



# NUTRITIONAL AND HEALTH EDUCATION SERVICES UNDER INTEGRATED CHILD DEVELOPMENT SERVICES IN AN URBAN AREA OF NORTH KARNATAKA

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## ABSTRACT

**Introduction:** Nutritional and Health Education (NHE) activities under Integrated Child Development Services (ICDS) are intended to change behaviour of community in general and specifically of the mothers.

**Objectives:** To assess the utilisation of Nutrition and Health Education services provided under ICDS in urban areas of Belagavi.

**Methodology:** A cross-sectional study was conducted during January to December 2013 among beneficiaries of Anganwadis (AWC) in Urban Areas of Belagavi. There were 912 participants who included Mothers of Children aged less than 6 years, Pregnant and Lactating Women, Adolescent Girls and Non-Pregnant Non-Lactating Women enrolled at the AWC. A predesigned questionnaire was used to collect data regarding utilisation of Nutrition and Health Education services provided through the AWC.

**Results:** Of the 912 respondents, 585 had attended at least one session of NHE. The topics commonly discussed were Family Planning, Balanced Diet and Hygiene and Sanitation. Just over half the respondents said that the NHE activity resulted in some change in their practices. The common reason given for not attending the sessions was the unsuitable timing.

**Conclusions:** Overall there is a room for improvement in the NHE activities provided under ICDS.

**Keywords:** Integrated Child Development Services, Nutrition, Health Education, Anganwadi, urban area.

## INTRODUCTION

Integrated Child Development Services (ICDS) scheme was introduced by the Government of India on 2<sup>nd</sup> October 1975, with the aim of improving the nutritional and health status of children in the age group of 0-6 years.<sup>1</sup> As a comprehensive and integrated approach, ICDS caters to children below 6 years of age, adolescent girls, pregnant women and nursing mothers, along

with all women in the reproductive age group (15-45 years).<sup>2</sup> One of the main objectives of ICDS is to enhance the capability of the mother to look after the normal health and nutritional needs of the child through proper nutrition and health education (NHE).<sup>1</sup> Hence, NHE one of the six services covered under the ICDS programme, has been a primary component of ICDS since its inception.

Previous studies have shown that at many places, Anganwadi Centres (AWC) act as mere points of distribution of Supplementary Nutrition, with poor focus on other services.<sup>3</sup> Data from various parts of the country has shown that there has been limited success encouraging mothers to adopt appropriate child care and feeding behaviours that have the potential to improve child growth and health outcomes.<sup>4</sup>

With this in view, the present study was conducted to assess the delivery and utilisation of NHE services provided under ICDS in urban areas of Belagavi city in North Karnataka.

## METHODOLOGY

A community based cross sectional survey was conducted to assess the utilisation of NHE services provided under ICDS. The study was conducted in areas catered by 76 AWCs functioning under three Urban Health Centres (UHC) at Ashok Nagar, Ram Nagar and Rukmini Nagar, which form the urban field practice area of J N Medical College, Belagavi.

Twelve beneficiaries were chosen from each AWC, randomly from the list of beneficiaries available at each centre; which included two children aged between 7 months to 3 years, two children aged between 3 to 6 years, two Adolescent girls, two Pregnant women, two Lactating mothers and two non-pregnant non-lactating women (NPNL) in the reproductive age group (15-45 years). Information was collected from the mothers of children aged between 7 months to 6 years. Hence there were a total of 912 participants in the study. A Field Survey Questionnaire designed by Right to Food Campaign<sup>5</sup> was used after making modification to suite our study. The modified questionnaire was piloted in the study area before being used for the study. The data was collected by interviewing mothers of children aged less than 6 years, pregnant and lactating women, adolescent girls and non-pregnant non-lactating women over a period of one year from January to December 2013. Ethical clearance was obtained from the Institutional Review Board of J. N Medical College. Informed consent was taken from the participants. Data was entered in Excel sheet after coding and Descriptive analysis was done using SPSS 16.0 (trial version).

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## RESULTS

A total of 912 participants under 76 AWCs were interviewed. Nearly two-thirds (65.70%) of the respondents were Hindus, 298 (32.67%) were Muslims, eight (0.88%) were Christians and six (0.65%) were Sikhs. The mean age of the interviewed women was 24.09 ( $\pm$  5.28) years and that of the adolescent girls was 16.71 ( $\pm$  1.59).

