

Do adolescent girls of Coastal Karnataka, India have Knowledge of Integrated Child Development Services (ICDS) Scheme? What is their perception and utilization rate? – A cross sectional study

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Abstract

Background: Adolescence is a critical phase in the life of woman. At this stage, she would stand at the beginning of adulthood. This stage is in midway between childhood and womanhood and it is the most eventful for mental, emotional, social and psychological health and well-being. The life-cycle approach for holistic development of a child remains unaddressed if adolescent girls are excluded from the nutritional and developmental programmes.

Aims/Objectives: To study the awareness, utilization and perception of ICDS scheme by adolescent girls in coastal Karnataka.

Methodology: A community based cross sectional study was conducted among 66 adolescent girls in the field practice area of a tertiary care Hospital in South India.

Results: All the adolescent girls were registered. But only 2 beneficiaries were given services in rotation basis for the period of 6 months. Among the study subjects, larger proportion were aware of Supplementary Nutrition SN (97%) followed by Iron & Folic Acid supplementation IFA (43.9%) and Nutrition & Health Education NHED (25.8%). Majority were utilizing SN (97%) followed by IFA supplementation (30.3%) and NHED (25.8%). SN food of good quality (60.9%) followed by average quality (37.5%) and of adequate quantity (93.8%). It was also found that 92.4% adolescent girls were satisfied with SN.

Conclusions: It is vital to register all the adolescent girls, and ensure that they all avail the ICDS services regularly to improve the nutritional status. There is a necessity to improve the quality and quantity of food provided as per the hope of mothers to ensure better utilization.

Keywords: Awareness, utilization, perception, ICDS, Adolescent girls

Introduction

Adolescence is a critical phase in the life of woman. At this stage, she would stand at the beginning

of adulthood. This stage is in midway between childhood and womanhood and it is the most eventful for mental, emotional, social and psychological health and well-being. The life-cycle approach for

holistic development of a child remains unaddressed if adolescent girls are excluded from the nutritional and developmental programmes.^{1,2}

The Adolescent Girls (AG) Scheme, implemented by the Ministry of Women and Child Development under Umbrella Integrated Child Development Services (ICDS), primarily aims at breaking the inter-generational life-cycle of nutritional and gender disadvantage and provide them with a helpful and caring environment for self-development. The key objective of this scheme is to facilitate, educate and empower AGs so as to enable them to become self-reliant and aware citizens. Over 40 years in implementation, the success of ICDS in tackling under-nutrition among children remains a matter of great concern. It has been found repeatedly that there is discrepancy in expected and actual delivery of services.²

Scheme for Adolescent Girls was sanctioned in the year 2010 and was implemented in 205 districts across the country. Later, the expansion and universalisation of the Scheme for Adolescent Girls was done in additional 303 districts in 2017-18 and the remaining districts in 2018-19 with the simultaneous phasing out of Kishori Shakti Yojana (KSY). Thus, at present all districts in the country are covered under Scheme for Adolescent Girls. There are two major components under the Scheme - Nutrition and Non Nutrition Component.³

Nutrition component includes Take Home Ration (THR) or Hot Cooked Meal (HCM) for 11-14 years Out of school girls - Nutrition Provision Rs. 9.50 per day (600 calories; 18-20 gram of protein and recommended daily intake of micronutrients per day for 300 days in a year.). The financial norms will be Rs. 9.5/- per beneficiary per day for 300 days in a year. This would be inclusive of the cost of micronutrient fortification. Non-Nutrition Component includes Iron and Folic acid (IFA) supplementation, Health check up and referral services and Nutrition and Health Education (NHED) Sessions, Counselling / Guidance on family welfare, Adolescent Reproductive and Sexual Health (ARSH), child care practices, Life Skill Education and accessing public services.³ Hence the current study was undertaken to study the awareness, utilization and perception of ICDS scheme by adolescent girls in coastal Karnataka.

