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Role of ICDS in Improving Health and Nutrition among Tribal Children: A Critical Analysis

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Abstract:
This paper critically examines the effectiveness of the Integrated Child Development Services (ICDS) program in providing health and nutrition services to tribal children in India. Launched in 1975, the ICDS program aims to address the nutritional, health, and educational needs of children under six years of age, as well as pregnant women and lactating mothers. Despite significant expansion, tribal populations continue to face barriers to accessing these services, including geographical remoteness, socio-cultural obstacles, and infrastructural limitations. The study aims to evaluate the awareness, accessibility, and utilization of ICDS services and their impact on the health and nutritional outcomes of tribal children. This study analyzes the implementation of the program in tribal areas, focusing on the adequacy and accessibility of health and nutrition services, as well as the role of Anganwadi workers in bridging service gaps. By utilizing a mix of qualitative and quantitative data, the analysis reveals the strengths and weaknesses of ICDS in tribal regions, emphasizing the need for context-specific interventions, community involvement, and improved resource allocation to enhance outcomes for tribal children. The findings indicate that while the ICDS program has made positive contributions in certain areas, its overall impact remains suboptimal due to ongoing systemic challenges that necessitate urgent attention to achieve sustainable improvements in child health and nutrition.

Keywords: ICDS, Nutritional status, Health Status, Anganwadi workers, tribal Children.

Introduction

The health and nutritional well- being of children are critical determinants of a nation's overall development. In India, tribal communities about 8.6% of the population, often experience disproportionate levels of poverty, undernutrition, and inadequate access to health service. These challenges are further exacerbated by geographical isolation, socio-cultural barriers, and limited awareness of government welfare programs. The Integrated Child Development Services (ICDS) program, initiated in 1975 by the Government of India, is recognized as one of the largest and most ambitious public health and nutrition initiatives aimed at supporting young children, pregnant women, and lactating mothers. Its objectives encompass improving maternal health, reducing child malnutrition, promoting early childhood education, and enhancing community health through a network of Anganwadi centers. As of 2023, ICDS operates over 1.4 million Anganwadi centers across India, serving approximately 88 million children and 25 million mothers annually. However, despite its extensive reach, the program's impact has been inconsistent,

particularly in tribal areas where indigenous populations face unique challenges. These challenges, including geographic isolation, cultural differences, lack of awareness, and inadequate infrastructure, impede the effective delivery of health and nutrition services.

Tribal children, one of the most vulnerable groups in India, disproportionately face challenges such as malnutrition, stunted growth, and limited access to healthcare. According to the National Family Health Survey (NFHS-5, 2019-2021), approximately 47% of children in tribal areas experience stunting, significantly higher than the national average of 35.5%. Furthermore, the prevalence of underweight children in tribal communities is 44%, compared to 32.1% in the general population. These concerning statistics underscore the nutritional challenges faced by tribal communities and highlight the necessity of assessing the effectiveness of the Integrated Child Development Services (ICDS) program in these regions.

To address these challenges, the Government of India launched the Integrated Child Development Services (ICDS) program in 1975. As one of the largest early childhood development initiatives globally, the ICDS aims to meet the health, nutrition, and educational needs of children under six years of age, as well as pregnant and lactating women (UNICEF, 2012). The program provides a comprehensive package of services, including supplementary nutrition, immunization, health check-ups, pre-school education, and referrals, all delivered through Anganwadi Centers (AWCs) managed by Anganwadi Workers (AWWs). Despite its ambitious goals, the effectiveness of ICDS in tribal areas remains inconsistent. Studies indicate that tribal populations encounter distinct barriers to accessing ICDS services, such as geographical remoteness, inadequate infrastructure, and socio-cultural factors (NITI Aayog, 2021). For instance, Chakrabarti et al. (2019) note that only 50% of tribal children enrolled in the ICDS program receive the full range of services, compared to 67% of children in non-tribal populations. Furthermore, the limited availability of skilled AWWs, combined with logistical challenges, further hinders service delivery in these regions (Gupta et al., 2020).

