

Original Research Article

Assessing beneficiary and parental perception of Integrated Child Development Services Scheme in Pulwama district, Jammu and Kashmir

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ABSTRACT

Background: The study addresses the beneficiaries and parents' satisfaction on health services provided at integrated child development services (ICDS) Scheme in Pulwama District, of Jammu and Kashmir, union territory (UT). The current study examines the level of satisfaction among the beneficiaries and parents with ICDS health services component in Pulwama, with a focus on service accessibility, quality of services, and overall beneficiary perception.

Methods: The study was conducted in all the five blocks of ICDS Pulwama, which included a sample of the parents of below six-year-old beneficiaries and the female beneficiaries such as pregnant women and lactating mothers. The data was collected through sampling of the Anganwadi centres (AWCs) using convenience sampling technique, where structured interviewing process was carried out. The study utilized a mixed methodology.

Results: The findings of the study indicate 86% of parents and 83% of female beneficiaries reported satisfaction with food quality. The 92% parents and 86% female beneficiaries viewed immunization as helpful and 76% parents and 78% of female beneficiaries expressed satisfaction with health check-ups. However, there are certain aspects that require rapid redress such as irregular service delivery, logistical barriers and impediments as well as inadequate staff training.

Conclusions: The research findings indicate the need to emphasis on the enhancement of functional effectiveness of ICDS, enhancement of ICDS staff and ensuring consistent availability of essential resources. The study advises target interventions towards filling the gaps and gaps thus allowing ICDS scheme to become more resilient and responsive as a public health initiative in districts like Pulwama.

Keywords: ICDS, Social welfare, Health policy, Maternal health, Child health

INTRODUCTION

The integrated child development services (ICDS) scheme is a major PFP program in India, started in 1975 to stimulate the development, health and nutrition services to children under six years of age, and pregnant and lactating women, through AWCs.^{1,2} This year 2025 marks as 50th anniversary for the program, it is the only government run comprehensive program in the world that

has been running for 50 years for women and child development. The program was designed as a response to the India's long-standing challenges with child and maternal malnutrition, poor child development indices, and limited access of weak section of society to essential health services in rural and economically disadvantaged areas. The ICDS scheme provides a comprehensive circle of services, that are given through AWCs with the overall aims of a reduction in malnutrition, child mortality, and

morbidity rate and increase in the awareness of maternal health.³ These services are delivered by 1.4 million Anganwadi workers with the help of Anganwadi helpers, these workers and helpers are tasked to implement the scheme and act as a vital link between the healthcare system and the underprivileged population, particularly

children and women.⁴ The scheme is delivered through a network of millions of ICDS centres across India.³ A range of services provided under the ICDS scheme, they are given in Figure 1 it also highlights the nature and scope of services provided at the ICDS centres.

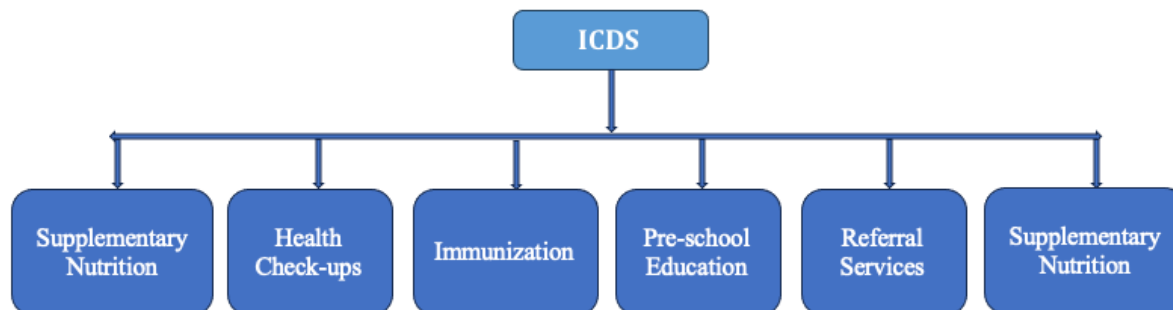


Figure 1: Services provided under ICDS.

