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Review Paper on Role of Anganwadi Program to Reduce Child Mortality

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Abstract
Providing many integrated services like- nutrition, health check ups, immunization and pre school education, Anganwadi program underIntegrated child development programme,plays an important role in improving child health and reducing child mortality. 40 national and international studies(published between 1998 and 2025), analyzed for evaluate the impact of anganwadi services to health outcomes. The findings of the paper has revealed that ICDS program trough anganwadi, contributed significantly to improving child heath indicators and nutrition level of children yet challenges are still remain because of inadequate infrastructure, irregular food supply, insufficient training and low income of anganwadi workers.The paper also reveals the significance of women 's education, their economic dependency, community participation and effective implementations to ensure sustainability in improving child health and reducing child mortality. The study concludes that by strengthening anganwadi program through training, monitoring, income and community Involvement also necessary for achieving the goal of minimizing child mortality in India.

Keywords: child health, Anganwadi program, Child mortality, ICDS , Nutrition, Women empowerment.

Introduction

Child health is the foundation of growth and development of a country. Child health includes not only physical health but also mental health ,social and emotional growth and their learning and thinking development. In ancient time, the care and treatment of childhood diseases was depend upon general medicines. The children were far from quality health services nutrition and sanitation. That's why the health status of children was in worst condition and early childhood mortality rate was high .Child mortality is has long been a major concern in India. Which reflects the socio economic and healthcare challenges in India. There are 3 categories of child mortality:-First is neonatal mortality (no of child deaths within 28 days of life/ total no. Of births). Second is infant mortality rate(no.of child deaths within 12 months of life/total no. Of births). Third is child mortality rate (no.of child deaths within 5th birthday/total no. of births). There are many social economic and cultural regions of childhood deaths in India like:- Diarrhea malaria pneumonia sepsis and malnutrition. In 1990 the child mortality rate in India was 134 deaths per 1000 live births for childrenUnder 5 years old. But in 2021, the under 5 mortality rate was 31 deaths parbo 1000 live births(According to sample registration system of the census of India). This reduction in child mortality rate is indicating that child health has strongly improved continuously due to the working of various government schemeslike:- Integrated child development programme (ICDS), posonmission, National Health mission (NHM), Janani Shishu Suraksha Karyakram (JSSK), universal

immunization programme (UIP), intensified pulse polio immunization (IPPI), which were activated for improving child and maternal health and reduction in child and maternal mortality rates. Integrated child development programme is one of the world's largest end most unique programmes of early childhood care and development. It is known through a platform of anganwadi centre at village level and urban level also. the main purpose of this programme is to fulfil the needs of the development of children in the age group zero to 6 years. anganwadi means a courtyard play centre that provides integrated services like supplementary nutrition, vaccination, health check-ups, pre school education, health and nutrition education. Through the anganwadi programme, the government is trying to Enhanced health facilities that are free and accessible to the poor children of 0-6 years age group. So, the paperis trying to find out the role of anganwadi program to reduce child mortality through various aspects including nutrition, vaccination, pre school education and health awareness, which are the main aspects of anganwadi programme.

Methodology

The review is based on the analysis of over 40 studies, published between 1998 to 2023.The studies were salectedwithin their focus on ICDS implementation, childnutrition, Anganwadi worker's performance and mortality determinants. The literature, which are selected for the review, is selected from different research papers and thesis related to anganwadi programme and child mortality. The paper aims to review, existing literature on the role of anganwadi programme in reducing child mortality, combined findings from different studies, identified gaps and suggesting points for future research. The review is organised thematically, covering nutrition, vaccination, health education and awareness, pre school education, and early childhood care, provided by anganwadi centres.