Tribal communities, distinguished by their unique languages, traditions, and often isolated living conditions, necessitate culturally sensitive and context-specific approaches. Insufficient community engagement and resource inadequacies within the Integrated Child Development Services (ICDS) framework have exacerbated disparities, particularly in the delivery of nutrition and healthcare services. For instance, a study by Sethi et al. (2018) found that fewer than 30% of Anganwadi Centers (AWCs) in tribal-dominated regions possessed adequate facilities for effective program implementation. This paper aims to critically analyze the implementation of the ICDS program in tribal areas, focusing on the adequacy and accessibility of health and nutrition services. By examining the roles of Anganwadi workers, systemic challenges, and potential interventions, this study provides a comprehensive evaluation of ICDS performance in tribal contexts. The findings underscore the necessity for improved resource allocation, enhanced community participation, and culturally sensitive strategies to ensure equitable health and nutrition outcomes for tribal children. By addressing these critical gaps, this research identifies actionable pathways to strengthen the ICDS framework, contributing to the broader goal of achieving sustainable development goals (SDGs) related to child health, nutrition, and well-being.

The Components of ICDS

1. Supplementary Nutrition:

Supplementary nutrition is one of the important factors for balancing the nutrition status of children. This includes supplementary feeding and growth monitoring and again vitamin A shortage and control of nutritional anaemia. All families in the community are surveyed to identify children below the age of 6

and Pregnant Mothers and Lactating Mothers. Anganwadi workers take advantage of supplementary feeding supports 300 days a year. For nutritional purposes, ICDS provides 300 calories with 8 to 10 grams of protein every day to every child below six years of age. For adolescent girls, it is up to 500 calories with up to 25 grams of protein every day.

By providing supplementary feeding, the Anganwadi attempts to bridge the calorie gap between the national recommended. The average intake of children and women in Adivasi tribes and income and disadvantaged communities. Growth monitoring and nutrition are two important actions that are undertaken; children below the age of 3 years of age are weighed once a month, and children 3-6 years of age are weighed quarterly. Weight-for-age growth cards are maintained for all children below six years. This helps to find out the growth flattering and helps in assessing their nutritional status. In addition, highly malnourished children are forecast with special supplementary feeding and referred to medical services for the betterment.

2. Immunization:

Immunization is of utmost necessity for a child from health-related problems. Immunization of pregnant women and infants protects children from 6 vaccine-preventable diseases, tetanus, tuberculosis and missiles. These are major preventable that helps in preventing child mortality, disability, morbidity and related malnutrition; immunization of pregnant women against tetanus also reduces the risk of maternal and neonatal mortality.

3. Health Check-ups:

The health check-up includes children less than six years of age, antenatal care of mothers and post-natal care of nursing mothers. The different health services provided by Anganwadi workers for those children and community health Centre staff includes regular health check-ups, recording of weight, immunization management of malnutrition, treatment of diarrhoea and distribution of simple medicines etc.

4. Pre-school Education:

Non-formal pre-school Education (NFPSE) is a part of the ICDS, and it is mostly considered as its backbone because its services basically cover the Anganwadi. Anganwadi Center (AWC)- a village courtyard is the main platform for delivering the services. These AWCs have been set up in every village of the country. In its functioning, the commitment to the cause of India's children, the Present government has decided to set up an AWC in every human occupation /settlement. As a result, the total number of AWC would go up to almost 1.4 million. This is also the most joyful play-way daily activity, visibly sustained for three hours a day. It brings and keeps young children at the Anganwadi Center, an activity that motivates parents and communities. Pre-schools Education (PSE), as considered in the ICDS, focuses on the total development of children chiefly six years old, mainly from the poor groups or those who are most needy. Its programme for the 3-6 years old children in the Anganwadi is directed towards providing and ensuring a naturally joyful and motivating environment, with importance on necessary inputs for most advantageous growth and development. The early learning component of the ICDS is a significant contribution to providing a sound foundation for increasing lifelong learning and development. It also contributes to the Universalization of primary education by providing the necessary preparation for primary schooling and offering alternative care to younger siblings, thus freeing the older ones, especially girls, to attend school.

