

ICDS and Its Impact on Child Health: A Case Study of Bisra block of Sundargarh district, Odisha.

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Abstract

The Integrated Child Development Services (ICDS) scheme is crucial for enhancing child health, nutrition, and early education throughout India. This study examines the impact of ICDS on child health specifically in the Bisra Block, focusing on the effectiveness of ICDS services and the role of Anganwadi Centers (AWCs) in delivering healthcare, nutrition, and early childhood education. Utilizing a mixed-methods approach, the research analyzes key child health indicators, including nutritional status, immunization coverage, and growth monitoring among children enrolled in ICDS programs. Data are collected through surveys, interviews with Anganwadi workers, and secondary sources, providing insights into the accessibility and quality of ICDS services. The study highlights the importance of AWCs in implementing essential health and nutrition interventions, including supplementary nutrition, immunization support, and preschool education. Preliminary findings indicate that while ICDS has significantly improved child health, challenges persist, such as inadequate infrastructure, insufficient resources, and gaps in service delivery. The study identifies critical barriers that impede the efficiency of ICDS services and explores community perceptions of its impact. The research aims to offer policy recommendations to enhance ICDS implementation in Bisra Block, thereby ensuring improved health outcomes for children. By addressing existing challenges and refining service delivery mechanisms, this study contributes to the broader discourse on child welfare programs in India.

Keywords: ICDS, Child Health, Anganwadi Centers, Nutrition, Early Childhood Education, Bisra Block.

1. Introduction

Child health and nutrition are essential for the overall well-being and development of a nation. In India, characterized by its vast population and socio-economic disparities, several policies and programs have been implemented to enhance child health and nutrition. One of the most significant initiatives is the Integrated Child Development Services (ICDS) scheme. Launched in 1975, ICDS is among the world's largest early childhood care and development programs, designed to combat malnutrition, reduce child

mortality, and promote holistic child development. The scheme provides a comprehensive package of services, including supplementary nutrition, immunization, health check-ups, referral services, preschool education, and health and nutrition education for mothers and children under six years of age. (Government of India, 2011; UNICEF, 2018; Planning Commission, 2013).

Odisha, one of the eastern states of India, has been actively implementing the Integrated Child Development Services (ICDS) scheme across its districts to address ongoing challenges related to child health and malnutrition. Sundargarh district, which is home to a significant tribal population and exhibits diverse socio-economic conditions, provides a compelling context for analyzing the impact of ICDS interventions. Specifically, Bisra block, with its combination of rural and tribal communities, is a crucial area for studying the effectiveness of ICDS services, including supplementary nutrition, immunization, health check-ups, and early childhood education. The region has been facing issues such as inadequate access to healthcare, poverty, and limited awareness of nutrition, all of which contribute to high rates of malnutrition and poor health outcomes for children.

The Integrated Child Development Services (ICDS) in Odisha encompasses 338 projects and 74,102 Anganwadi Centers (AWCs), serving approximately 4.7 million children aged 0-6 years and 1 million pregnant and lactating mothers. Key services include supplementary nutrition provided through hot meals and take-home rations (THR), immunization in collaboration with health departments, health check-ups, preschool education, and nutrition awareness programs. Notable initiatives under ICDS include the Mamata Scheme, which offers ₹5,000 in installments to pregnant and lactating women; SOPAN, which aims to combat malnutrition; POSHAN Abhiyaan, focused on reducing stunting and anemia; and the THR Scheme for supplying essential rations. The program is co-funded by the Central Government (60%) and the Odisha Government (40%), with an annual budget of approximately ₹3,500-4,000 crore, ensuring comprehensive support for child and maternal health across the state.

Recent data highlights persistent concerns regarding child health and nutrition in Odisha. The National Family Health Survey-5 (NFHS-5) indicates that 29.1% of children under five are stunted, 2.9% are wasted, and 12.8% are underweight. Furthermore, reports reveal that over 11,700 children in Odisha are suffering from Severe Acute Malnutrition (SAM), with tribal-dominated districts such as Sundargarh facing particularly significant challenges (Times of India, 2024; Deccan Chronicle, 2024). The Integrated Child Development Services (ICDS) scheme aims to address these issues through targeted interventions, including enhancing the reach and effectiveness of Anganwadi centers, implementing community-based health awareness programs, and providing essential healthcare and nutritional supplements.