Thematic Review

Women's socio economic role and child survival

The social and economic status of mothers significantly influences child health and their survival. **Sharma (2019)** Has mentioned about knowledge attitude and practices among anganwadi workers regarding child Care services under ICDS schemes. She studied she studied the socio economic and demographic characteristics off anganwadi Barker's and compare the knowledge attitude practices regarding child care services among the anganwadi workers in various study groups. **Thapi(2007)** discusses about the impact of women's economic role on child health in Kerala. The study also seeks a casual relationship between women's work and child well being. However, the study focus is not limited to the casualty of the formulated relationship but seeks to understand the larger context that has framed this particular research question. It raises many research questions related the significance and policy implications of the studies. Problems in the existing conceptual categories and how certain feminist nations,, female agency, carrying lever , Give better insights to the research problem in terms of its political implications on women in particular in society in general. **Gunasekran (2016)** Discusses about the determinants of infant and child mortality in rural India. The findings of the study indicate stop worst variations in infant and child mortality rates among the 3 mortality groups. Thought infant and child mortality rates have declined substantially in all mortality groups in the last 15 years. The recent levels indicate that both the rates are significantly higher among the children of high mortality group as its too medium and low motility groups. poor housing conditions, high levels of fertility and under utilization of maternal healthcare services by women in the high mortality group are the possible reasons for the high levels of infant and child mortality

rates in the high mortality group.**Bora(2018) and Shukla (2020),** support empowering women through education, health awareness and family planning for reduction in child mortality rate.They talked about neonatal and under five mortality rate in Indian districts with reference to sustainable development Goal:3 good health and well being by the analysis of the NFHS 2015-16 and analysis the effect of contraceptive use on child mortality in India by using the NFHS2015-16. The family planning contribution is very helpful introducing child mortality because it increases birth intervals which increases child survival and improves maternal health.

Implementation and performance of ICDS and anganwadi centres

Performance of ICDS programme and anganwadi centersis notified in this theme and implications have discussed by reviewers.. **AftabAlam (2018),** has discussed about the objectives of ICDS programme, different services of ICDS , the project and coverage of ICDS in Bihar. Conclusion from the study is that the ICDS programme is not working properly to achieve its objective, coverage of the services is limited and ICDS services not providing supplementary nutrition through out the year to their beneficiaries. Because of this,the nutritional status of the children is not improving properly. **ShamasulHaque&Naseer Ahmad Vani (2013),** has told that Integrated child development scheme of India is the main symbol of dedication towards her children and their health. In IndiaICDS has played an important role in providing pre school education and breaking the vicious circle of child mortality, morbidity, and reduced learning capacity. Despite of the huge allocation by Jammu & Kashmir central government, the development of basic infrastructure and improvement in facilities was not enough, specially in rural areas of Jammu& Kashmir. This is the first comprehensive study of capacity of ICDS in rural areas of Kashmir valley. **ParamitaSengupta (2015),** has studied about the programme ICDS in urban area of Ludhiana which has approximately 20,000 population. The study has found out several short comings in ICDS programme including insufficient infrastructure and essential facilities. There is the lack of necessary equipments in anganwadi centres and growth monitoring of children is not in existent. **Thippesh.K (2014),** has discussed about the workers in implementation of Integrated child development scheme (ICDS) . ICDS provides an integrated form of basicservices like child care, primary stimulation and learning, health and nutrition services, clean water and clean environmentfor the sustainable development of children. **NiyiAwofeso and Ani Rammohan (2011),**highlights several shortcomings, including inadequate infrastructure, underfunding and poor management, which have hindered the programmes ability to make significant progress in reducing child malnutrition and improving maternal health outcomes. issues like poor community involvement, inadequate training for anganwadi workers, and gender disparities in nutrition outcomes have limited the programs success. the study discusses the structural weakness within India's public health system which compound the challenges faced by ICDS. The study emphasise the need for better integration of child and maternal health services with broader public health policies, including improved sanitation and food security. **NavuluriKranthi Kumar Reddy &Surekha Kishore (2020),** in their study assessment of utilization of icds in Uttarakhand provides 8 detailed evaluation of how the icds scheme is being utilised in 2 districts of Uttarakhand, India, Haridwar and Dehradun.The study was focusing on households benefitted from the scheme. it aimed to access the extent to which the services offered by icds, such as, supplementary nutrition ,preschool ,Immunization and health education are utilised by the target population. The study identified several barriers to service utilization. these include a lack of felt need for supplementary nutrition among some households, a preference for private schools

over anganwadi centres for pre school education, songs end reliance on health services at sub centres rather than anganwadi centres for immunization.