5. Health and Nutrition Education:

Nutrition, Health and Education (NHED) is a key element of the Anganwadi worker. This is a part of the BCC (Behaviour change communication) strategy. This has the long-term goal of capacity building of

women, particularly in the age group of 15-45 years, so that they can look after their own health, nutrition, and development needs as well as their children and families.

6. Referral Services:

During health check-ups of malnourished children and timely medical attention are referred to the community health Centre (CHC) Bisra or Rourkela Government Hospital (RGH) for better treatment. In the Anganwadi, workers were enlisted such cases in a special register, but at present, the ANM or visiting doctor is referring the malnourished child for NRC or high treatment to Raipur or Tata or Hyderabad.

ICDS and Tribal Communities

The Integrated Child Development Services plays a crucial role in addressing the needs of tribal communities, which constitute about 8.6% of India's population. These communities face multiple challenges, including higher levels of poverty and malnutrition, limited access to healthcare and education due to their remote locations, and cultural practices or dietary habits that may not align with mainstream interventions. Such factors often hinder the effective delivery and utilization of ICDS services, making targeted and culturally sensitive approaches essential for improving their overall health and development.

ICDS plays a critical role in addressing these challenges by:

The Integrated Child Development Services addresses these challenges through multiple targeted strategies in tribal areas. It establishes Anganwadi centres to deliver essential services directly within communities, ensuring better access to nutrition and healthcare. The program also provides culturally appropriate nutritional support and health education to align with local practices. Additionally, outreach activities help raise awareness and encourage service utilization among tribal families, while active community engagement builds trust and promotes participation in health and nutrition initiatives.

Impact on Tribal Children

1. Reduction in Malnutrition:

One of the major impacts of the Integrated Child Development Services has been the reduction of malnutrition among tribal children. Through supplementary nutrition, regular growth monitoring, and health services provided at Anganwadi centres, tribal children have shown modest improvements in weight-for-age and height-for-age indicators. These changes reflect better nutritional status and demonstrate the program's role in addressing chronic undernutrition in vulnerable tribal communities.

2. Increased Immunization Rates:

The Integrated Child Development Services has contributed to increased immunization rates among tribal children through regular health campaigns and coordination with frontline health workers. Anganwadi centres play a key role in mobilizing families, spreading awareness, and ensuring timely vaccination. As a result, vaccination coverage in tribal areas has improved, which helps protect children from preventable diseases and significantly reduces child morbidity and mortality rates.

3. Access to Early Education:

The Integrated Child Development Services enhances access to early education for tribal children through pre-school activities at Anganwadi centres. These programs focus on basic learning, cognitive development, and social skills, helping children become school-ready. By introducing structured learning at an early stage, ICDS lays a strong foundation for formal schooling, improves enrolment, and reduces the likelihood of early dropouts among tribal children.

4. Empowering Women:

The Integrated Child Development Services plays an indirect yet important role in empowering women by educating mothers about nutrition, hygiene, and childcare practices. Through counselling and awareness sessions at Anganwadi centres, women gain essential knowledge that helps them make informed decisions regarding their family's health. This increased awareness enhances their confidence, strengthens their role in household decision-making, and enables them to provide better care and a healthier environment for their children.

Challenges in Tribal Areas

Despite the efforts of the Integrated Child Development Services, several challenges persist in tribal areas. Many Anganwadi centres suffer from poor infrastructure and inadequate staffing, affecting service quality. Cultural and language differences often create communication barriers between service providers and communities. The limited availability of diverse and culturally acceptable food items further restricts nutritional impact. Additionally, logistical difficulties in remote regions lead to irregular servaaaaaaice delivery, reducing the overall effectiveness of ICDS interventions.