*Source: Jammu Kashmir ICDS Department of Social Welfare (n.d.) <https://www.jkicds.com/>.

Although the ICDS scheme is well-conceived, certain challenges persist in its execution.⁵ Research studies conducted throughout India have found substantial achievements, including increased nutritional awareness, improved health outcomes, increased immunization coverage, and enhanced preschool education among children.⁶ However, many gaps persist in the quality and quantity of delivered services, lack of refresher training, inadequate infrastructure of ICDS centres, and disrupted monitoring mechanisms. Moreover rural, border and conflict-prone areas, such as those in Jammu and Kashmir UT, present more operational challenges, working conditions for staff for effective implementation, such as difficult terrain, rough geographical conditions, cold weather during winters, poor road connectivity, and socio-political instability.

Rationale

Because of all these challenges it is crucial to understand how the ICDS services are perceived and utilized by the very beneficiaries they are intended for. Evaluating of beneficiary and parental satisfaction is an important process through which its effect can be assessed since its effectiveness will be through its successful implementation and community acceptance. Research studies also reported variations in awareness and satisfaction among mothers regarding services provided through AWCs, indicating differences in community acceptance.^{7,8} Service delivery, efficiency, and monitoring have long been issues for ICDS, despite its extensive reach and promise. These issues necessitate a region-specific evaluation of beneficiary and community satisfaction and understand implementation challenges. Therefore, this research study focuses on Pulwama district of Jammu and Kashmir, aiming to assess how female beneficiaries and parents of children below six perceive ICDS health services and to bring forth areas

where targeted improvements can be made for more effective and better service delivery.

Research gap

Review of the literature available indicates that despite huge reach out nationally ICDS implementation and nutrition outcomes, perception based from conflict affected districts such as Pulwama are limited. Several studies in Jammu Kashmir show low level of immunisation coverage, maternal services and health check-ups through ICDS, but do not sufficiently capture how parents of the beneficiaries interpret the quality, accessibility and relevant reliability on ICDS services.^{9,10} Very limited research is available on perceived effectiveness or satisfaction regarding health services under ICDS in Jammu and Kashmir rural areas where harsh winter climate, tough geographical conditions and socio-political factors create additional barriers. Therefore, the current study aims to fill this gap by assessing beneficiary and for parental perception systematically regarding ICDS health services delivered.

Study area context: Pulwama district

The Pulwama District of Jammu and Kashmir provides the unique setting to conduct the research on ICDS health services because of its situation in a rural area and issues of the region. Several studies indicate that ICDS has succeeded in ensuring better health indicators in Jammu and Kashmir, but certain issues, such as low staffing, awareness and logistic-related problems continue to persist, particularly in rural regions, such as Pulwama.¹⁰ In Kashmir valley only 13.5% of children below the age of six had health check-ups and 1.8% received immunization at ICDS centres.¹⁰ Similarly, only 12.4% of pregnant women received tetanus toxoid vaccines through ICDS centres.⁹ These low rates indicate inadequate

integration with health systems and several other potential road blocks. Despite an extensive literature available about the outcomes of ICDS program there is limited localized data and literature available about the satisfaction of beneficiaries in a sensitive area with rural geography and harsh climatic conditions. This paper aims at shedding some light on the effectiveness of the ICDS program in a region with specific sociocultural and

functional peculiarities through the evaluation of the satisfaction and perception of ICDS health services by beneficiaries and parents in Pulwama. Pulwama district is the study area of this study it was selected because of its rural character social and economic constraints, and unique geographical and climatic challenges. The administrative boundaries and geographical location of the study presented in Figure 2.