There were 38 respondents (4.17%) were illiterate and majority (85.41%) of the participants were housewives. More than half of the respondents (52.71%) lived in nuclear family. About 60% of the respondents had Below Poverty Line ration card and 49.23% belonged to classes IV and V as per Modified B G Prasad Classification. (Table 1)

**Utilisation of Nutritional and Health Education Services:** Among the respondents, 827 (90.68%) were aware of the NHE activities conducted at the AWC in the past 6 months. Among them, the awareness was low amongst NPNL women (73.03%) as compared to the other groups. Of the respondents who were aware of this service, 585 (70.74%) had attended at least one session in the past 6 months. (Table 2)

The reasons given for not attending the NHE sessions included timings not being convenient (44.07%), not being interested (18.35%) and lack of time (10.09%). Five (1.53%) of the respondents regarded the sessions to be useless. (Table 3)

Half the participants (55.70%) had attended two or more sessions of NHE activities. The topics commonly discussed varied amongst the different groups. The most common topics discussed amongst mothers of young children and amongst pregnant and lactating women were Infant Feeding Practices, Family Planning and Immunisation. The common topics chosen for Adolescent Girls were regarding Menstrual Hygiene and Diet; and for NPNL women were Family Planning, Hygiene and Sanitation. (Table 4)

Of the 585 who had attended at least one session of NHE, 471 (80.51%) felt that it resulted in some change in their practices and 26 (4.44%) reported that it brought in no change. Proportion of respondents who opined that the NHE sessions caused no change in the practices was higher among NPNL women (8.86%) as compared to the others. (Table 2)

In general, over 90% of the respondents were satisfied with the nutritional and health education services provided under ICDS.

**Table 1: Socio-demographic Profile of Study Participants (n=152 in each group)**

Variables	Mothers of 7 months to 3 yrs children	Mothers of 3 to 6 yrs children	Adolescent Girls	Pregnant women	Lactating women	Non Pregnant Non Lactating women
<b>Age (in years)</b>						
15 – 19	-	-	152 (100)	-	-	-
20 – 25	28 (18.42)	25 (16.45)	-	24 (15.79)	30 (19.74)	7 (4.61)
26 – 30	95 (62.50)	100(65.79)	-	98 (64.47)	103(67.76)	49 (32.24)
31 – 35	29 (19.08)	27 (17.76)	-	30 (19.74)	19 (12.50)	41 (26.97)
36 – 40	-	-	-	-	-	38 (25.00)
41 – 45	-	-	-	-	-	17 (11.18)
<b>Religion</b>						
Hindu	80 (52.63)	86 (56.58)	86 (56.58)	89 (58.55)	87 (57.24)	80 (52.63)
Muslim	71 (47.71)	65 (42.76)	65 (42.76)	61 (40.13)	65 (42.76)	63 (41.45)
Christian	1 (0.66)	1 (0.66)	1 (0.66)	1 (0.66)	-	5 (3.29)
Sikh	-	-	-	1 (0.66)	-	4 (2.63)
<b>Literacy Status</b>						
Illiterate	7 (4.61)	5 (3.29)	11 (7.24)	4 (2.63)	5 (3.29)	6 (3.95)
Primary	51 (33.55)	46 (30.26)	69 (45.39)	34 (22.37)	46 (30.26)	45 (29.61)
High school	73 (48.03)	81 (53.29)	58 (38.16)	89 (58.55)	81 (53.29)	79 (51.97)
PUC and above	21 (13.82)	20 (13.16)	14 (9.21)	25 (16.45)	20 (13.16)	22 (14.47)
<b>Occupation</b>						
House wife	132(86.84)	128(84.21)	127 (83.55)	128(82.21)	132(86.84)	132(86.84)
Self employed	14 (9.21)	16 (10.53)	23 (15.13)	17 (11.18)	14 (9.21)	12 (7.89)
Employed	6 (3.95)	8 (5.26)	2 (1.32)	7 (4.61)	6 (3.95)	8 (5.26)
<b>Type of family</b>						
Nuclear	77 (50.66)	88 (57.89)	71 (46.71)	81 (53.29)	79 (51.97)	85 (55.92)
Joint	75 (49.34)	64 (42.11)	81 (53.29)	71 (46.71)	73 (48.03)	67 (44.08)
<b>Socioeconomic status</b>						
I	3 (1.97)	2 (1.32)	2 (1.32)	4 (2.63)	3 (1.97)	3 (1.97)
II	18 (11.84)	11 (7.24)	16 (10.53)	16 (10.53)	12 (7.89)	19 (12.50)
III	56 (36.84)	67 (44.08)	55 (36.18)	56 (36.84)	64 (42.11)	56 (36.84)
IV	59 (38.82)	59 (38.82)	64 (42.11)	58 (38.16)	60 (39.47)	62 (40.79)
V	16 (10.53)	13 (8.55)	15 (9.87)	18 (11.84)	13 (8.55)	12 (7.89)
<b>Type of Ration card</b>						
Below Poverty Line	91 (59.87)	95 (62.50)	90 (59.21)	94 (61.84)	95 (62.50)	84 (55.26)
Above Poverty Line	35 (23.03)	30 (19.74)	43 (28.29)	34 (22.37)	30 (19.74)	45 (29.61)
Do not have	26 (17.10)	27 (17.76)	19 (12.50)	24 (15.79)	27 (17.76)	23 (15.13)