Literature of Review

Das Gupta et al. (2005) Evaluates the effectiveness of India's Integrated Child Development Services (ICDS) in improving child nutrition outcomes. The paper identifies significant weaknesses in the ICDS program, including insufficient targeting of at-risk populations and limited focus on children under three, a critical window for nutritional intervention. The authors highlight that services are often directed toward wealthier families, missing the poorest and most vulnerable children. They recommend restructuring ICDS to prioritize nutrition education, health interventions, and community-based approaches for infants and mothers. The paper emphasizes the need for better governance, outreach, and coordination with healthcare services to maximize impact. Their analysis underscores the importance of timely nutritional support and suggests that ICDS can be made more effective through targeted reforms and improved implementation. This research provides valuable insights for policymakers seeking to enhance child nutrition outcomes in India.

Abhina, B. (2020) Conducts an impact assessment of the Integrated Child Development Services (ICDS) program on the nutritional status of children in Trivandrum district. The study evaluates how ICDS interventions, including supplementary nutrition, immunization, and health education, affect child growth and health outcomes. The findings reveal that children enrolled in the ICDS program demonstrate improved nutritional status compared to non-beneficiaries, particularly in terms of weight-for-age and height-for-age indicators. However, the study also identifies gaps in service delivery, including inconsistent quality of supplementary nutrition and limited parental awareness. Abhina recommends strengthening the capacity of Anganwadi workers, enhancing community participation, and ensuring the regular monitoring of services to optimize outcomes. This research highlights the critical role of ICDS in addressing child malnutrition and underscores the need for targeted improvements to increase the program's overall effectiveness in reducing undernutrition.

Kapil, U. (2002) provides a comprehensive review of the Integrated Child Development Services (ICDS) scheme, emphasizing its role in promoting the holistic development of children in India. The paper outlines the key components of ICDS, including supplementary nutrition, immunization, health check-ups, preschool education, and health education. Kapil highlights the scheme's potential in addressing

malnutrition, improving child health, and supporting early childhood development. Despite these benefits, the paper identifies challenges such as inadequate infrastructure, insufficient resources, and variations in service delivery across regions. The author stresses the need for better training of Anganwadi workers, consistent monitoring, and improved coordination with healthcare services to enhance program effectiveness. Kapil concludes that while ICDS is a vital initiative for child welfare in India, targeted reforms and efficient implementation are essential for achieving its goals. This analysis underscores the program's significance in fostering child health and development in the country.

Lokshin et al. (2005) Analyze the effectiveness of the Integrated Child Development Services (ICDS) program in addressing child malnutrition in India. Published in *Development and Change*, the study highlights significant gaps in the program's design and implementation, particularly its failure to target the most vulnerable children under three years of age. The authors argue that ICDS services often benefit older children and those from relatively wealthier families, leaving marginalized groups underserved. They suggest that more focused interventions on early childhood nutrition, better outreach to disadvantaged populations, and improved resource allocation are essential for the program's success. The paper emphasizes the need for ICDS to adopt a more targeted, evidence-based approach to combat malnutrition effectively. This research offers critical insights for policymakers, stressing that structural reforms and strategic service delivery are necessary to enhance the program's impact on child nutrition outcomes in India.

Dey and Bisai. (2019) Present a systematic review of under-nutrition prevalence among tribal children in India. Published in *Anthropological Review*, the study highlights alarmingly high rates of stunting, wasting, and underweight among tribal communities due to poverty, food insecurity, and limited healthcare access. The authors emphasize regional disparities and the persistent vulnerability of tribal children compared to non-tribal populations. They call for targeted nutritional interventions, improved healthcare infrastructure, and culturally sensitive approaches to address these issues. This review underscores the urgency of integrating tribal-specific strategies within national programs to combat child malnutrition effectively in India.

