Leveraging the Integrated Child Development Scheme for better health outcomes in children up to the age of 6 years; an observational study in Belagavi taluka.

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Abstract:
Introduction:
‘Balsanjeevini’ is the health care scheme for the children of 0 to 6 years of age belonging to Integrated Child development Scheme (ICDS) of Below Poverty Line Families (BPL). The scheme is implemented by Women and Child Welfare Department, Government of Karnataka. Children up to the age of six years, who need higher treatment/surgery are referred to recognized Net Work Hospitals (NWH) for further management.

Objective:
1. To study functioning of Anganwadi centres and awareness about Balsanjeevini scheme among care-takers in Belagavi taluka.
2. To find-out working pattern of Anganwadi workers (AWWs) and suggest corrective action to enhance their competency.

Methodology:
The health camps were conducted for Integrated Child Development Scheme (ICDS) children in over 14 Primary Health Centres (PHCs) of Belagavi Taluka covering over 50 villages between December, 2013 to March, 2015. Over 4550 children were examined by team of Pediatricians of Jawaharlal Nehru Medical College, Belagavi. The health check-up camps were conducted under aegis of ‘Balsanjeevini’ scheme with the help of AWWs of Women & Child Welfare Department.

Conclusion:
Over 51% of care-takers are not aware of benefits of the Balsanjeevini scheme. The basic causes that haunt children health are unhealthy living conditions, overcrowded houses, poor sanitation, drinking of impure water, consuming stale food, food being cooked on firewood causes smoke and poor ventilated homes. Illiteracy, poverty, smoking and alcohol consumption by head of family are aggravating factors. Implementation of social security programs and ensure its reach to right beneficiary, free universal education, advancement in socio-economic conditions can only reduce the burden of diseases on parents and can save their dearly earnings.

Key Words: Integrated Child Development Scheme, Anganwadi, Nutrition, Nutrition Rehabilitation Centre, Below Poverty Line.

Prime Minister Shri. Narendra Modi’s goal of making India the human resources capital of the world will succeed only if malnutrition is addressed immediately and ambitiously. India has made significant progress over the past few years in reducing the levels of malnutrition in the country, which unfortunately still remain high.”

“The Swachh Bharat Mission can be a game-changer because good sanitation practices can help address malnutrition. I look forward to learning from India’s experience and exploring ways of working together to increase the impact of current initiatives.”

Jim Yong Kim,
World Bank Group President

I. INTRODUCTION
The Integrated Child Development Scheme (ICDS) is one of the flagship program of the Government of India initiated in the year 1975, seeking to comprehensively address the Nutrition, Health and Pre-school
needs of children of 0 to 6 years of age group\(^{(1)}\). Human development starts in a child’s earliest years, in the first 1000 days of life. Beginning with a woman’s pregnancy and following through to the first two years of a child’s life, appropriate nutrition, early stimulation and learning, a safe environment are crucial for a child’s overall development\(^{(2)}\). Right food, proper health care, early learning opportunities, clean water and sanitation are essential for healthy growth of all children. The absence of these essential requirements can not only have an irreversible impact on the child’s development, but also undermine the country’s future economic productivity\(^{(3)}\). Improving nutrition in the early years can raise adult wages by 5-50 percent and reducing stunting can increase Gross Domestic Product by 4-11 percent \(^{(4)}\).

The first six years constitutes the most crucial period in life of children. This is the period the foundations are laid for cognitive, social and emotional language, physical/ motor development and cumulative lifelong learning \(^{(5)}\). The World Bank estimates that India is one of the highest ranking countries in the world for the number of children suffering from malnourishment. The prevalence of underweight children in India is among the highest in the world, and is nearly double that of sub-Saharan Africa with consequences on productivity, economic growth because of increased morbidity and mortality \(^{(6)}\). The poverty, illiteracy and ignorance are the risk factors for under-nutrition. Children in Below Poverty Line families are more malnourished than those in Above Poverty Line families. Children of Muslim households and those belonging to Scheduled Caste, Scheduled Tribe face higher rates of malnourishment. The appropriate weight and height is highly dependent on the Socio-Economic status of the population \(^{(7)}\). In fact, according to World Health Organization, about fifty percent of infant and child mortality may be associated with malnutrition \(^{(8)}\). National Health Family Survey in its 2016 report presented the grim picture that, 34% children are under weight, 37% children are stunted and over 50% children are anemic. These children would perform badly in school, college and business in their later part of life \(^{(9)}\).