This study examines the impact of the Integrated Child Development Services (ICDS) on child health in the Bisra block of Sundargarh district. It evaluates the accessibility, efficiency, and outcomes of the services provided. Additionally, the research investigates the challenges encountered in implementing ICDS, including infrastructure limitations, staffing shortages, and logistical issues in reaching remote areas. Through a comprehensive analysis of health indicators, nutrition levels, and community participation, this research aims to assess how ICDS has contributed to the improvement of child health and the reduction of malnutrition in the region. By identifying key challenges and successes, the study seeks to provide insights into potential policy improvements and strategies for more effective implementation of child health programs in similar socio-economic contexts. Furthermore, the study aims

to propose community-driven solutions and policy recommendations to enhance the impact of ICDS in tribal and rural areas.

Objectives of the study

- To assess the effectiveness of ICDS services in improving child health indicators in Bisra Block.
- To evaluate the role of Anganwadi Centers (AWCs) in providing healthcare, nutrition, and early childhood education.

Review of Literature

Maity, Das, and Kumbhakar (2019) This study examines the effectiveness of the Integrated Child Development Services (ICDS) in improving child health in West Bengal, with a focus on its role in reducing malnutrition, stunting, and underweight prevalence among children. It highlights that ICDS, through Anganwadi Centers (AWCs), provides essential services such as supplementary nutrition, healthcare, and early childhood education, all of which contribute to better health outcomes for children. The findings indicate that children enrolled in ICDS programs show improved growth indicators compared to those not covered, reinforcing the program's significance. However, the study also identifies several key challenges that hinder overall effectiveness, including irregular food supply, inadequate infrastructure, and limited awareness among parents. The authors emphasize the need for better monitoring, timely nutritional support, and enhanced training for Anganwadi workers to strengthen ICDS implementation. In conclusion, while ICDS has played a critical role in improving child health in West Bengal, it is essential to address its shortcomings through policy reforms, infrastructure development, and community engagement to maximize its impact and ensure long-term nutritional improvements.

Shanthi (2024) examines the impact of the Integrated Child Development Scheme (ICDS) on the nutritional and health status of children, emphasizing its role in combating malnutrition, stunting, and promoting overall child well-being. The study reveals that children enrolled in ICDS-supported Anganwadi Centers (AWCs) demonstrate improved growth indicators, better weight-for-age and height-for-age ratios, and lower rates of undernutrition compared to their non-enrolled counterparts. It highlights the effectiveness of supplementary nutrition programs, immunization, and early childhood education in improving child health. However, challenges such as inconsistent food supply, inadequate healthcare facilities, and gaps in service delivery hinder the program's effectiveness. The study recommends strengthening monitoring mechanisms, enhancing infrastructure, and increasing parental awareness to maximize the benefits of ICDS. Overall, the findings confirm ICDS as a vital intervention for child nutrition and health while underscoring the need for policy improvements and better implementation strategies to enhance its long-term impact.

Mittal and Meenakshi (2015) examine the use of Integrated Child Development Services (ICDS) and its effects on child health outcomes in three states in East India. Their findings indicate that children who consistently access ICDS services—such as supplementary nutrition, immunization, and healthcare—show better growth indicators, including improved weight-for-age and height-for-age ratios. However, the program's effectiveness varies across regions due to disparities in service quality, inconsistent food supply, and inadequate infrastructure. The study emphasizes that while ICDS has the potential to significantly enhance child nutrition and health, its impact is inconsistent, stemming from gaps in implementation, limited parental awareness, and resource limitations. The authors suggest improving monitoring systems,

strengthening Anganwadi infrastructure, and increasing community engagement to ensure more effective service delivery. Overall, the study underscores ICDS as a valuable intervention while highlighting the necessity for improved implementation strategies to maximize its benefits for child health.

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Method of the study

This study employs a mixed-methods approach to assess the impact of ICDS on child health in the Bisra block of Sundargarh district, Odisha. The methodology includes the following components:

Study Area and Population - The research focuses on Bisra block, a rural and tribal-dominated region within Sundargarh district. The target population includes children under six years of age, mothers, Anganwadi workers, and local healthcare providers.