Mehta and Pratap (2014) Critically examine the Integrated Child Development Services (ICDS) and the National Rural Health Mission (NRHM) in their *CPRC-IIP Working Paper 48*. The study identifies strengths, such as ICDS's comprehensive approach to child development and NRHM's focus on healthcare access. However, challenges like inadequate infrastructure, poor service delivery, and limited accountability hinder their effectiveness. The authors highlight the need for better coordination between programs, enhanced resource allocation, and stronger community involvement. They provide valuable insights into the factors affecting program success and emphasize the need for systemic reforms to achieve health and nutrition goals in India.

Joseph, A. (2023). Investigates the child health and nutritional status of tribal communities in Kerala, providing an in-depth case study through a socio-economic lens. The doctoral dissertation explores the persistent health disparities among tribal children despite various government interventions, including the Integrated Child Development Services (ICDS). The study identifies key factors influencing poor health outcomes, such as poverty, lack of access to quality healthcare, food insecurity, and low levels of maternal education. The research highlights high rates of stunting, wasting, and underweight among tribal children, emphasizing the need for culturally tailored interventions.

Joseph also examines the effectiveness of existing health and nutrition programs and finds significant gaps in implementation, awareness, and outreach. The study recommends improving healthcare infrastructure,

increasing community participation, and providing targeted education and nutrition programs to address these disparities. This work offers valuable policy insights for addressing child health and nutrition inequities in tribal areas, emphasizing a multi-dimensional approach for sustainable improvements.

Shashidhar, R., Maiya, P., & Ramakrishna, V. (2012). Analyze the performance of India's Integrated Child Development Services (ICDS) with a focus on Anganwadi centers. Published in the *OIDA International Journal of Sustainable Development*, the study highlights both the strengths and weaknesses in the implementation of ICDS. The research points out that while Anganwadis play a critical role in providing nutrition, early education, and healthcare services to children, challenges such as inadequate infrastructure, lack of resources, and inconsistent service delivery hinder their effectiveness.

The study also emphasizes the need for better training of Anganwadi workers, timely supply of nutritional supplements, and increased community participation. Recommendations include improving monitoring systems, enhancing service quality, and adopting region-specific strategies to address gaps. The paper concludes that while ICDS has potential, structural improvements are necessary to fully realize its objectives and improve outcomes for child health and development in India.

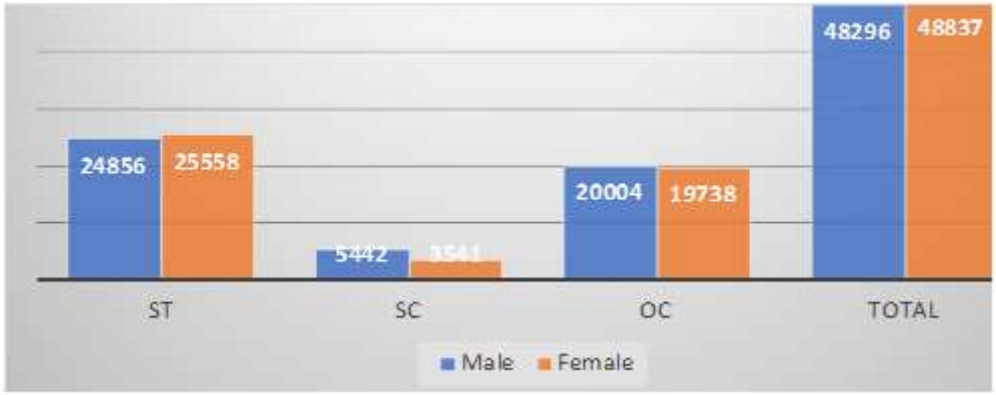
Research Methodology

The methodology of this study focuses on examining the impact of the Integrated Child Development Scheme (ICDS) on the health and nutrition of tribal children in the Bisra block of Sundargarh district. This rural area, comprising 14-gram panchayats and inhabited predominantly by the Oram, Munda, and Santal communities, includes 172 Anganwadi Centers (AWCs) under one ICDS center. A mixed-method approach was employed, using interviews, case studies, and observations to collect both qualitative and quantitative data. Tools such as structured questionnaires, cumulative record cards, and face-to-face interviews with Anganwadi Workers, helpers, and community members provided insights into the socio-economic and demographic profiles, health, and educational outcomes of children aged 0-6 years.

