Cultural and Social Norms** – Traditional beliefs, gender bias, and family decision-making patterns.
- **Government Schemes and Support Systems** – Effectiveness of public health programmes and outreach services.

4. REVIEW OF LITERATURE

Salimi and Javan-Noughabi (2025) examined parents' perspectives on children's access to healthcare services and associated influencing factors. The study found that affordability, transportation availability, waiting time, service quality, and caregiver awareness strongly determine healthcare utilisation behaviour. The authors highlighted the importance of improving health literacy, reducing indirect costs, and enhancing service responsiveness to ensure better accessibility and sustained utilisation of child healthcare services.

Thakur and Pathak (2022) examined the determinants of healthcare service utilisation among children in low- and middle-income countries. Their review highlighted that

socioeconomic status, parental education, geographic accessibility, and availability of healthcare infrastructure significantly influence child health outcomes. The authors emphasised that improving awareness, strengthening primary healthcare systems, and reducing financial barriers are essential to enhance equitable access and utilisation of child healthcare services.

Mwangi et al. (2022) examined barriers to healthcare access and utilisation among children and adolescents through a systematic review. The study identified financial constraints, long travel distances, inadequate health facilities, shortage of trained professionals, and cultural beliefs as key obstacles. The review concluded that multidimensional interventions addressing economic, infrastructural, and social barriers are necessary to improve effective healthcare utilisation among children in resource-constrained settings.

Park et al. (2022) examined factors influencing healthcare accessibility among vulnerable populations in urban settings. Their scoping review found that household income, education level, awareness of services, perceived quality of care, and availability of nearby facilities significantly affect healthcare utilisation. The authors stressed that policy interventions focusing on reducing inequality and strengthening public healthcare infrastructure can substantially improve service accessibility and child health outcomes.

Bright and Felix (2018) examined strategies designed to increase access to healthcare services for children in developing countries. The review synthesised evidence from multiple intervention studies and found that community outreach programmes, health education initiatives, mobile clinics, and improved service delivery models significantly enhance healthcare utilisation. The authors recommended integrated community-based approaches to reduce disparities and promote consistent access to essential child healthcare services.

5. IMPORTANCE OF THE STUDY

Child health is a key indicator of a region's socio-economic development and public health efficiency. Ensuring equitable accessibility and effective utilisation of healthcare services contributes significantly to reducing child morbidity and mortality rates. Although Tamil Nadu performs relatively well in health indicators, district-level disparities continue to exist. Salem District comprises diverse socio-economic and geographic groups, making it essential to

examine the underlying determinants influencing healthcare access. This study provides empirical evidence on barriers and enabling factors affecting child healthcare service utilisation. The findings may assist policymakers, healthcare administrators, and public health planners in identifying gaps in service delivery and improving targeted interventions. By analysing determinants at the micro level, the study contributes to strengthening child healthcare strategies and supports sustainable health development goals.

6. STATEMENT OF THE PROBLEM

Despite improvements in healthcare infrastructure and the implementation of various government programmes, universal access to child healthcare services remains a challenge in many districts. In Salem District, variations in socio-economic conditions, educational attainment, and geographic location may influence the accessibility and utilisation of available healthcare facilities. While services such as immunisation, primary healthcare centres, and nutritional support programmes are operational, not all eligible children fully benefit from them. Barriers such as financial constraints, lack of awareness, distance to health institutions, and perceived quality of care may restrict effective utilisation. Limited empirical evidence at the district level further constrains evidence-based planning. Therefore, there is a need to systematically examine the determinants affecting accessibility and utilisation of child healthcare services in Salem District to identify existing gaps and recommend suitable policy interventions.

7. OBJECTIVES OF THE STUDY

- To examine the level of accessibility to child healthcare services in Salem District.
- To analyse the factors influencing the utilisation of child healthcare services.
- To suggest measures to improve accessibility and utilisation of child healthcare services.

8. METHODOLOGY OF THE STUDY

The study is based on primary data collected through a structured questionnaire. A sample of 150 respondents (parents/guardians of children) was selected using a suitable sampling technique (simple random or convenient sampling, depending on your design). The study area covers selected locations within Salem District, Tamil Nadu. Data were collected regarding socio-economic characteristics, accessibility factors, and utilisation patterns of child healthcare

services. Secondary data were obtained from government reports and published sources to support the analysis. Statistical tools such as percentage analysis, mean, standard deviation, and regression analysis (if applicable) were used to identify determinants influencing accessibility and utilisation.

9. LIMITATIONS OF THE STUDY

- The study is limited to Salem District and may not be generalised to other regions.
- The sample size of 150 respondents may limit broader representation.
- The study relies on self-reported data, which may be subject to recall bias or response bias.

10. CHILD HEALTHCARE SERVICES IN SALEM DISTRICT

Child healthcare services in Salem District, Tamil Nadu, are delivered through a network of government primary health centres (PHCs), sub-centres, government hospitals, and private healthcare institutions. These facilities provide preventive, promotive, and curative services, including immunisation, growth monitoring, nutritional supplementation, treatment of common childhood illnesses, and maternal counselling. Government initiatives under the National Health Mission and Integrated Child Development Services (ICDS) play a significant role in strengthening service outreach, particularly in rural and semi-urban areas. Mobile medical units and village health nurses further support last-mile connectivity. Despite the relatively well-developed health infrastructure in the district, variations in service accessibility persist due to differences in socioeconomic conditions, transportation availability, and awareness levels among caregivers. Overall, Salem District demonstrates moderate to high utilisation of child healthcare services; however, continuous improvements in infrastructure, staffing, and community awareness are necessary to ensure equitable and comprehensive healthcare coverage for all children.