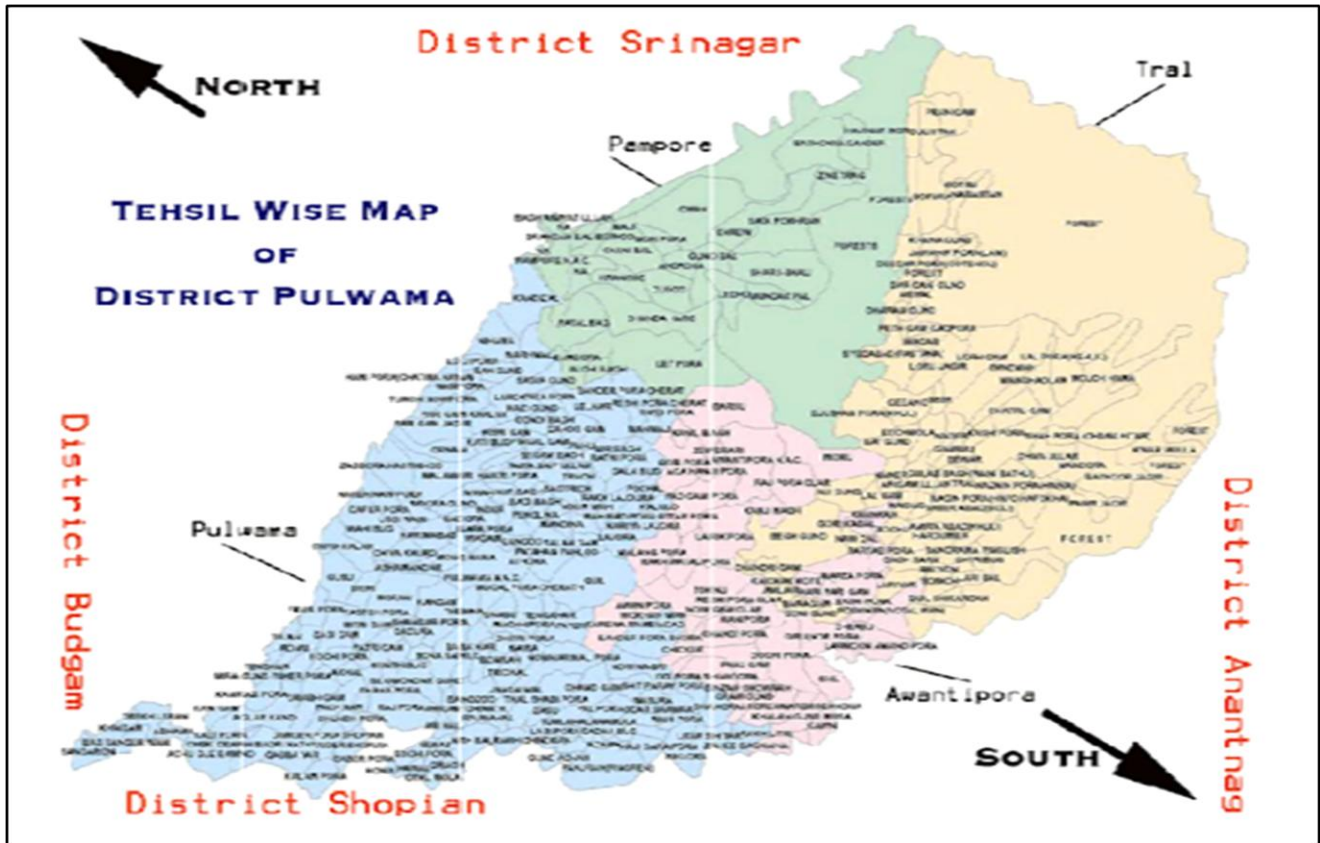


Figure 2: Geographical map of Pulwama district.

*Source: <http://www.dhskashmir.org/pulwama.php> (Accessed on 01 October 2025).