Objectives of the study
1. To study functioning of Anganwadi centres and awareness of Balsanjeevini scheme among its beneficiaries in Belagavi taluka.
2. To study working pattern of Anganwadi workers (AWWs) and suggest corrective action to enhance their competency.

II. METHODOLOGY

42 health check-up camps were conducted covering over 50 villages in Belagavi taluka between December, 2013 to March, 2015. Over 4550 children were examined by team of Pediatricians of Jawaharlal Nehru Medical College, Belagavi. 480 children were referred to District Hospital or KLES Dr. Prabhakar Kore Hospital, Belagavi for further management. In the study period the research scholar visited over 200 Anganwadi centres covering 50 villages. Less than 15% Anganwadi centres are said to be model and as per prescribed standards. Much desired to be done to improve the standards of existing Anganwadis.

III. DISCUSSION

We suggest simple, yet powerful and cost effective following steps for effective implementation of ICDS program. These initiatives shall bring positive changes in the lives of children and their families and could be game changer in decreasing childhood diseases. Participation of family and community is essence of the success.

1. Health Check-up and referral of children

Children need to be examined by qualified medical practitioner preferably by Pediatricians at least once in two months. Identification of early symptoms and treatment is crucial for the successful outcome. Children with severe malnourishment need to be identified and referred to Nutritional Rehabilitation Centers (NRC). Children suffering from Gastroenteritis, Pneumonia, Fever, Diarrhea, Mental Retardation, Congenital anomalies, etc should be referred on priority to higher centers for further management. Mothers/care-takers should be counseled on the importance of nutritious food and need for health check-up. For better outcomes in children, Anganwadi centres should serve quality food prepared in hygienic conditions. Emphasis must be laid on importance of hand wash before food consumption. Hand washing practice and its importance needs to be highlighted to all AWWs and mothers. In early age, inculcating hand wash practice an educational and practical intervention produces sustainable positive change. Water and sanitation facilities must be made available at home and pre-school. A comprehensive knowledge about importance of hand washing program should be used.
to improve low-cost but highly effective initiative that will meaningfully reduce the burden of transmissible disease among children in rural settings \((10,11)\). Men folks must also join in the care and upbringing of children.

2. **Awareness Programs**

Information, Education and Communication (IEC) are the fundamental factors in transforming society. Communities are deprived of various health benefit schemes mooted by Government. IEC activities act as a spring board to connect to the people and gain information about various schemes \((12)\). Village meetings (Grama Sabhas) must provide ample of opportunity to Female Health Worker, Accredited Social Health Assistants (ASHAs) and AWWs to share the information about Balsanjeevini, Rastriya Swasthya Bima Yojana (RSBY), Yeshaswini & Vajpayee Arogya Shree scheme, etc and their utilities for the needy. Information booklets, pamphlets and posters must be displayed in various locations of villages. Public participation is essence and programs like “Swach Bharath Mission” to be carried out in villages in periodical intervals by involving youths. ANC, vaccination, family planning, benefits of spacing and other national programs to be implemented religiously. The study conducted in Belagavi taluka highlights that, Over 51% of parents were not aware of Balsanjeevini scheme launched by Women & Child Welfare Department in the study area. Worst is over 75% beneficiaries were not having information for whom the scheme is being implemented.