Knowledge, Attitude, and Training of Anganwadi workers

The performance of anganwadi workers is main thing and it depends upon knowledge, attitude and training of them. **HoldharMehto (2015),** has discussed about the perceptions of anganwadi workers and mothers. The first 3 years of children's life are much more important. The study has done in Jharkhand, where almost half of the population is malnourished. This study has found that there is the lack of the components of the programme among aganwadi workers and the mothers of children. The ICDS programme has failed to develop the understanding related to the components of ICDS programme, its importance, and the results of malnutrition. Furthermore, the centre services are limited.Due to this many opportunities have missed. So it is necessary to evaluate the ICDS training of anganwadi workers as well as continuing the training is necessary for strong the important messages.**ChhaviBhatnagar (2015)**.has told that the study is based on the services which are provided under ICDS programme by anganwadi workers and on the thought s of the mothers of children who have registered their children in anganwadi centres both urban as well as rural areas.Since the programme is working from last four decades. Therefore it is necessary to reviewthe objectives and achievements of the programmespacially for the improvement in health and nutrition of children and women.**Manisha Arya (2018),** has told about the effect of training on nutritional knowledge of anganwadi workers of Uttarkashi district in Uttarakhand. The study has done on the analysis of socio- economic and demographic profile of 30 anganwadi workers in Uttarkashi. Before the training and after the 15 days of training,the knowledge test was done. The score of post test had shown that nutritional education was useful in getting knowledge in the selected subjects. **AftabAlam (2018),** has discussed that the ICDS programme is not working properly to achieve its objective, coverage of the services is limited and ICDS services not providing supplementary nutrition through out the year to their beneficiaries because of this. The nutritional status of the children is not improving properly. **HimantaBorgohain&Jyoti Prasad Saikia (2017),** have studied the problems of anganwadi workers of Bihar. The analysis of the study shows that the nature of duties and responsibilities of anganwadi, family ,community and the expectations of society give a type of unhappiness and unsatisfection to anganwadi workers. The study also shows that anganwadi workers are unsatisfied with lower wages and heavy workload but they are satisfied with other aspects of their job. **Sneha Kurian &Bansari L. Chawada (2023), in** their study, explores the challenges and benefits associated with the transition to digital record keeping in anganwadi centres. The study found that wild digitalisation brought significant benefits, it also posed substantial challenges for anganwadi workers. the preference for digital versus traditional record keeping was largely age dependent, with younger workers open 2 embracing new technology. Study highlights the need for improvements in software usability, language options, and the quality of mobile devices to insure that digital tools enhance, rather than hinder, service delivery in anganwadi centres.**IpsitaDebata& TS Rangnath (2023),** in their studyevaluates anganwadi worker performance to optimise service delivery. across sectional descriptive study was conducted over 6 months Involving 21 anganwadi centres that service a rural population of 16,231. The study measures anganwadi workers knowledge and performance in areas like supplement nutrition, immunization, Growth monitoring and health education. Results revealed, Several performance gaps the study highlights the need for improvement in various service areas, suggesting more frequent refresher training foranganwadi workers enhanced use of technology and greater community involvement to increase the schemes effectiveness.