Objectives of the study

Assessing beneficiary satisfaction with ICDS health services

In order to find the adequacy of the ICDS program to the needs of mothers and children it will be imperative to measure the satisfaction of beneficiaries with the health services available to them through the program. Studies have demonstrated that availability, quality, and frequency of such services as vaccination, supplemental feeding, and health examination impact the level of satisfaction of the beneficiaries; the distinct majority of whom are children under six and pregnant or lactating mothers. A study conducted in Gujrat also revealed moderate satisfaction of ICDS in terms of services rendered to beneficiaries; aspect of presence of trained personnel and increasing the proximity of AWCs based on beneficiaries were cited as some of key aspects.¹¹

Similarly, another study observed that the frequency of supplying dietary supplements has huge influence in improving satisfaction among customers, but due to interruptions in supply chains, this success is commonly undermined. This association with satisfaction is also found when the beneficiaries receive more information in rural areas about the available services thus enhancing their levels of satisfaction.⁷ These findings suggest that ICDS has a strong structure but the integration of the community and effectiveness of the functioning are the main contributors to the capability of ICDS to encourage beneficiary satisfaction.

Evaluating parental perceptions of health interventions

The perception of the parents towards the ICDS health interventions can give valuable answers concerning the reception of the program and its impact on individuals other than the ones who are the direct beneficiaries.

Specifically, mothers play the key role in ensuring that their children access ICDS services, and their views often represent the cultural predispositions and an actual experience of working with the government programs. Researchers' studies observed a predominantly good attitude toward childhood immunization and health check-ups, with most guardians showing good acceptance of vaccines and low levels of hesitancy.¹³ Several research studies across Indian contexts shows that parental perceptions of ICDS service quality and trust in ICDS staff significantly relate to service utilization. For example, mothers of child beneficiaries in Kerala were generally aware of ICDS services but reported mixed perceptions about quality, particularly regarding nutrition and education components.

On the part of the parent, parents will most likely be satisfied whenever they see their children are getting healthier upon participating in the program, yet they will not want to trust it completely in case they see and

comment on such facts as the unexceptional servicing or the unreliable staff. A research study from Meerut city in Utter Pradesh found that 58.5% of the mothers were dissatisfied with the frequency of supplementary nutrition provided at the ICDS centres.¹⁴

METHODS

The current research study was carried out in all the five blocks of Pulwama district of Jammu and Kashmir between 2023-2024 to assess satisfaction and perception of health services provided by beneficiaries and parents under the scheme of ICDS. In order to get a detailed view of the method applied in this research, approach used in carrying out research are explained below. The current study follows research design that is systematic, encompassing study area selection, sampling techniques, data collection and data analytical procedures. An overview of research methodology adopted in study shown in Figure 3.