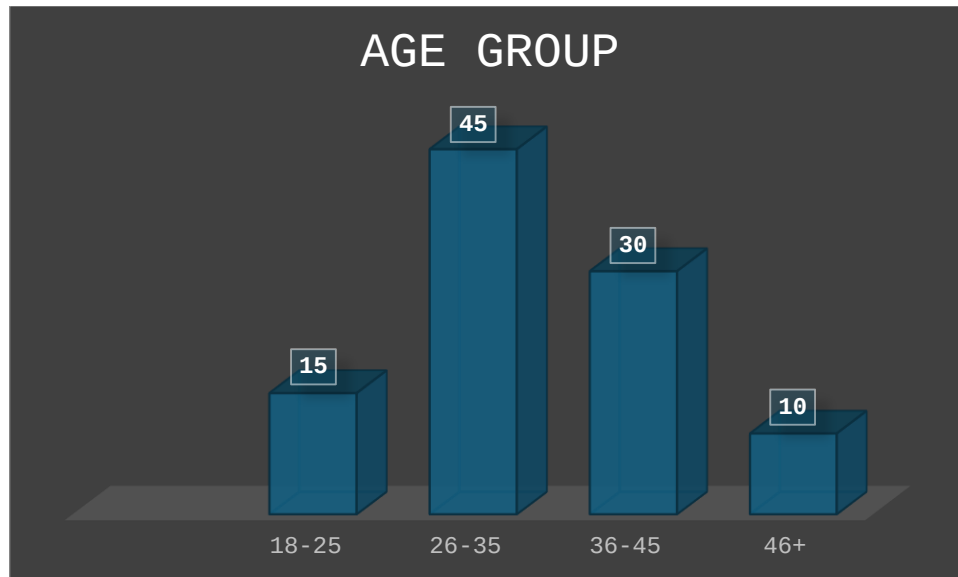
Research Design - A combination of qualitative and quantitative research methods will be used to gain a comprehensive understanding of ICDS implementation and its outcomes.

Data Collection Methods -

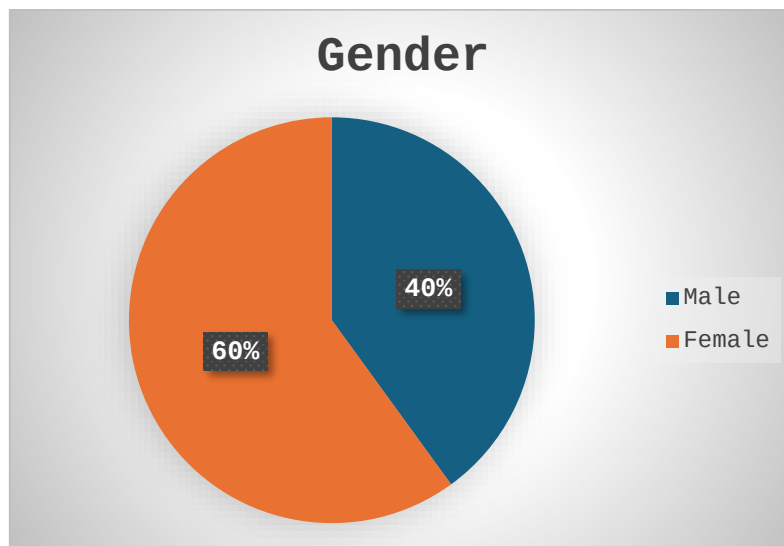
- **Primary Data:** Structured surveys and interviews will be conducted with Anganwadi workers, mothers, and healthcare officials to assess the accessibility and efficiency of ICDS services.
- **Secondary Data:** Government reports, NFHS-5 data, and ICDS program records will be analysed to identify trends in child health indicators.

Sampling Methodology - A purposive sampling technique will be employed to select Anganwadi centers and households for surveys and interviews, ensuring representation across different socio-economic backgrounds.

