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A STUDY TO ASSESS THE KNOWLEDGE ABOUT INTEGRATED CHILD DEVELOPMENT SERVICES OF ANGANWADI WORKERS AND THEIR PROBLEMS

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ABSTRACT

The study aims to know about current level of knowledge possessed by the Anganwadi Workers (AWWs) regarding essential grass-root level health services provided in the Anganwadi Centres. Studying the profile of an AWW, pertaining to her qualification, experience, skills, knowledge, attitude and training, was important because it has direct impact on the output of Integrated child development scheme (ICDS) The knowledge about the ICDS among AWW in seventy Anganwadi Centres (each having one AWW), of Champasari gram panchayat of Matigara Block of Darjeeling district in West Bengal was assessed by interviewing them. It was found that only 6.19% of Anganwadi workers have correct knowledge about the calories and proteins required for children in the age group of 6 months to 6 years and none had the correct knowledge about the amount of calories and proteins to be given to severely underweight children through supplementary nutrition. Only 12.86% had correct knowledge about the average weight of a 1year old child, and they were not aware of the colour code used for growth monitoring. Knowledge about the flattened growth line on growth chart was existent among 31.43% of the AWW interviewed. AWWs were ignorant about the meaning of red colour mid arm circumference (MAC) strip.

Keywords: Integrated Child Development Services (ICDS), Anganwadi Worker (AWW), Anganwadi Centre (AWC), Supplementary Nutrition Program,

1.1: INTRODUCTION

The integrated child development scheme (ICDS) was launched by Government of India in October 1975, in combating persistent hunger and malnutrition especially among children under the age of 6 years. Now it has become the world's largest early child development programme which includes a package of services relating to health, nutrition and education to the children below 6 years, pregnant and nursing mothers.[1] Specifically the package of services are

ISSN: 2455-8834

Volume:03, Issue:12 "December 2018"

Supplementary nutrition (SNP), Non-formal pre-school education (PSE), immunization, Health check-up, Referral services and Nutrition and Health Education (NHE). Out of these six, three services viz. immunization, health check-up and referral, are designed to be delivered through the primary health care infrastructure while providing SNP, PSE and NHE are the primary tasks of the Anganwadi Centre [2], located within the village or slum area itself. It is a kind of play school cum a health centre. An Anganwadi Centre (AWC) usually covers a population of 400 to 800 in rural and urban areas and 300 to 800 in tribal and hilly areas. Each Anganwadi centres is taken-care by an Anganwadi worker, a woman of same locality and the community based voluntary frontline workers of the ICDS programme [3]. Being the functional unit of ICDS programme which involves different groups of beneficiaries, the AWW has to conduct various types of job responsibilities like nutrition and health education, non-formal pre-school education (NEPSE), supplementary nutrition, growth monitoring and promotion and family welfare services including the coordination with the health functionaries for provision of other services [4]. In addition to attending various beneficiary groups, she has to enlist beneficiaries, arrange immunization camps, health check up camps. Her functions also include community survey, primary health care and first aid, referral services to severe malnourished, sick and at risk children, and organizing women's groups and Mahila Mandals, school enrolment of children and maintenance of records and registers [5].

From the above text, it is clear that Anganwadi Workers are key player to enhance health and nutritional status of women and children at the grass root level and the output of ICDS scheme to a great extent depend on them. But studies show that AWWs are less capable of providing services to the targeted population [6] [7] and in-spite of spending lot of money on ICDS programme by the Government, impact is very ineffective. Most of the study concentrated on the nutritional and health status of the beneficiaries of ICDS. Less focus has been given to assess the knowledge and awareness among AWW regarding recommended ICDS programmes, who are actually the main resource person [8]. With this background the present study was planned to assess the knowledge of anganawadi workers and their problems at the Champasari Gram Panchyat of Matigara Block of Darjeeling district in West Bengal.