The research design involved purposive sampling of 150 respondents, including Anganwadi Workers, helpers, monitoring committees, and beneficiaries. Data collection incorporated primary sources, such as field observations and interviews, and secondary sources, such as official records and published studies. Observations were methodically planned and executed to assess behavior and performance objectively. Quantitative data were statistically analysed using SPSS, while qualitative data were interpreted in line with the study's objectives. Despite its focus on a single block, the study sheds light on the effectiveness of ICDS in improving tribal children's health and education, contributing to policy and practice in rural development.

Study and analysis

In this chapter, findings and analysis were described in detail. The findings and analysis were described in tabular and graphical forms. First, information related to the respondents has been described and then in a consecutive paragraph, other information has been analysed and explained.

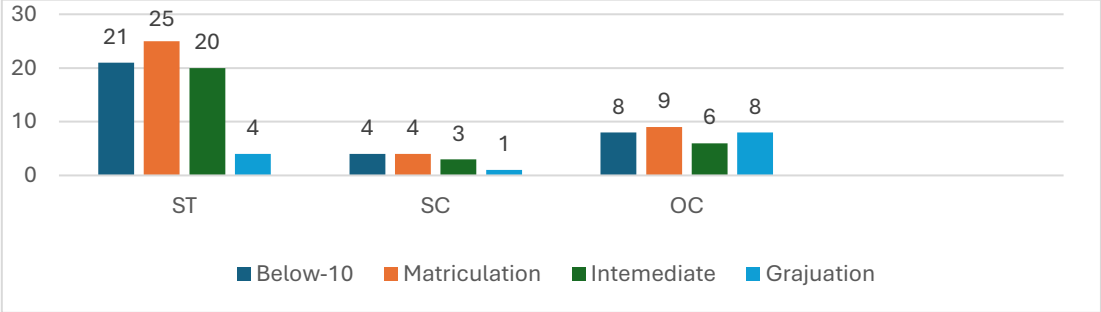


Source: - *Yearly Survey report ICDS of Bisra block Sundargarh*

Figure - Population status of Bisra block

Bisra has a population of 97133 people, but only 50414 of them are ST, accounting for 52 per cent of the total population. Currently, the government has declared that all Anganwadi workers will be classified as ST. However, in this case, 31Anganwadi workers are appointed before the government's responsibilities. In the Adivasi tribes of the area, there are more females than males.

Figure- Education status of Bisra block Anganwadi workers



Source: - *Yearly Survey Report ICDS of Bisra*

There are 126 AWWs from the ST, 12 from the SC, and 31 from the OC. ST Anganwadi Workers represent 74.5 percent of all Anganwadi Workers. However, 21 Anganwadi workers do not have a high school diploma, accounting for 16.6% of all ST Anganwadi workers. Currently, the majority of work is done on mobile devices. As a result, those who do not have a high school diploma are having a difficult time preparing for MIS and MPR, as well as registering pregnant mothers, lactating mothers, and children.