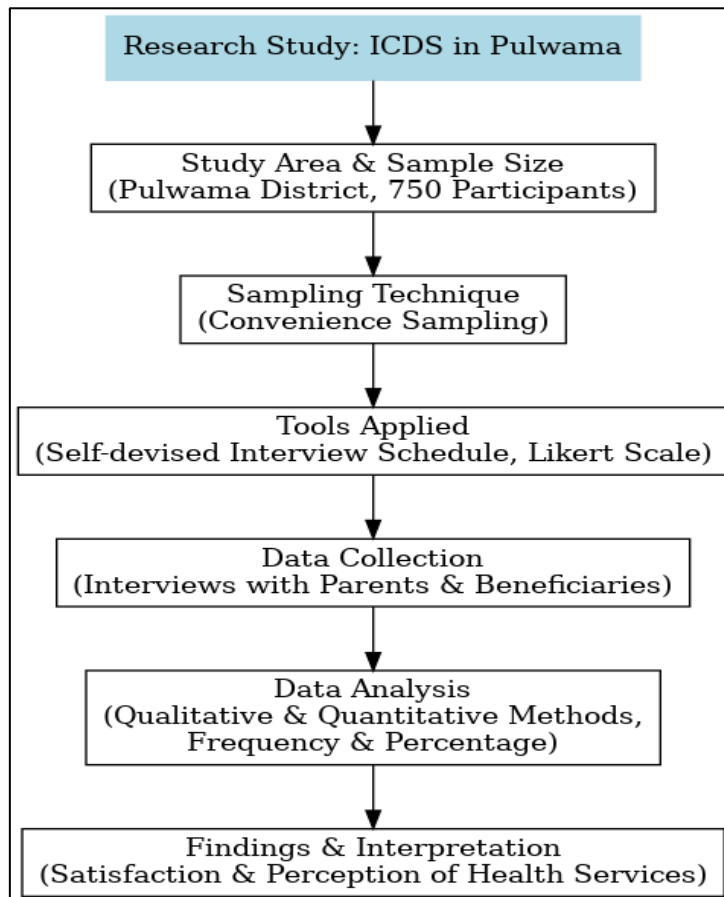


Figure 3: Research methodology.

Study area and sample size

The research included all of the five blocks of ICDS because this was done to have a fair covering of the rural and semi-urban territories of Pulwama District. Ten ICDS Centres were selected through convenience sampling to reflect the experiences within the district, which was

composed of 50 AWCs. A total of five hundred parents of those children who received the benefits of the ICDS and 250 female beneficiaries (pregnant women and lactating mother) were selected. A total of 750 participants have been used in this and hence made it possible to extensively evaluate the health and nutritional care presented within the program.

Sampling technique

A convenience sampling method has been used in selecting the sample where issues of accessibility and willingness to participate have been accorded high priority. Parents and beneficiaries who are present by the time of visiting the centres were selected on a random basis and the AWCs were selected on the basis of their operational status.

Tools applied

Data collection was facilitated by a self-devised interview schedule, which was intended to record the views of parents and beneficiaries besides the challenges that they encounter in ICDS centres. The interview schedule contained a closed-ended interview questions, and on the topics of accessibility, care quality, and obstacles in the course of using the services, a five points Likert scale was applied, to measure the satisfaction with health services (nutrition, vaccinations, and health examination). The tool was pre-tested on a small group of people and before it was fully utilized in the research, the focus of the tool was made clear by ensuring that it made sense and it was related to the focus of the research.

Data collection

The collection of data was made by personal visits to the chosen centres of Anganwadi where it is possible to directly interact with participants. The researcher himself conducted the interview schedule on the 250 female beneficiaries as well as 500 parents thus creating uniformity in the collection of the data as well as the provision of clarification that might be required.

Data analysis

In the analysis of data both qualitative and quantitative methods were applied to provide the comprehensive understanding of the findings. The frequency of responses, e.g. the extent of satisfaction or the number of reported challenges, was measured with the help of frequency distribution and percentage calculations. This dual approach method ensured an equal interpretation of the data since it both demonstrated subtle experiences as well as numerical patterns. Moreover, for descriptive statistics chi-square (χ^2) tests of independence were applied to examine the association between satisfaction level and educational qualification with ICDS health services among female beneficiaries and parents with statistical significance assessed at $p < 0.05$.

RESULTS

Perception of parents of ICDS child beneficiaries regarding the ICDS services

ICDS scheme plays a crucial role in providing nutritional support to children in Pulwama. This study conducted to

assess the perception of parents regarding quality of food (nutrition) provided at ICDS centres. Results provide insights into level of satisfaction among parents (Table 1). Nearly a quarter of parents 24% rated the food quality as very good, indicating a high level of regarding meals provided to their children. A significant majority 62% of parents considered food quality to be good. About 10% of parents perceived food quality as average. Perception regarding immunization 64% of parents strongly believed that immunization provided at centres to their children had a highly positive impact on their children's health and well-being. The 28% of parents acknowledged that immunization was beneficial, though perhaps not as significantly as those who rated it very helpful. The 4% of parents felt that immunization had a moderate or neutral impact on their children. The 3% of parents expressed slight dissatisfaction, indicating that they did not observe a significant improvement in their child's health. One percent of parents felt that immunization had no positive impact on their children's health.