1.2: OBJECTIVES OF THE STUDY

The key objectives of the study are:

i. to examine the socio-economic background of AAWs,
ii. to assess the existence of proper knowledge among AAWs about Integrated Child Development Services (ICDS),
iii. to assess the awareness among the AAWs regarding the health and nutritional services of ICDS program,

ISSN: 2455-8834

Volume:03, Issue:12 "December 2018"

iv. to study the problems faces by AWWs.

1.3: METHODOLOGY

The study area was Champasari Gram Panchyat of Matigara Block. The sample for the present study comprises of 70 Anganwadi workers from these 70 AWCs which are located in eight villages of Champasari gram panchayat. The names of the villages are: Champasari, Samarnagar, Debidanga, Baghajatin, Salbari, Sukna, Milonmore and Sevoke. A face to face interview schedule was used as a tool for data collection with various questions framed to assess the knowledge among Anganwadi workers regarding the services of ICDS.

Schedule were designed in English and for the convenience of the respondents it was translated in Bengali which is the common language spoken in the surveyed areas. For knowing their profile, the basic information of the worker like her name, age, education and their working experience was collected. For the assessment of their knowledge regarding ICDS services, a questionnaire was so designed as to question every aspect of services provided through the Anganwadi centre and the functioning of AWWs like immunization, growth monitoring, nutrition and health education, health check-up and supplementary nutrition. The detailed data was entered into the Microsoft Excel sheets, presented in the form of tables and figures. Some of the questions were also asked to the AAWs about the availability of electricity, safe drinking water and sanitary toilets. Feedback was also taken with respect to problems faced by them in implementing the scheme. Informed consent to publish their opinion was taken from all study participants.

1.4: RESULTS AND DISCUSSION

Data were collected from a sample of 70 Anganwadi workers from 70 Anganwadi centres of Champasari Gram Panchyat of Matigara Block through the survey schedule in relation to the assessment of knowledge about ICDS of Anganwadi workers. Personal interview with Anganwadi Workers and observation generated important results which are presented in the tabular form below:

ISSN: 2455-8834

Volume:03, Issue:12 "December 2018"

Table 1: Socio-demographic characteristics of Anganwadi workers (n=70)

Parameters	Numbers of AWWs	Percentage (%)
Age in years		
21-30	11	15.71
31-40	27	38.57
41-50	24	34.29
51-60	08	11.43
Marital Status		
Unmarried	15	21.43
Married	55	78.57
Social Category		
General	40	51.14
Scheduled Caste	14	20.00
Scheduled Tribe	13	18.57
Other Backward Class	03	4.29
Education		
Below Secondary	09	12.86
Secondary	36	51.43
Higher Secondary	22	31.43
Graduate	03	4.28
Working Experience in years		
Less than 10 years	41	58.57
10 – 20 years	15	21.43
More than 20 years	14	20.00

Source: Field Survey

Out of 70 Anganwadi Workers, maximum numbers of workers (38.57%) were in the age group of 31-40 years, 34.29% were in the age group of 41-50 years. Lowest number i.e., 8 (11.43%) belonged to the age group of 51-60 years. 55 (78.57%) of them were married and 21.43% of

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Volume:03, Issue:12 "December 2018"

them are unmarried. 40 (51.14%) of AAWS belonged to general category and 20% from scheduled castes. 51.43% of AWWs completed 10th standard (passed Secondary level), 31.43% completed 12th standard (passed Higher Secondary) and only 4.28% AWWs are graduates (Table 1).

Table 2: Responsibilities of AWWs

Sl. No.	Responsibilities rendered by the AWWs	Responses (N=70) Yes (Percentage)
1.	Caring of Children (0yrs to 6yrs)	70 (100)
2.	Maintaining Register for Supplementary Food Distribution	70 (100)
3.	Maintaining Growth Chart of Every Child	70 (100)
4.	Taking Weight of Every Child Each Month	70 (100)
5.	Maintaining Register for Immunization	70 (100)
6.	Maintaining Register for Pre-School Education	70 (100)
7.	Organizing Social Awareness	70 (100)
8.	Running Kishori Shakti Yojna	09 (12.86)

Source: Field Survey

Table 2 shows the responsibilities rendered by the AAWS. This study shows that all AAWS take care of the children between the age group of 0yrs to 6yrs. They maintain register for supplementary food distribution, immunization, pre-school education. They regularly visit households, organize social awareness programmes. In this study, only 12.86 percent of respondents implemented Kishori Shakti Yojna at their AWCs.