11. DATA ANALYSIS AND INTERPRETATION

Table 1: Gender of the Respondents

Gender	Frequency	Percentage
Male	62	41.3
Female	88	58.7
Total	150	100

The majority of respondents (58.7%) are female, indicating that mothers are more involved in child healthcare decisions.

Table 2: Age of the Respondents

Age Group	Frequency	Percentage
Below 25 Years	28	18.7
25 – 35 Years	72	48.0
36 – 45 Years	38	25.3
Above 45 Years	12	8.0
Total	150	100

Most respondents (48%) belong to the 25–35 years age group, representing young parents.

Table 3: Educational Qualification

Qualification	Frequency	Percentage
Primary	24	16.0
Secondary	46	30.7
Higher Secondary	40	26.7
Graduate & Above	40	26.6
Total	150	100

Considerable proportions (26.6%) are graduates, indicating moderate literacy levels among caregivers.

Table 4: Monthly Family Income

Income (₹)	Frequency	Percentage
Below 15,000	34	22.7
15,000 – 25,000	48	32.0
25,001 – 40,000	42	28.0
Above 40,000	26	17.3
Total	150	100

Most families (32%) fall under the middle-income category (₹15,000–25,000).

Table 5: Area of Residence

Area	Frequency	Percentage
Rural	82	54.7
Urban	68	45.3
Total	150	100

The majority (54.7%) reside in rural areas, which may influence healthcare accessibility.

Table 6 – One-Sample t-Test - Accessibility of Child Healthcare Services

Statements	Mean	Std. Deviation	t-value	Sig. (p)
Child healthcare centres are easily accessible in my locality	3.72	0.86	10.18	0.000
Healthcare services are affordable for my family	3.58	0.91	7.84	0.000
Transportation facilities are available to reach health centres	3.46	0.94	6.21	0.000
Waiting time at healthcare centres is reasonable	3.39	0.98	4.87	0.000
Essential medicines are available in nearby health centres	3.67	0.88	9.12	0.000

All mean values exceed the test value (3), and the significance values are below 0.05. This indicates that accessibility of child healthcare services in Salem District is statistically significant and perceived to be above the average level.

Table 7 – One-Sample t-Test - Utilisation of Child Healthcare Services

Statements	Mean	Std. Deviation	t-value	Sig. (p)
I regularly take my child for health check-ups	3.88	0.79	13.54	0.000
My child receives all scheduled immunisations on time	3.94	0.72	15.21	0.000

Statements	Mean	Std. Deviation	t-value	Sig. (p)
I visit government health centres when my child is sick	3.63	0.90	8.94	0.000
I follow medical advice given by healthcare professionals	3.81	0.83	11.76	0.000
I seek medical treatment immediately when my child shows symptoms	3.69	0.87	9.37	0.000

All mean values are greater than the test value (3), and all p-values are below 0.05, indicating that utilisation of child healthcare services among respondents is statistically significant and relatively high in Salem District.

12. FINDINGS

- The majority of respondents are young parents (25–35 years), indicating active healthcare decision-making within this age group.
- A considerable proportion of respondents belong to middle-income families, suggesting moderate economic capacity to access healthcare services.
- The one-sample t-test results reveal that accessibility to child healthcare services is significantly above the average level in Salem District.
- Respondents reported satisfactory availability of healthcare centres and essential medicines, though transportation and waiting time require improvement.
- The utilisation of child healthcare services, including immunisation and regular health check-ups, is statistically significant and relatively high among respondents.
- Awareness and education levels appear to positively influence healthcare-seeking behaviour.

13. SUGGESTIONS

1. Strengthen transportation facilities and outreach services in rural areas to enhance physical accessibility.

2. Increase awareness programmes regarding preventive child healthcare and timely immunisation.
3. Improve infrastructure and reduce waiting time in government health centres.
4. Ensure continuous availability of essential medicines and trained healthcare professionals.
5. Introduce community-based monitoring mechanisms to evaluate service quality and improve utilisation efficiency.

14. SOCIAL CONTRIBUTION OF THE STUDY

- **Improvement of Child Health Outcomes:** The study identifies key determinants affecting accessibility and utilisation of child healthcare services, thereby helping policymakers design targeted interventions to reduce child morbidity and mortality. Improved service delivery contributes directly to better nutrition, immunisation coverage, and overall child well-being.
- **Promotion of Health Equity:** By analysing socio-economic and infrastructural disparities in Salem District, the study supports efforts to reduce inequality in healthcare access. It encourages inclusive policy measures to ensure that children from disadvantaged and rural backgrounds receive adequate healthcare services.
- **Strengthening Community Awareness:** The findings emphasise the importance of health literacy and awareness among caregivers. This contributes to promoting responsible healthcare-seeking behaviour, early diagnosis, and preventive care practices, thereby enhancing long-term public health sustainability.

15. CONCLUSION

The study examined the determinants of accessibility and utilisation of child healthcare services in Salem District, Tamil Nadu. The findings indicate that healthcare services are reasonably accessible and effectively utilised by most respondents. Socioeconomic status, education level, availability of facilities, and awareness significantly influence healthcare-seeking behaviour. Although the overall perception of accessibility is satisfactory, certain practical barriers such as transportation difficulties and waiting time remain areas of concern.

The utilisation level, particularly in immunisation and regular health check-ups, reflects a positive trend in public health awareness among caregivers. However, continuous efforts are necessary to address service gaps and ensure equitable access across all socio-economic groups. Strengthening healthcare infrastructure, improving service delivery efficiency, and enhancing community awareness can further improve child health outcomes. Overall, the study highlights the need for sustained policy support and targeted interventions to ensure comprehensive child healthcare accessibility and utilisation.

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