Children (0-6) status of Bisra block

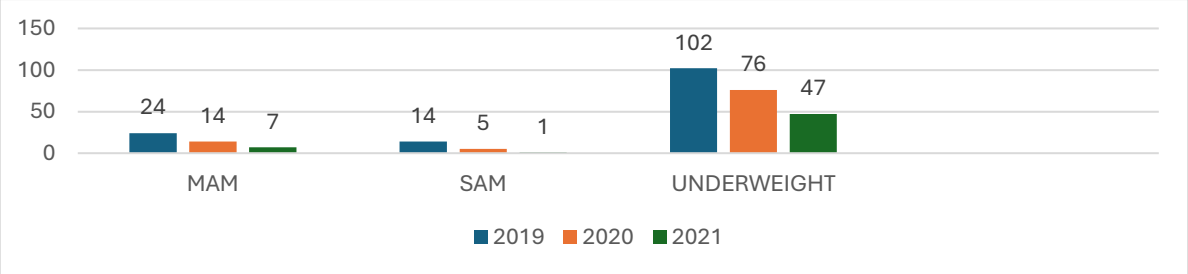
Category	Total children	ST		SC		OC		TOTAL	
		M	F	M	F	M	F	M	F
0-6 yr	7388	1793	1845	291	264	1632	1563	3716	3672
7m-3yr	3078	675	758	112	105	715	713	1502	1576
3-6y	4310	1110	1087	197	159	917	850	2214	2096

Pre-school	2413	657	616	92	93	500	455	1249	1164

Source: - *Yearly survey report ICDS of Bisra*

There are 3638 Adivasi children aged 0-6, accounting for 49.24% of all children in the Bisra area, while only 2413 children attend pre-school, accounting for 32.6 percent of all children.
Only 1273 Adivasi children out of a total of 2205 attend Anganwadi pre-school, accounting for only 58 percent of all Adivasi children. The majority of the youngsters in this neighbourhood attend a private school. The Adivasi work harder and earn more money, allowing them to send their children to private schools, whereas in Anganwadi Centers, the majority of the teachers are below the age of +2, and they do not have the time to effectively educate the students.

Figure- Malnourished children 0-6 year



Source: *Bisra ICDS report 2019-21*

There are seven children, which is 70.8 percent less than in 2019 and 50 percent less than in 2020. It signifies that the percentage rate is dropping as a result of a plentiful supply of protein-rich foods. There is only one Sam Child available. However, the number of Sam children in 2020 and 2019 was 5 and 14, respectively, 92.8 percent and 80 percent. In 2021, there will be 47 underweight children, compared to 102 and 70 in 2019 and 2020, respectively. Brest feeding grates in 2019 were 54% and 3%, respectively. Although most women dislike feeding their babies, nursing promotes optimal cognitive development in children.

Mother and child mortality rate of the study area

Category	Male	Female	Total
Mother	-	1	1
Infant	-	17	17
Child < 6 years	22	3	25

Source: -*MPR of ICDS Bisra Report*

The table presents the **mother and child mortality rate in the study area** based on the MPR of the ICDS Bisra Report. The data reveal that **one maternal death** was recorded during the study period. In the case of infant mortality, a total of **17 deaths** were reported, all among female infants. Further, among children below **6 years of age**, the total number of deaths was **25**, of which **22 were male children** and **3 were female children**. These findings indicate a comparatively higher mortality burden among children under six years, particularly male children. The data highlight the need for strengthened maternal and child

healthcare services, improved nutrition, and timely intervention through ICDS and related health programmes in the study area.

Three years death Report of Bisra Block

Death	2019	2020	2021
Maternity	13	6	1
Infant	42	27	17
Child (3-6) year	57	39	25

Source: *Yearly Survey report of ICDS Bisra*

The deaths of P.M (Maternity), infants, and children aged 0 to 6 years are shown in this Table. There are numerous camas of children and moms who have died. The majority of deaths are caused by a lack of iron and iodine. In 2021, there will be only one maternity fatality, compared to 13 and 6 deaths in 2019 and 2020, respectively. It is 92% less than in 2019 and 83% less than in 2020. Similarly, infant mortality is gradually decreasing.