3. **Break to Superstition**

In the modern scientific age superstation has no room. However, innocent people are being deceived by jugglers, mantrikas-tantrikas. It is unfortunate that, children are being sacrificed to gain unknown fortunes. The atrocities on children particularly in lower strata of the society are reported to be high. Women & Child Welfare Department, Social Welfare Departments are required to be vigilant and expected to educate the masses and uncover the mystery of jugglers. Women self help groups and youths must join their hands in educating masses.

4. **Need for Improvement in Anganwadi infrastructure**

Over 80% of Anganwadis in urban Belagavi do not have their own buildings and the hired once don’t have basic amenities. Children are forced to sit in small rooms which do not have sufficient ventilation and lighting. Overcrowding of children in small rooms leads to exposing of children to cross infections. As per the ICDS guidelines, it is imperative to have at least two rooms for each Anganwadis but only one room is available in which their learning activities, cooking and storing of ration takes place \((13,14)\). It is also noticed that rats and pests are found in few of the Anganwadis their presence is dangerous to children. Toilets, place for hand wash, tiny play grounds for children a are not be found. Neat and clean rooms with abundant natural light, sufficient air flowing and kitchen for cooking, toilets to attend to natural calls and safe drinking water are essential to develop good habits in early childhood.

5. **Training enhances performances**

The existing training system for AWWs is old, outdated and lacks in direction. The present training schedule needs major revamping. It is recommended to invite guest resource persons who can instill confidence among AWWs and draw out best performances from them. Their role in reducing Infant Mortality Rate (IMR) /Maternal Mortality Rate (MMR) is tremendous, hence the quality of training has to be taken to the next level \((15)\). Result oriented training sessions with measurable outcomes must be planned and implemented by inviting external resource personnel.

6. **Quick supply of medicines**

The basic Pediatric drugs stock is poor in majority of PHCs. The medicines being prescribed after the Health camps (conducted under Balsanjeevini scheme) are not being supplied on the same day to children. The prescription is sent to the approval and procurement from Child Development Project Officer (CDPO). The severely ill children are deprived of emergency medication and delay in administration of drugs in few rare diseases may lead to disastrous outcome. It is recommended to provide prescribed medicines to children on the site of the health camps.

7. **Need for reengineering**

Slightest change in the approach towards children by parents is expected to produce better results. Breastfeeding within 30-45 mins of child birth. Educating mothers on exclusive breast feeding for first six months, Universal immunization, Vitamin A supplementation, routine health check-ups, ensuring highest order of cleanliness in homes, feeding child at regular intervals, administrating anti worm mediations once in six months, use of toilets, stopping of open defecation, inculcating hand wash with soap and water after visiting toilets and washing hands before consumption of food could keep children away from majority of the diseases.
Supply of right quantity and quality of ration to the homes to 6 months to 36 months children needs to be strictly adhered. Attendance of children from 36 months to 60 months at Anganwadis is reported to be 60-70% only. It is the responsibility of AWWs to ensure highest attendance of children. The prescribed quality and quantity of food need to be served as per the food chart. In the Global Hunger Index report 2016, India stands at 97th position among 116 countries. It speaks volumes about starvation of our children particularly in lower strata of the society and children quality food to survive

8. Parents/care-takers participation:

Unhealthy foods are fed in abundance to children by parents particularly in villages. Such foods compound the health conditions like loss of appetite, pain abdomen, vomiting, loose stools, throat infections are reported to be common among children. Fried chips, pappad, chocolates, ice-creams, half-cut fruits sold on street side are offered by parents on daily basis to children. Consequently, these poor quality foods are the reasons for majority of avoidable illnesses. Massive awareness, education interventions by trained counselors to parents/care-takers is immediate need of the hour. Our own experience of frequent interactions, group meetings, discussions and counseling among parents and AWWs of Kadoli, Yellur, Hirebagewadi, Shahapur, Vadagaon, Damne, Peernawadi, Kakti, villages of Belagavi taluka regarding importance of healthy food has encouraging results. But, much desirous to be done.