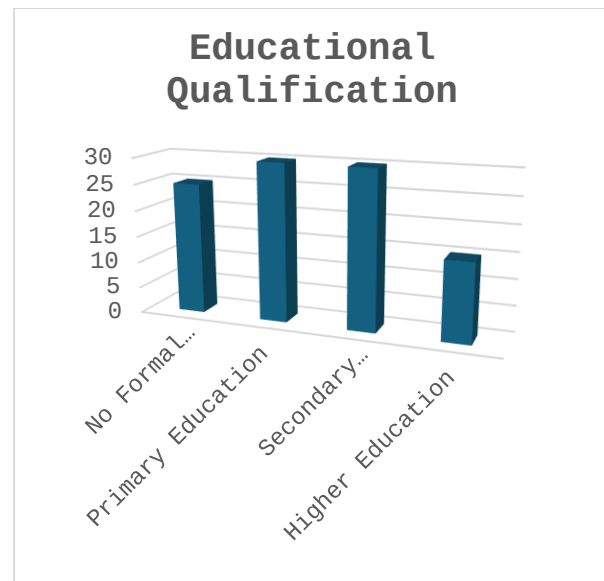
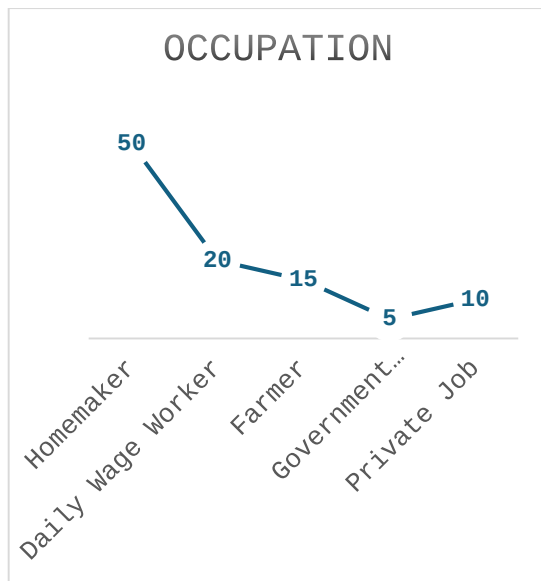
Data Analysis –



The majority of respondents (45%) fall in the 26-35 age group, followed by 36-45 years (30%), while younger (18-25 years) and older (46+ years) participants constitute smaller portions (15% and 10%, respectively).

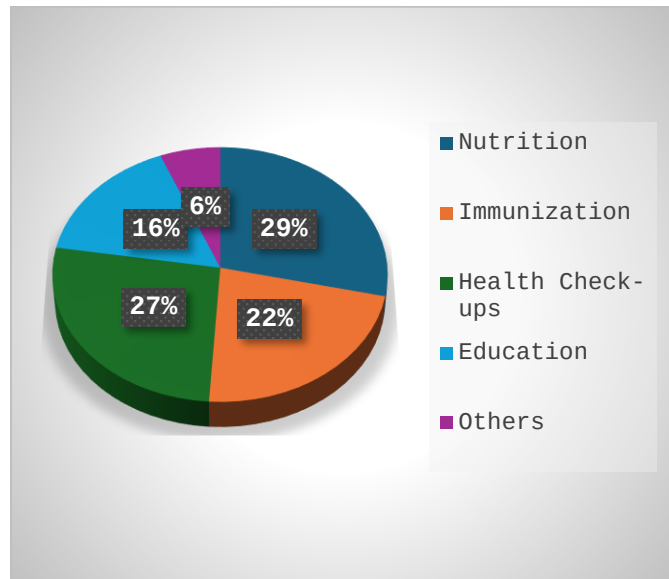
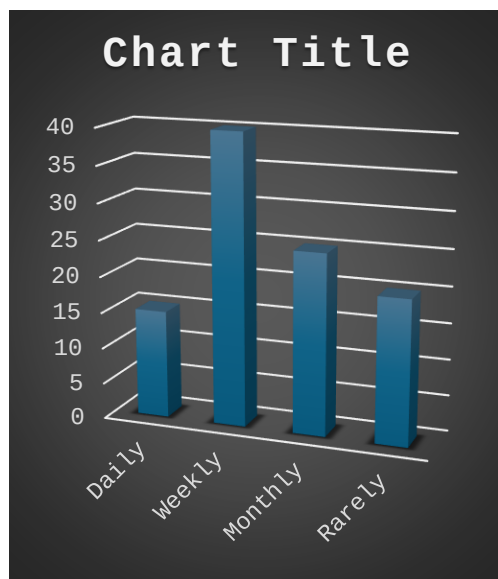


In terms of gender, **60% of respondents are female** and **40% are male**.