In the previous year, there were 42 in 2019, 27 in 2020, and only 17 in 2021. Infants make up 59 percent of the population and 37 percent of the population, respectively. Similarly, the death rates of (0-6) year old children are 57, 39, and 25 in 2019, 2020, and beyond, respectively. Because of government assistance, particularly ICDS assistance, the number of children dying is reducing the death of a child.

Do they come regularly

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	121	80.7	80.7	80.7
	No	29	19.3	19.3	100.0
	Total	**150**	**100.0**	**100.0**	

The table presents the regularity of children's attendance at the Anganwadi Centre. Out of the total **150 respondents**, **121 children (80.7%)** were reported to be attending the Anganwadi Centre regularly, while **29 children (19.3%)** were not attending regularly. This indicates that a substantial majority of children are regularly visiting the centre, which reflects a positive level of participation in Anganwadi services. However, the fact that **19.3 percent** of children do not attend regularly points to certain barriers such as distance, parental awareness, health issues, or socio-economic constraints. These factors may affect the effective utilization of ICDS services and need further attention.

Do all the 6m-3yrs. Child receive Take home Ration

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	139	92.7	92.7	92.7
	No	11	7.3	7.3	100.0
	Total	**150**	**100.0**	**100.0**	

Source: Field Survey by Researcher

The table presents the distribution of children aged **6 months to 3 years** receiving **Take Home Ration (THR)** under the ICDS programme. Out of the total **150 respondents**, **139 children (92.7%)** were

reported to receive Take Home Ration regularly, whereas **11 children (7.3%)** received it rarely or not regularly. This finding indicates a high level of coverage of supplementary nutrition services among children in the specified age group. The high percentage reflects the effective implementation of the THR component of ICDS in the study area. However, the small proportion of children receiving it irregularly suggests the existence of gaps in distribution, which may require improved monitoring and timely delivery mechanisms.

Summary

This study critically examined the role of the Integrated Child Development Services (ICDS) programme in improving the health and nutritional status of tribal children in Bisra Block, Sundargarh district. The findings indicate that ICDS has made significant contributions in areas such as supplementary nutrition, immunization, health check-ups, and early childhood education through Anganwadi Centres. The data show improvements in indicators like reduced malnutrition levels, declining maternal and child mortality rates, and high coverage of services such as Take-Home Ration (THR) and regular attendance at Anganwadi Centres. However, despite these achievements, several gaps persist. Issues such as irregular service delivery, limited awareness among beneficiaries, infrastructural deficiencies, and socio-cultural barriers continue to hinder the full effectiveness of the programme. The study also highlights the crucial role of Anganwadi workers in service delivery and community mobilization, though challenges like inadequate training and workload affect their performance.

Conclusion

The present study highlights the significant role of the Integrated Child Development Services (ICDS) programme in improving the health and nutritional status of tribal children in Bisra Block of Sundargarh district. The findings clearly indicate that ICDS has contributed positively to reducing malnutrition, improving immunization coverage, and enhancing maternal and child health awareness. Services such as supplementary nutrition, Take Home Ration (THR), health check-ups, and pre-school education provided through Anganwadi Centres have strengthened the overall well-being of children and mothers. The observed decline in maternal and child mortality rates and the reduction in the number of severely malnourished children reflect the programme's impact at the grassroots level. However, despite these achievements, the effectiveness of ICDS in tribal areas remains constrained by several challenges. Issues such as irregular service delivery, lack of awareness among beneficiaries, inadequate infrastructure, and socio-cultural barriers limit the programme's reach and efficiency. The study also reveals that while a majority of beneficiaries are covered, a section of the population still does not fully utilize the available services due to accessibility and awareness gaps.

Therefore, to ensure sustainable improvements, it is essential to strengthen ICDS implementation through better monitoring, adequate resource allocation, and improved infrastructure. Enhancing the capacity of Anganwadi workers, increasing community participation, and adopting culturally sensitive strategies can further improve service delivery. In conclusion, ICDS continues to be a crucial intervention for tribal development, but targeted efforts are required to maximize its impact on child health and nutrition.

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