**Table 2: Utilisation of NHE Services by study Participants**

Variables	Mothers of 7 months to 3 yrs children	Mothers of 3 to 6 yrs children	Adolescent Girls	Pregnant women	Lactating women	Non Pregnant Non Lactating women
<b>Aware of NHE conducted in the past 6 months</b>						
Yes	142 (93.42)	144 (94.74)	141 (92.76)	145 (95.39)	144 (94.74)	111 (73.03)
No	3 (1.97)	2 (1.32)	7(4.6)	5 (3.29)	4 (2.63)	15 (9.87)
Don't know	7 (4.61)	6 (3.95)	4(2.63)	2 (1.32)	4 (2.63)	26 (17.11)
<b>If yes, attended</b>						
Yes	87 (61.27)	97 (67.36)	108 (76.6)	109 (75.17)	105 (72.92)	79 (71.17)
No	55 (38.73)	47 (32.64)	33 (23.4)	36 (24.83)	39 (27.08)	32 (28.83)
<b>NHE causing any change in practices</b>						
Yes	69 (79.31)	81 (83.51)	84(77.778)	94 (86.24)	84 (80.00)	59 (73.68)
No	4 (4.60)	4 (4.12)	6(5.56)	3 (2.75)	2 (1.90)	7 (8.86)
Can't say	14 (16.09)	12 (12.37)	18(16.67)	12 (11.01)	19 (18.10)	13 (16.46)

**Table 3: Reasons for Not Attending Session**

Reason for not attending	Mothers of 7 months to 3 yrs children	Mothers of 3 to 6 yrs children	Adolescent Girls	Pregnant women	Lactating women	Non Pregnant Non Lactating women
Not aware of the sessions	10 (6.58)	8 (5.26)	11 (7.24)	21 (13.82)	22 (14.47)	15 (9.87)
Unsuitable timings	35 (23.03)	31 (20.39)	20 (13.16)	9 (5.92)	9 (5.92)	8 (5.26)
Not interested	16 (10.53)	9 (5.92)	9 (5.92)	6 (3.95)	8 (5.26)	7 (4.61)
Lack of time	3 (1.97)	6 (3.95)	3 (1.97)	-	-	2 (1.32)
Useless	1 (0.66)	1 (0.66)	1 (0.66)	-	-	-
<b>Total</b>	<b>65 (42.76)</b>	<b>55 (36.18)</b>	<b>44 (28.95)</b>	<b>36 (23.68)</b>	<b>39 (25.66)</b>	<b>32 (21.05)</b>

**Table 4: Topics Discussed at NHE sessions**

Topics Discussed	Mothers of 7 Mnths to 3 yrs children	Mothers of 3 to 6 yrs children	Adolescent Girls	Pregnant women	Lactating women	Non Pregnant Non Lactating women
Infant Feeding	39 (25.66)	53 (34.87)	-	75 (49.34)	83 (54.61)	-
Child Care	17 (11.18)	27 (17.76)	-	52 (34.21)	48 (31.58)	-
Family Planning	58 (38.16)	65 (42.76)	49 (32.24)	67 (44.08)	66 (43.42)	59 (38.82)
Hygiene & Sanitation	28 (18.42)	41 (26.97)	-	44 (28.95)	42 (27.63)	52 (34.21)
Immunisation	39 (25.66)	52 (34.21)	-	63 (41.45)	45 (29.61)	-
Balanced Diet	-	-	52 (34.21)	-	-	49 (32.24)
Menstrual Hygiene	-	-	88 (57.89)	-	-	-
HIV/STI/RTI	-	-	47 (30.92)	-	-	-

In general, over 90% of the respondents were satisfied with the nutritional and health education services provided under ICDS.

## DISCUSSION

In our study, it was seen that 90.68% of the respondents were aware of NHE services, and amongst those who were aware, about 70% had attended at least one session. Thus, in this study 64% had attended at least one session of NHE, which is evidently better than the result in a study done in New Delhi in 2008 where only 23.6% of the women interviewed had received Nutritional and Health Education.<sup>6</sup> NFHS-3 data shows only 11% of pregnant women and 8% of the lactating women had received any form of Nutritional and Health Education from the ICDS functionaries<sup>7</sup> and another study done in Gulbarga in 2011, revealed the coverage of NHE to be 43.5%.<sup>8</sup> Another study done in Aurangabad reported 100% coverage of NHE activities amongst the respondents in reproductive age group.<sup>9</sup> A study done by Barman et al in Jorhat, Assam revealed that formal sessions on NHE were conducted in 26.67% of AWC, 6.67 % of the AWC conducted it every 6 months, 13.33% of AWC's conducted NHE once a year.<sup>10</sup> In a facility based study done in Gujarat, 81.6% AWCs had conducted NHE activities in the preceding six months.<sup>11</sup>

In this study, only 10% respondents expressed dissatisfaction with the Nutritional and Health Education services as compared to 65.33% who were dissatisfied with the teaching and 77.33% who were dissatisfied due to the irregularity of the NHE programs in the Barman et al study.<sup>10</sup> In a study by Pandey et al. in Lucknow, 81.9% of the respondents said they were satisfied by the services under ICDS.<sup>12</sup> The reasons given in our study for not attending the NHE sessions included timings not being convenient, not being interested and lack of time.

## CONCLUSION

The awareness about the NHE activities being conducted at the AWC was high; however, it was low amongst the NPNL group. The utilization of this service was also low. Hence, greater focus needs to be given to the Nutritional and Health Education services to ensure that the benefits of the ICDS scheme last long.

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