Health check-ups play a crucial role in monitoring children's growth, identifying nutritional deficiencies, and ensuring overall well-being. The 48% of parents believed the health check-ups had a significant positive impact on their children's well-being. The 29% considered them beneficial but not outstanding. The 15% felt the impact was moderate, neither particularly beneficial nor ineffective. The 6% of parents expressed dissatisfaction, suggesting that the check-ups did not meet their expectations. The 2% found them entirely ineffective.

Association between parental educational qualification and satisfaction about the ICDS health services

Table 2 presents the educational qualification of parents of ICDS child beneficiaries. The chi-square test of Independence was applied to examine whether the educational qualifications of the parents is significantly associated with satisfaction levels regarding the health services provided under ICDS. The results of the test show a statistical significance association between educational qualification of parents and satisfaction with ICDS health services ($\chi^2=35.42$, $df=8$, $p<0.001$). Parents with higher education reported higher levels of satisfaction as compare to parents with low educational background or no formal education. This suggests that strong educational background highly influences perception and evaluation of health services under ICDS.

Perception of ICDS female beneficiaries (Pregnant women and lactating mothers) regarding the ICDS services

Regarding the perception of ICDS female beneficiaries (Pregnant and lactating) regarding quality of food (Nutrition) provided at ICDS Centres, are summarized below, see Table 3. A majority of 63% of female beneficiaries considered the food to be good, suggesting that most beneficiaries find the food satisfactory and

acceptable. A smaller portion of respondents, 11%, felt that the food was average, indicating that while it meets basic expectations, there is room for improvement.

The 39% of respondents strongly believe that immunization has had a highly positive impact on their health and well-being. The 47% consider the impact of immunization beneficial, though not outstanding, indicating a general sense of satisfaction. The 13% believe impact of immunization is moderate, suggesting that while it is helpful, it does not significantly exceed their expectations. One percent of beneficiaries perceive the immunization efforts as ineffective or inadequate. Zero percent of respondents rated the immunization efforts as very bad, indicating no strong dissatisfaction. 24% of respondents found the health check-ups to be highly beneficial. Majority, 54%, considered the check-ups beneficial, indicating strong positive perception. The 13% felt the check-ups had a moderate impact. The 6% believed the check-ups had limited usefulness. The 3% of respondents found no value in the health check-ups.

Association between female beneficiary educational qualification and satisfaction about the ICDS health services

Table 4 presents the educational qualification of ICDS female beneficiaries (pregnant and lactating women). To assess the association between female beneficiaries' educational qualification and their satisfaction with health services a chi-square test was conducted.

This revealed that there is a statistically significant association ($\chi^2=28.04$, $df=8$, $p<0.001$) between satisfaction level and educational qualification.

Higher level of satisfaction was reported among female beneficiaries (pregnant and lactating women) with higher educational levels as compared to those with low educational background or no educational attainment, indicating that education enhances awareness, perceived effectiveness of health services under ICDS and service utilisation.

Table 1: Responses of parents of ICDS child beneficiaries.

Responses	N	Percent (%)
Perception of parents of ICDS child beneficiaries regarding quality of food (Nutrition) provided at ICDS centres		
Very good	122	24
Good	308	62
Average	49	10
Bad	16	3
Very bad	5	1
Total	500	100
Perception of parents of ICDS child beneficiaries regarding impact of immunization on their children given at ICDS centres		
Very helpful	318	64
Helpful	141	28
Average	22	4
Not so helpful	13	3
Not helpful at all	6	1
Total	500	100
Perception of parents of ICDS child beneficiaries regarding impact of health check-ups on children conducted at ICDS centres		
Very helpful	238	48
Helpful	145	29
Average	78	15
Not so helpful	30	6
Not helpful at all	9	2
Total	500	100

Table 2: Educational qualification of parents of ICDS child beneficiaries.