Nutritional and health outcomes of children

Nutrition and health is the major goal of anganwadi program. **Dogra(2013),** has discussed about nutritional awareness among anganwadi workers and their implementation to nutritional services in Jammu. The study shows that performance as well as awareness among anganwadi workers regarding the importance of implementation of nutritional services was not satisfactory. **Dr.Ranjini (2021),** has pointed out the nutritional status of anganwadi children under ICDS in rural area of Adichunchanagiri institute of medical science. The study shows that the scope of malnutrition, stunning and wasting is equal to the average of NFHS-4.The problem of stunning and low weight has found more in female children than male children. The result shows that the nutritional status of studied children was good while in malnourished population most of the children was average malnourished and onlya few percentage of children need changes relatednutrition. Although the nutritional status of children becomes the result of many connected factors.**Narkhede Vinod &LikharSwarnakanta (2011),** have tried to analysis the nutritional status and food pattern of under five years age children.It was a cross sectional community based study in which, the under five years age of children were included. Thepresent study was done for identifing the malnutrition pattern and food related aspects of under five years children. So that the important steps should take for control on malnutrition. The study concluded that nutrition rehabilitation centres should stablished and the malnourished children should linked to health centres for treatment. **RameshVerma(2016)**mentioned the importance of micro nutrient supplementation in childhood to reduce child mortality. His experience is based on Haryana. He said that the majority of malnourished children lives in India and other developing countries. Primarily micronutrients iron, vitamin A, iodine and zinc are necessary for children for better health. He mentioned that Haryana is the first state to launch a micronutrient supplementation program with a view to overcoming malnutrition in children.**K.S Patil& Kulkarni (2016),** . The study reveals that 91.39% of women were aware of ICDS services .The study Highlights that utilization of ICDS play services, was 77.48% with children utilization the services more than women. among children eased 6 to 36 months, 41.25% received irregular supplementary nutrition and 70% were fully immunised. similarly 71.64% of children aged 3 to 6 years were immunised, but only 22.39% regularly received supplementary nutrition. The study also explode socio demographic factors, finding no significant association between education, occupation orphan family typeicds utilization. the conclusion emphasises the need for increased awareness and more consistent service delivery to improve the utilization of icds services, specially among women end higher socio economic groups.**S. Sivanesan& A Kumar (2016),** in their study utilization of ICDS scheme buy child beneficiaries in coastal Karnataka, India, explores the effectiveness and utilization of ICDS services among children aged 3 to 6 years in the region. The study underlined need for regular weight monitoring and improvements in service delivery to Enhance ICDS impact. Overall, the study concluded that though the ICDS Services are widely utilised, particularly for supplementary nutrition and immunization, challenges remain in terms of service quality and awareness, especially Regarding health education.**S, Busayo&S.Phiri (2021),** discuss about the study titled Prevalence and strategies to reduce malnutrition among children of 0-5 years in Ifedore LGA, Ondo state, Nigeria . The study examines the causes and strategies to reduce malnutrition, targeting children between 0 to 5 years in the Local government areas of Ondo State .the study concludes with recommendations for health facilities to conduct educational campaigns that focus on utilising locally available food resources to prevent malnutrition. the study suggests that focusing on stunning and educating on the different forms of malnutrition, wood significantly help combat the problem in the community. **Chris A. Rees &KitiezoAggryLgunza (2023),** in their study, investigates healthcare provider adherence to World Health organization guidelines in the

treatment of children who died from preventable causes and resource limited settings. the study concludes that improving adherence to clinical care guidelines is critical for reducing child mortality n these regions. The study wolf supported by the Bills and Melinda Gates Foundation And calls for the urgent improvements in healthcare systems adhere more closely WTO guidelines to reduce preventable childhood deaths in these high mortality areas.

Challenges and Gaps in ICDS Implementation

Dispite progress ICDS program faces many challenges. **Michal Lokshin&Monica Das Gupta (2005),** Discuss the challenges off addressing child malnutrition in India, despite significant economic growth and government intervention. The paper also critiques the program's design and implementation, highlighting issues such as Worley trained workers, erratic food supply and weak targeting off the most nutritionally vulnerableChildren. The study argue that while economic growth and increased agricultural productivity have improved food availability in India, widespread malnutrition persists due to factors like poverty, over sanitation and the prevalence of diseases, which exacerbate Malnutrition. The study calls for a reassessment Of the program's distribution and greater focus on addressing environmental and health related factors to improve its impact on child nutrition .**Adil Bashir &Unjum Bashir(2014),** Highlights the study's objectives were to assess the schemes performance, understand women's attitudes towards it, investigate Issues affecting service quality end proposed remedies. The findings of the study show several challenges, such as weak pre school education, Inadequate motivation among anganwadi workers, poor food storage, limited involvement of the community and insufficient medical check-ups for young children. The study makes several recommendations for improving the ICDS including better coordination between departments, improved training for anganwadi workers, ensuring regular supply of supplementary nutrition and increasing the involvements of local communities and organizations in the programs implementation.**Akansha Sinha (2014),** recognises the critical role of the ICDS in combating child malnutrition, highlighting the programmes challenges, particularly in Delhi's slums, rural and semi urban areas. poor sanitation lack of clean drinking water and underwriters sourced anganwadi centres are significant barriers to achieving the programmes goals. The study found that anganwadi centres specially in slum areas, often lack essential amenities like toilet, clean water and educational materials.**Arunima N. B &AnithamalB,** This study used a mixed method approach, combining quantitative and qualitative research together insights form a community in Kerala. The study reveals that while most community members know about the services targeting children and pregnant women, there is a lack of awareness regarding referral services and nutrition and health education provided through anganwadi centres. the study also highlights the significant challenges anganwadi workers face such as inadequate honorariums, excessive record keeping and infrastructure issues. Despite their critical role in implementing ICDS program, anganwadi workers are underpaid and burdened with large workloads and poor working conditions. the study calls for increased awareness in the community about the services offered by anganwadis and argues the government to address the systematic issues facing anganwadi workers to improve service delivery and community welfare.**N Rao& V Kaul (2017) ,**provides a detailed examination of India's ICDSprogram, the world's largest community based program, promoting child health, nutrition and development. Notably, many anganwadi centres lack proper facilities such as Toilets and drinking water and there is inadequate training and compensation for anganwadi workers, who are central to the program's implementation. **DileepDandotiya&AngelinPriya(2018),** In their study, explores the effectiveness And beneficiaries satisfaction with the icds in bhopal's urban area. Findings indicate that