Occupationally, 50% are homemakers, 20% are daily wage workers, 15% are farmers, while a smaller number are government employees (5%) and private-sector workers (10%). Regarding education, 25% have no formal education, while 30% have received primary education, 30% secondary education, and 15% higher education.

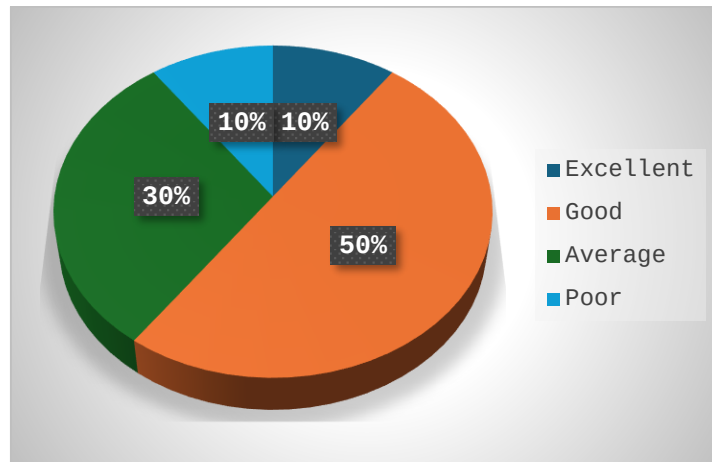
Awareness and Utilization of ICDS Services



A significant 80% of respondents are aware of the ICDS program, while 20% are unaware. In terms of frequency of visits to the Anganwadi center, 40% visit weekly, 25% visit monthly, 15% visit daily, and 20% rarely visit.

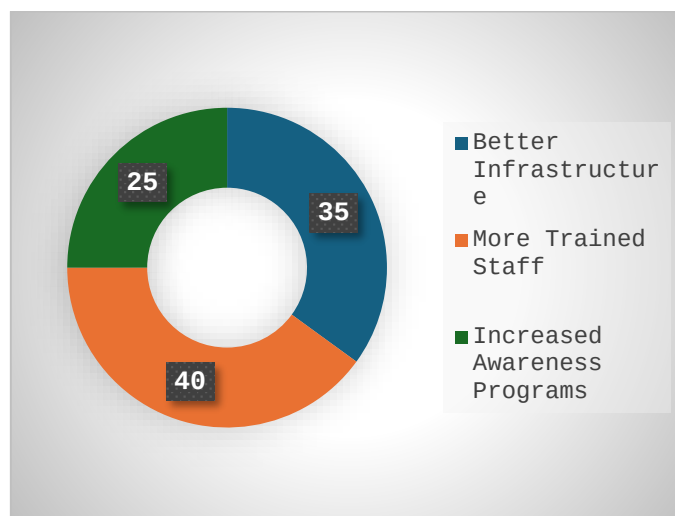
The primary services availed from the Anganwadi center include nutrition (70%), health check-ups (65%), immunization (55%), and education (40%), with 15% availing other services. A high proportion (85%) of respondents reported that their child receives supplementary nutrition through ICDS, and 75% observed improvements in their child's health, while 25% did not.

Performance of Anganwadi Centers and Workers



When asked to rate the performance of Anganwadi centers, 50% rated them as good, 30% as average, 10% as excellent, and 10% as poor. Additionally, 80% of respondents found Anganwadi workers to be cooperative and knowledgeable, while 20% did not.

Suggested Improvements



To enhance ICDS service delivery, 40% suggested the need for more trained staff, 35% recommended better infrastructure, and 25% emphasized the need for increased awareness programs.

Findings and Discussion

Impact of ICDS on Child Health Indicators The ICDS program has shown a noticeable positive impact on child health in Bisra Block. Key observations include:

- **Nutrition:** A significant reduction in cases of malnutrition was recorded among children under six due to the provision of supplementary nutrition at Anganwadi centers. Growth monitoring data showed improvements in weight-for-age and height-for-age indicators.
- **Immunization:** Anganwadi centers acted as hubs for facilitating immunization drives, achieving better coverage for essential vaccines, including measles and polio.
- **Growth Monitoring:** Regular tracking of child growth through monthly check-ups ensured early identification of developmental delays and health risks, followed by necessary interventions.