Educational qualification	High	Moderate	Low	Total
No education	105	54	17	176
8 th	59	43	6	108
12 th	34	68	7	109
Bachelor's degree	45	27	2	74
Master's degree	21	10	2	33
Total	264	202	34	500

Table 3: Responses of ICDS female beneficiaries.

Responses	N	Percentage (%)
Perception of the ICDS female beneficiaries regarding quality of food (Nutrition) provided at ICDS centres		
Very good	50	20
Good	158	63
Average	28	11
Bad	9	4
Very bad	5	2
Total	250	100
Perception of ICDS female beneficiaries regarding the impact of immunization		
Very good	98	39
Good	118	47
Average	31	13
Bad	2	1
Very bad	1	0
Total	250	100
Perception of ICDS female beneficiaries regarding the impact of health check-ups		
Very helpful	59	24
Helpful	134	54
Average	33	13
Some what helpful	16	6
Not helpful at all	8	3
Total	250	100

Table 4: Educational qualification of ICDS female beneficiaries.

Educational qualification	High	Moderate	Low	Total
No education	32	32	6	70
8 th	12	21	4	37
12 th	30	15	2	47
Bachelor's degree	53	14	1	68
Master's degree	19	8	1	28
Total	146	90	14	250

DISCUSSION

The findings of this study conducted in Pulwama district reveals generally higher level of satisfaction among both parents and beneficiaries including pregnant ladies and lactating mothers regarding the services provided by ICDS. These results of this study resonate with and also diverge from findings reported in some other states. The satisfaction regarding services or consistent with earlier researches that have been conducted in different regions of India. The high appreciation for immunization services echoes the findings from studies and national analyses by Chakrabarti et al who found strong health benefits of ICDS supported vaccination program conducted across India.¹⁶

In a similar study conducted in Ernakulam, Kerala, among 553 women aged 18 to 45 the study found that 75% respondents expressed high satisfaction with services provided under ICDS.¹⁵ However the utilisation of services among the lactating women and pregnant ladies was significantly lower as compare to mothers of children below the age of six. The results resonate with Pulwama district where the satisfaction level was high but mothers in vulnerable groups showed inconsistency in

availing the services.¹⁷ Another study conducted in West Bengal covering regions of Howrah and Purulia districts found that for 80% mothers were aware of ICDS services and 73% observed regular operations of AWCs. This contrasts with Pulwama where awareness levels and regular functioning of the ICDS centres appear more variable pointing to the challenge is link to tough geographical and climatic conditions and socio-political disturbances. In urban slums of Kolkata, the satisfaction levels have shown more mixed results. Another study shows 35.6% of mothers reported satisfaction with ICDS versus especially related to the quality of food and behaviour of ICDS staff. While dissatisfaction in Pulwama was very less widespread, the concerns over the quality of food and a regular health check-up parallel to those findings, this suggest that the service delivery issues are systematic across different states and regions of India.⁸

This study not only corroborates existing literature on the effectiveness of ICDS scheme but moreover contributes to new localised insights into the functioning of ICDS scheme in geographically challenged areas and tough rural terrains. The study emphasises the need for region specific sensitive initiatives such as strengthening of

logistics, flexible delivery and differentiating stopping norms to ensure that all the beneficiaries across diverse social geography contexts get benefited.

CONCLUSION

The current study found that the beneficiaries in Pulwama generally waived ICDS services positively expressing higher satisfaction with emanation and nutrition and related services. However, differences in satisfaction among some mothers and guardians indicate that there is scope for improvement in the services. Strengthening ICDS can improve child and maternal health, promote health equity and support human development among vulnerable groups. Findings of the study emphasises the importance of improving infrastructure, training of staff and integration of health systems. Special policy attention should be given to geographically challenged in areas like Pulwama through inclusive service delivery models which are localised and flexible.