Methodology

The community based cross sectional study was carried out during the period October 2013 to March 2016 in the field practice area of Department of Community Medicine, Kasturba Medical College, Manipal University, Manipal, South India among adolescent girls. It is situated along the coastal belt of Udupi District covering a population of 45,246 spread out over 13 villages. These villages have a similar population in terms of occupation, socio-economic status and food habits. The total literacy rate in the field practice area is 87.5% with female literacy of 84.1% and sex ratio of 1036.8/1000 males.

The Department of Community Medicine provides health care services to this population through a network of five Rural Maternity and Child Welfare homes (RMCW homes)/ centres.

In the field practice area, IMR is 3.83 per 1000 live births and nil MMR; all the expectant mothers had undergone Institutional deliveries. All the children less than five years of age and expectant mothers were immunized and effective couple protection rate was 50%.

Inclusion Criteria: The adolescent girls who were registered at least for six months prior to the study in the anganwadi centres (AWCs).

Exclusion Criteria: The adolescent girls who did not fulfil the inclusion criteria or who were not willing were excluded.

Ethical Clearance: Ethical Committee approval was obtained from the Institutional Ethics Committee (IEC), Kasturba Hospital before the commencement of study vide letter no. IEC 494/ 2013. Along with the permission from Child Development Project Officer (CDPO), Udupi project was obtained before the start of the study.

Sample Size: According to the study conducted by Kumar P and Garg M in 2008,⁴ Quick appraisal of SN component of ICDS in Udupi and Karkala, utilization rate was 3%, as only 2 adolescent girls were receiving benefits for every 6 months in rotation, 50 of them were considered to be part of our study. In total 38 AWCs were present in the field practice area, 1-2 adolescent girls were selected from each centre.

Consent: Written Informed consent was obtained before interviewing the mothers of adolescent girls.

Data Collection: House to house visit was conducted and mothers were interviewed. Details regarding socio-demographic factors, awareness, utilization and perception about ICDS services like supplementary nutrition, nutrition and health education, immunization, health checkups and referral services were obtained from them. Regarding supplementary nutrition, details of food received any interruption in utilization, their perception and reasons for underutilization were collected from the mothers.

Data analysis: Data was entered and analysed in Statistical Package for Social Sciences (SPSS version 15.0) as it is licensed with the Manipal University. Results were expressed in percentages and proportions with 95% confidence interval. Statistical tests like Chi square test and Fischer's exact test were used to assess significance of categorical variables.

Results:

A total of 66 adolescent girls were enrolled in the study. Table 1 shows larger proportion of the study subjects (86.4%) were Hindus. Larger proportion of the mothers of adolescent girls were educated up to middle school (31.8%) followed by High school (28.8%) and were homemakers (47%). Larger proportion of the fathers of adolescent girls were educated up to middle school (36.4%) followed by High school (29.1%) and were involved in skilled jobs (36.4%) followed by unskilled jobs (29.1%) and semiskilled jobs (25.5%). About 68.2% adolescent girls belonged to BPL family. All the adolescent girls were registered. Whereas, 64 (97%) were utilizing ICDS services.

Table 1: Socio demographic characteristics of Adolescent girls in the study (n = 66)

S. No	Factor	Category	n (%)
1	Religion	Hindu	57 (86.4)
		Muslim	8 (12.1)
		Christian	1(1.5)
2	Literacy of mother	Illiterate	10 (15.2)
		Primary school	6 (9.1)
		Middle school	21 (31.8)
		High school	19 (28.8)
		Post high school diploma	8 (12.1)
		UG/PG	2 (3)

Conti..Table 1: Socio demographic characteristics of Adolescent girls in the study (n = 66)