69.16% of the beneficiaries were satisfied with the services wild 30.84% expressed dissatisfaction. Reasons for dissatisfaction primarily included inadequate space, poor food quality, irregular pre school education, and lack of medical services. the study concludes that wild satisfaction and utilisation levels but generally high, there is still a need for improving service quality in several areas.

Global and comparative Insights

The comparison of India's Integrated Child Development programme (ICDS) can be done with community based child health programmes of other developing countries. **Busayo and Phiri (2021) in Nigeria and Rees &Igunza (2023)**in African countries, clarified that effective local participation ,training and nutritional awareness is the most important and required things to reduce child mortality rates. **WHO**data confirm that on global level, reduction in child mortality has noticed but inequalities is still alive. India and Nigeria are still involve in the biggest contributing countries in child mortality.

Discussion & Conclusion

The reviewed literatureclarified that the anganwadi program under Integrated Child Development programme (ICDS) plays a important role in reducing child mortality rates in India by providing integrated services like- nutrition, immunization, health check-ups and pre school education. Yet this is not same in every state. Because the lack of resources, lack of regular training and difference s in infrastructure the effectiveness varies in across regions. Studies shows that nutritional services in anganwadi plays a crucial role in reduce malnutrition and stunning but irregular food supply, low quality food and lack of limited supervision, the problem is still persists . Knowledge, attitude and training level of anganwadi workers influence the progress of the program to a great extent. In which regions, the training remain regular, the results remain betterbut low wages, over work and limited inspiration affect their efficiency. Women education and women empowerment are the main factors of improving in child health and mortality rate. Educated mother's become more aware about nutrition, sanitation and more health services. On the global level, community based programmes in other developing countries like – Nigeria and Kenya proves that iflocal participation and awareness , reduction in child mortality rates and malnutrition are more sustainable. India also need such type of community involvement and monitoring system.

Points for future research

- Conduct continuing studies to measure the long-term effect of Anganwadi program on child health and Development.
- Research on the role of digitalization and technology to improving keeping record and monitoring.
- Study the impact of better training, salary and working conditions on Anganwadi worker's performance.
- Study the access of anganwadi services on tribal and low income communities.
- Study behavioural changes of parents after health and nutritional education.
- compare India's community based child health model with other developing countries.

References

1. Aftab. A (2018). Integrated child development services in Bihar with reference to East Champaran.
2. Anchal, S (2019). Knowledge, attitude and practices among anganwadi workers regarding child care servicesunder ICDS Scheme.