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REFERENCES

- Dhasmana A, Seferidi P, Sharma V, Sahiba K, Ghosh-Jerath S, et al. Opportunities for enhancing dietary diversity and environmental sustainability of supplementary nutrition program under the Integrated Child Development Services Scheme: a qualitative study in Srikakulam district, Andhra Pradesh. *BMC Public Health*. 2025;25(1):3238.
- Kapil U. Integrated Child Development Services (ICDS) scheme: a program for holistic development of children in India. *Indian J Pediatr*. 2002;69(7):597-601.
- Kapil U, Pradhan R. Integrated Child Development Services scheme (ICDS) and its impact on nutritional status of children in India and recent initiatives. *Indian J Public Health*. 1999;43(1):21-5.
- Jain A, Walker DM, Avula R, Diamond-Smith N, Gopalakrishnan L, Menon P, et al. Anganwadi worker time use in Madhya Pradesh, India: a cross-sectional study. *BMC Health Serv Res*. 2020;20(1):1130.
- Samuelson PA. The pure theory of public expenditure. *Rev Econ Stat*. 1954;36(4):387-9.
- Bhandari B, Gupta AP, Mandowara SL, Sahare P, Singhal M. Decadal changes in nutritional and immunisation status of ICDS beneficiaries. *Indian J Matern Child Health*. 1993;4(1):9-10.
- Banerjee S, Naskar S, Mitra K, Nandi C. Awareness and satisfaction of mothers of under six children regarding Anganwadi centre services. *Int J Community Med Public Health*. 2018;5(2):769-73.
- Prabhakar VR, Dasgupta A, Pal J, Parthasarathi R, Biswas R, Naiya S. A cross-sectional study on client satisfaction of Anganwadi centres under ICDS scheme in a slum of Kolkata. *Natl J Community Med*. 2014;5(1):88-92.
- Khan SM, Bhat MY, Qurat-ul-Ain, Mahajan SH, Masoodi M. A cross-sectional study on client satisfaction and utilization of ICDS services in Kashmir Division of Jammu and Kashmir State. *Indian J Public Health Res Dev*. 2013;4(4):206-10.
- Yasin T, Azim H. Evaluation of Integrated Child Development Services program in Kashmir, India. *Int J Trop Dis Health*. 2019;35(2):1-7.
- Chudasama RK, Patel UV, Verma PB, Vala M, Rangoonwala M, Sheth A. Evaluation of Anganwadi centres' performance under the Integrated Child Development Services (ICDS) program in Gujarat, India. *J Clin Diagn Res*. 2015;9(12):LC01-6.
- Avula R, Frongillo EA, Arabi M, Sharma S, Schultink W. Enhancements to nutrition program in Indian Integrated Child Development Services increased growth and energy intake of children. *J Nutr*. 2011;141(4):680-4.
- Girija N, Sreelatha DD, Vasanthamani BP, Sukumaran AB, Jose R, Leelavathy MD, et al. Attitude towards childhood vaccination among parents in a rural area of Trivandrum district. *Int J Community Med Public Health*. 2021;8(3):1247-51.
- Kumar P, Kundu S, Bawankule R. District-level geospatial analysis of utilization of ICDS services among children in India. *Front Public Health*. 2022;10:874104.
- Jawahar P, Raddi SA. Assess the knowledge, utilization, level of satisfaction of utilization and barriers of non-utilization regarding Integrated Child Development Services (ICDS) among women of Ernakulam District, Kerala, India. *Clin Epidemiol Glob Health*. 2021;12:100815.
- Chakrabarti S, Raghunathan K, Alderman H, Menon P, Nguyen P. India's Integrated Child Development Services programme: equity and extent of coverage in 2006 and 2016. *Bull World Health Organ*. 2019;97(4):270-82.
- Biswas AB, Das DK, Roy RN, Saha I, Shrivastava P, Mitra K. Awareness and perception of mothers about functioning and different services of ICDS in two districts of West Bengal. *Indian J Public Health*. 2010;54(1):33-5.

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