9. Need for Community Nutritional Rehabilitation Centers (CNRC):

The health camps were conducted for needy children in over 14 PHCs of Belagavi covering over 50 villages between Dec, 2013 to March, 2015. Over 4550 children were examined by team of Pediatrics of J N Medical College and KLE Centenary Charitable Hospital. At least 480 children were referred for further examination/investigations/admissions. Parents seek admission for severely sick conditions like fever, Upper Respiratory Tract Infection, Gastro Enteritis, etc, however parents do not prefer to admit severely malnourished children in hospital based NRCs. Parents presume malnourishment is not a disease and they refuse to admit child to NRCs. Even if, child is admitted at hospital based, NRCs 3/4th of the parents seek discharge from NRCs owing to various reasons like family responsibilities, poverty, festivals, marriages, etc. It is recommended to keep the child for initial work up in hospital based NRCs and then children may be shifted to CNRCs. On pilot study basis it is recommended to a create CNRCs at Vantamuri & Hudali PHC areas where predominantly Scheduled Tribe population is very high and the need for CNRC is highly desirable. The CNRC should function like day care centre with PHC medical officer examining children at least once in a week. Top priority must be given to timely feeding of nutritious food, medication and sanitation. Parent’s participation and educating them on child upbringing and health practices must go on side by side by trained counselors.

10 Challenges by Convent Schools to Anganwadi’s:

Belagavi sub-urban and villages adjoining Belagavi city has influence of convent schools. At least 15-20% children from Kakati, Yellur, Kadoli, Mutaga, Majagon, Camp, Vadagavi, Shahapur, etc have shifted their children from Anganwadi to convent schools. There is an exponential mushrooming of convent schools in the last couple of years, parents are attracted by uniform, shoes, school bags, benches, English medium education and other modern facilities offered by convent schools. There is virtual competition among the parents to influence each other to shift from Anganwadis to convent schools. In an informal group discussion conducted with parents at Kakati village reveals that, majority of the parents of BPL have made loans to admit their wards to convent schools. Further, more worrying factor is, convent schools do not offer free supplementary nutrition food to children. Perhaps, these children may still starve of hunger and may land in to the bracket of underweight. By taking the present trend into consideration, it may be said that, the concept of Anganwadi may loose its existence in the years to come. It is the high time that policy makers must review ICDS program and charter plans to further improve in the existing system.

IV. CONCLUSION

The observation made by this study were, awareness about Balsanjeevini is poor among parents. Much desirous to be done by CDPOs, AWWs, ASHAs, PHC and NWH staff to popularize the scheme amongst its beneficiaries.

Diseases in children can be temporarily contained by regular health check-up, medication, nutrition or admission to hospital. The basic causes that haunt children health are unhealthy living conditions, overcrowded houses, poor sanitation, drinking of impure water, consuming stale food, food being cooked on firewood causes smoke, poor ventilated homes, smoking, alcoholism, illiteracy, poverty, etc are the influencing factors.
Implementation of social security programs and ensure its reach to right beneficiary, free universal education, supply of free nutritious food to the children, better housing and advancement in socio-economic conditions can substantially reduce the burden of diseases in BPL children and parents can save their dearly earnings.

**Ethical Clearance:** Human Ethical Committee of KLE University, Belgaum has granted permission to conduct the Study vide letter No. KLEU/Ethic/14-15/D-71 dated 26th May, 2014

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**REFERENCES**


[2]. Sarah E, Georgieff M, The role of nutrition in brain development : the golden opportunity of the “First 100 days” Journal of Paed Aug, 2016, 16-21


[9]. National Health Family Survey - 4 , 2016


[13]. Performance Audit of ICDS Scheme, chapter IV, report No.22 of 2012-13

[14]. Ahmedabad Anganwadis lack basic infrastructure The Indian Express Published:May 2, 2016 .


[19]. Nitin N Ambadekar, Sanjay P Zodpey Effect of growth monitoring and nutrition education through female health workers in severe acute malnourished under fives. DOI: 10.1136/bmjgh-2016-EPHPabstracts.12 Published 7 July 2016