S. No	Factor	Category	n (%)
3	Literacy of father *(n=55)	Illiterate	3(5.5)
		Primary school	9(16.3)
		Middle school	20(36.4)
		High school	16(29.1)
		Post high school diploma	4(7.3)
		UG/PG	3 (5.4)
4	Occupation of mother	House wife	31 (47)
		Unskilled	9(13.6)
		Semi-skilled	20 (30.3)
		Skilled	5 (7.6)
		Professional/White collar	1 (1.5)
5	Occupation of father *(n=55)	Unemployed	3 (5.5)
		Unskilled	16 (29.1)
		Semi-skilled	14 (25.4)
		Skilled	20 (36.4)
		Professional/White collar	2 (3.6)
6	Ration card	BPL	45 (68.2)
		APL	20 (30.3)
		No card	1(1.5)

*some data of father is missing because of demise or separation of father.

Table 2 depicts, larger proportion of the study subjects was aware of SN (97%) followed by IFA supplementation (43.9%) and NHED (25.8%). None were aware of health check-up and referral services. This could be because the adolescent girls were busy with their schooling.

Table 2: Awareness of ICDS services among adolescent girls (n=66)

Services	n (%)
Supplementary nutrition	64 (97)
Iron folic acid supplementation	29 (43.9)
Nutrition and Health Education	17 (25.8)

Table 3: Utilization of ICDS services by the Adolescent girls: (n=66)

Services	n (%)
Supplementary Nutrition	64 (97)
Iron and folic acid supplementation	20 (30.3)
Nutrition and Health Education	17 (25.8)

The most common reason for non-utilization was mothers of adolescent girls did not go to AWC to avail services. The most common reason for interruption of services was mothers were working and did not go to AWC to receive benefits

Table 4: Perception of Supplementary nutrition among adolescent girls: (n=64)

	Category	n (%)
Quality	Good	39 (60.9)
	Average	24 (37.5)
	Poor	0
	Don't know	1 (1.6)
Satisfaction of quality of food	Yes	61 (95.3)
	No	3 (4.7)
Quantity	Adequate	60 (93.8)
	Inadequate	3 (4.7)
	Don't know	1 (1.5)
Quantity as per norm	Yes	22 (34.4)
	No	37 (57.8)
	Don't know	5 (7.8)

As shown in Table 4, larger proportion of the study subjects was of opinion: SN food of good quality (60.9%) followed by average quality (37.5%) and of adequate quantity (93.8%). It was also found that 92.4% adolescent girls were satisfied with SN. As observed by the investigator, only 34.4% of the study subjects had received SN as per norm. This can be because before January 2015, the food was measured and given to the beneficiaries

Discussion

Table 1 shows larger proportion of the study subjects (86.4%) were Hindus. found to be in contrast to the study done in Urban Belagavi reporting larger proportion of the study subjects to be Muslims (58%) followed by Hindus (41%).⁵ Table 3 depicts the most common service utilized by the study subjects was supplementary nutrition (97%) followed by IFA supplementation (30.3%) and NHED (25.8%). Similarly, the study done by Chudasama RK et al reported 87% of registered adolescent girls were availing services.⁶ But the findings, nearly 81.7% celebrated NHED followed by 86.7% adolescent girls had attended reproductive health education was in contrast to our study.⁶ On contrary, the study done in Urban Belagavi reported 73.4% adolescent girls attended health education session followed by health

check-up 70.7%.⁵ The study by Shavi et al to assess the utilization of ICDS services by adolescent girls in urban slums of Bellary City affirmed utilization to be 43% and the most common service availed was SN (67%) found to be lesser in comparison to our study.⁷ The study by Shavi et al had reported the common reason for not availing the services as lack of awareness not observed in the present study.⁷

Majority (60% - 70%) were not aware of services like health, nutrition counselling, advocacy, and village health and sanitation. The study by Rathore et al stated quality of SN was satisfactory in all the AWCs.⁸ SN was acceptable to 98.1% beneficiaries. The study by Madhavi H et al observed larger proportion (40.1%) AWCs had poor beneficiaries satisfaction score followed by 33.3% AWCs had moderate satisfaction score. The study by Pandey V et al reported benefits from AWCs were beneficial to 81.9% beneficiaries in such a way that it gives additional nutrition (52.6%), imparting education (23.5%), Immunization (12.1%) and children become healthy (11.9%).¹⁰ The study by Ram PV et al identified larger proportion of the study subjects (63%) had average level of satisfaction. While only 1.4% were well satisfied and about 35.6% were poorly satisfied with the services provided by ICDS scheme in the AWC.¹¹