3. Arunima, N. B &Babu, A. M . (2021) Community awareness about anganwadi services and challenges faced by workers in India.
4. Arya, M. (2018) . Effect of training on nutrition nutritional knowledge of anganwadi workers Of Uttarkashi district in Uttarakhand.
5. Bashir, A. &Bashir, U. (2014). An evaluation study of icds in Bandipoora district , Jammu & Kashmir.
6. Bhatnagar, C. (2015) . Service provision of anganwadi workers Under ICDS scheme: A comparison between rural and urban areas.
7. Bora, J. k. (2018). Neonatal and under 5 mortality in Indian districts With reference to sustainable development goal3:(good health and well being)
8. Borooah V. K. (2013). Social orientation of India's integrity child development services (anganwadi program).
9. Borgohain, H &Saikia, J.P.(2017). Problems of anganwadi workers in Sivasagar district of Assam.
10. Busayo, S &Phiri, S. (2021) Prevalence and strategies to reduce small nutrition Among children (0-5) in lfedore LGA , Ondo state, Nigeria.
11. Chavvi, B. (2015). Services provision of anganwadi workers Under ICDS scheme and views of mothers in rural and urban areas.
12. Chudasma, R. K. (2014). Evaluation of nutritional and other activities At anganwadi centres under ICDS programme in different districts of Gujarat India.
13. Debata, L &Ranganath, T. S (2023). Effectiveness of anganwadi workers in implementing the ICDS in rural Karnataka.
14. Dandotya, D &Priya, A (2018). Effectiveness and beneficiary satisfactionwith ICDS in Bhopal's urban area.
15. Dogra, A. (2013) . Nutritional awareness among anganwadi workers and Their implementation of nutritional Services in Jammu.
16. Ekweagwu, E. (2008) . Child health and the role Of micronutrients in preventing infections.
17. Ghosh, R. (2012). India's progress in reducing newborn And child deaths:A South Asian comparison.
18. Gunjal, B. S &Thippesh, K. (2014) . Functionaries in Implementation of integrated child development scheme.
19. Gunasekaran, S. (2016). Determinants of infant and child mortality in rural India.
20. Haque, S & Vani, N. A. (2013). An evaluated study of ICDS in Kashmir.
21. Jayamohan, M. K. (2013). Woman's economic role and child survival in India: A case study.
22. Jawahar, P. &Raddi, S. A. (2021). Knowledge, utilization, satisfaction and barriers to ICDS among women in Kerala.
23. Kandpal, E. (2011). Effectiveness of ICDS for poor children : Issues in distribution and equity.
24. Kaur, R. (2021). Role of anganwadi centres in child development under India's Integrated child development scheme.
25. Kurian, S. &ChawadaB. L. (2023). Challenges and benefits associated with digital record keeping in anganwadi centres.
26. Loksin, M. &Das Gupta, M. (2005). Challenges of addressing child malnutrition in India: placement and outcomes of the ICDS programme.
27. Maitra, P. (2006). Infant mortality and child nutrition in India: Gender discrimination in health outcomes.

28. Mehto, H. (2015). Perceptions of anganwadi workers and mothers on nutrition care of children in Jharkhand.
29. Narkhede, B. &Likhar, S. (2011). Nutritional status and dietary pattern of under five children in urban slum areas of Nagpur.
30. Ranjini, D. (2021). Nutritional status of anganwadi children under ICDS in rural field practice areas of Karnataka.
31. Panday, A. (1998). Child mortality and the role of maternal health in India.
32. Patil, K. S. &kulkarni. (2016). Knowledge and utilization of icds scheme among women in an urban slum in Nagpur.
33. Rao, N. &Kaul, V. (2017). India's ICDS programme: achievements and challenges.
34. Reddy, N. K. & Kishore, S. (2020). Assessment of utilization of ICDS scheme in Uttrakhand.
35. Rees, C. A. &Lgunza, K. A. (2023). Healthcare provider adherence to World Health Organization Guidelines for reducing Preventable the childhood deaths.
36. Sengupta, P. (2015). Assessment of the ICDS programmeIn an urban area ofLudhiana Punjab.
37. Sharma, M. K. J. (2013). Women's economic role and Child survival in South India.
38. Shukla, A. (2020). Effect of contraceptive use On child motility in India using NFHS data.
39. Sinha, A. (2014). Implementation and evaluation of it ICDS programme in Delhi.
40. Sivanesan, S. &kumar, A. (2016). Utilization of ICDS scheme Baby child beneficiaries in coastal Karnataka , India.
41. Thapi, B. V. (2007). Economic role of women and it's impact on child health and care in kerala.
42. Verma, R. (2016). Importance of micronutrient supplement In childhood to reduce child mortality: Evidence from Haryana.
43. Wang, L. (2004). child and infant mortality in rural india:A flexible parametric Policy model analysis.
44. World Health Organization (WHO). (2022). Levels and trends in child mortality: Report 20022. Geneva, Switzerland.