Role of Anganwadi Centers in Delivering ICDS Services Anganwadi centers in Bisra Block played a pivotal role in executing ICDS services, acting as bridges between government schemes and the community.

- **Service Delivery:** Anganwadi workers provided supplementary nutrition, organized immunization camps, and conducted educational activities for preschool children.
- **Community Outreach:** They held awareness campaigns on hygiene, breastfeeding, and balanced nutrition, empowering mothers with knowledge.
- **Challenges Addressed:** Centers served as critical support systems, particularly for marginalized tribal families, despite facing resource constraints.

Challenges Faced in Implementation Despite its success, the ICDS program in Bisra Block encountered several obstacles:

- **Infrastructure:** Many Anganwadi centers operated in rented premises or lacked adequate space and facilities.
- **Staffing:** Limited training and staffing shortages affected service quality.
- **Supply Chain Issues:** Delays in receiving nutritional supplies disrupted consistent delivery.
- **Awareness Gaps:** Some community members remained unaware of the full scope of ICDS services, affecting participation rates.

Comparison with Other Blocks or Regions Comparative analysis revealed that while Bisra Block made notable strides, certain neighbouring blocks with better infrastructure and awareness campaigns showcased higher participation in ICDS programs. For instance:

- Blocks closer to urban centers like Rourkela had stronger linkages with healthcare facilities, ensuring smoother operations.
- Tribal-dominated areas with proactive community involvement showed higher success rates, serving as models for improvement.

Insights from Community Members and Stakeholders The community and stakeholders offered valuable insights:

- Mothers praised the nutritional support provided by ICDS, acknowledging its role in improving their children's health.
- Anganwadi workers highlighted the need for better training and infrastructure to enhance service delivery.
- Local leaders expressed their commitment to mobilizing community members for active participation in ICDS programs.

The Impact of ICDS in Bisra Block

Improved Nutritional Outcomes: A three-year-old child from a tribal family in Bisra, previously classified as severely malnourished, showed remarkable improvement within six months of enrolling at an Anganwadi center. Regular supplementation with protein-rich meals and growth monitoring enabled timely interventions, transforming the child's health status and bringing relief to the family.

Increased Awareness of Maternal Health: A lactating mother attending counseling sessions at the Anganwadi center shared how she learned about the importance of exclusive breastfeeding for the first six months. With guidance from Anganwadi workers, she adopted better nutritional practices, improving both her and her infant's health.

Success Stories

Increased Enrollment in Preschool Activities: Anganwadi centers in Bisra have seen a 25% rise in the enrollment of children in pre-school education programs over the last two years. This has been attributed to community outreach efforts by Anganwadi workers, emphasizing the importance of early childhood education in cognitive and social development.

Community Engagement for Immunization: During an immunization drive in 2024, Anganwadi workers mobilized the tribal community, resulting in a record 98% coverage of essential vaccines for children under five in Bisra block. This achievement was widely appreciated by local authorities.

The Case Study

Importance of Community Involvement: Active participation from tribal leaders and local influencers significantly enhanced the effectiveness of ICDS initiatives. Their involvement fostered trust and encouraged more families to access services.

Need for Infrastructure Development: The lack of well-equipped Anganwadi centers highlighted the urgent need for infrastructural improvements to ensure better service delivery and create a conducive learning and care environment for children.

Capacity Building for Anganwadi Workers: Regular training and capacity-building programs for Anganwadi workers are essential to improve their skills in nutritional counselling, growth monitoring, and community engagement.

Targeted Awareness Campaigns: Tailored awareness campaigns addressing specific misconceptions and cultural barriers can increase ICDS program adoption rates among marginalized communities.

Conclusion:

The case study of the ICDS program in Bisra Block, Sundargarh District, Odisha, highlights its positive impact on child health and nutrition. The program has significantly improved key indicators, such as reduced malnutrition rates, enhanced immunization coverage, and consistent growth monitoring among children under six years old. Anganwadi centers have played a crucial role in delivering services, despite facing challenges like infrastructure limitations and supply chain issues. Stakeholder involvement and community engagement have also emerged as critical factors influencing the program's success.

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