Conclusion

All the adolescent girls were registered in the AWCs, only 2 girls were utilizing the ICDS service for 6 months in rotation basis. Among the study subjects, larger proportion were aware of SN (97%) followed by IFA supplementation (43.9%) and NHED (25.8%). None were aware of health check-up and referral services. Majority were utilizing SN (97%) followed by IFA supplementation (30.3%) and NHED (25.8%). SN food of good quality (60.9%) followed by average quality (37.5%) and of adequate quantity (93.8%). It was also found that 92.4% adolescent girls were satisfied with SN. It is vital to register all the adolescent girls, and ensure that they all avail the ICDS services regularly to improve the nutritional status and learn life skill education to sustain their life in future. There is a necessity to improve the quality and quantity of food provided as per the hope of mothers to ensure better utilization.

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Conflicts of Interest: NIL

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References

1. National Institute of Public Co operation & Child Development. Research on ICDS: An Overview, (1996-2008) Volume 3 New Delhi, India; 2009. [cited March 17 2022] Available from url: <https://www.nipccd.nic.in/file/reports/icdsvol3.pdf>.
2. ICDS Scheme. Ministry of women and child development, Government of India. Available from URL: <https://wcd.nic.in/> Accessed on 10.2.22
3. ICDS Scheme. Ministry of women and child development, Government of India. Available from URL: <https://dwcd.karnataka.gov.in/info-2/INTEGRATED+CHILD+DEVELOPMENT+SERVICES+SCHEME/en>. Accessed on 10.2.22
4. Kumar P and Garg, Meenakshi. Quick appraisal of SN component of ICDS 9th and 10th January 2008:Report on ICDS project Udupi and Karkala taluk. DCWC Bulletin. January-March.2008. Vol XII. Issue 1
5. Sharma M, Angolkar M, Narasannavar A, Murthy S, Oza M. Perception towards functioning of anganwadis and utilization of ICDS services by the adolescent girls of Urban Belagavi - A cross sectional study. International Journal. 2015;3(6):1431-5
6. Chudasama RK, Kadri AM, Verma PB, Patel UV, Joshi N, Zalavadiya D, and Bhola C. Evaluation of Integrated Child Development Services Program in Gujarat, India. Indian Pediatr.2014;51: 707-711.
7. Shavi, Tejesh. A study of utilization of ICDS services by adolescent girls at anganwadi centres. New Indian Journal of Surgery, Oct 2011; 2 (4): 321.
8. Rathore MS, Vohra R, Sharma BN, Chaudhary RC, Bhardwaj SL, Vohra A. Evaluation of Integrated child development services program in Rajasthan, India. Int J Adv Med Health Res 2015; 2(2): 95-101.
9. Madhavi H, Singh HK, Bendigiri ND: Utilization of Integrated Child Development Services (ICDS) Scheme and beneficiaries-satisfaction in rural area of Gulbarga district. Pravara Medical Review 2011 ; 3(3):13-17
10. Pandey V, Awasthi S, Srivatsava VK, Nigam AK, Srivatsava PK. Study of nutritional status of children attending ICDS services in Lucknow. Indian J. Prev. Soc. Med. Apr-Jun 2011; 42(2):142-144.
11. Ram PV, Dasgupta A, Pal J, Parthasarathi R, Biswas R, Naiya S. A Cross-Sectional Study on Client Satisfaction of Anganwadi Centres under Integrated Child Development Services (ICDS) Scheme in a Slum of Kolkata. Natl J Community Med 2014; 5(1): 88-92.