Table 3: Problems faced by Anganwadi workers

Types of Problems	**Numbers of AWWs**	**Percentage (%)**
Inadequate salary	40	57%
Lack of Infrastructure at AWC	5	7%
Work overloaded	14	20%
Excessive record maintenance	11	16%
Total	70	100%

Source: Field Survey

ISSN: 2455-8834

Volume:03, Issue:12 "December 2018"

From the above table 3 it is seen that 57% of AAWS face the problem of inadequate salary. Other 20% workers are overloaded with their work. And rest of 16% has problems related to infrastructure and excessive record maintenance.

Table 4: Knowledge of AWWs regarding different aspects of health services provided

Sl. No.	Category of Services	Type of questions asked	Correct response	
			No.	%
1.	Supplementary nutrition	What amount of calories & proteins given to each child through supplementary nutrition?	13	6.19
		What amount of calories & proteins given to severely underweight children?	0	0
2.	Growth monitoring	Growth monitoring should start from?	70	100
		Flattened growth line on growth card means?	22	31.43
		What is the average weight of a 1 year old child?	9	12.85
		The red colour in mid arm circumference (MAC) strip means?	0	0
3.	Immunization	Measles vaccine given at what age?	62	88.57
		What is the gap between 2 successive doses of DPT vaccine?	63	90.00
		What type of Vaccines given at 5yr age?	58	82.86
		What No. of tetanus toxoids that a pregnant lady should receive?	67	95.71
4.	Health check-up	First dose of vitamin A given at?	61	87.14

ISSN: 2455-8834

Volume:03, Issue:12 "December 2018"

		Gap between two successive doses of vitamin A?	59	84.29
		Minimum number of tablets of iron & folic acid that a pregnant woman should consume?	15	21.43
		What is the earliest symptom of vitamin A deficiency?	15	21.43
5.	Referral services	How to identify children at risk?	17	24.29
		How to identify pregnant women at risk?	11	15.71
		Do have the knowledge of place of referral services?	70	100.00
6.	Nutrition & health education	Exclusive breast feeding should be continued till?	70	100.00
		What Kind of diet that should be given during diarrhea?	59	84.29
		ORS should be discarded if not used completely after?	63	90.00

Source: Computed from field data

One of the important services of AWCs includes Supplementary Nutrition Program (SNP). The SNP provides supplementary food to children between 6 months and 6 years of age, adolescent girls and pregnant and lactating mothers [9. Supplementary nutrition is a high cost input of ICDS program [10]. The primary objective of the SNP programme within ICDS is to reduce the nutrition gap among children between the ages of 0 to 6 years and improve the nutritional status of pregnant and lactating mothers. The AWC provides different type of supplementary nutrition in form of hot cooked food (HCF), ready to eat food (RTE), and take home ration (THR) to the beneficiaries. An AWW has to identify eligible beneficiaries for Supplementary Feeding which include children (6 months to 6 years), pregnant women and nursing mothers. They provide nutritious food for the children freshly prepared at AWC. It must be kept in mind that the primary objective is to ensure that the prescribed Protein and Calorie requirement is given[11]. The present study found that only 6.19% of Anganwadi workers have correct knowledge about

ISSN: 2455-8834

Volume:03, Issue:12 "December 2018"

the calories and proteins given to children in the age group of 6 months to 6 years and no one have the right knowledge about the amount of calories and proteins given to severely underweight children through supplementary nutrition (Table 4). A similar observation was found in another study which documented that 'none of the Anganwadi worker was familiar with the energy and protein requirement of the targeted age group and was unaware of the fact as how much caloric food they are providing to children' [12]. A dissimilar observation is found in an earlier study where they stated that AWW 'had fair recall of calorie norms for each beneficiary category but was oblivious to protein norms and moneyallocations'[13]. Although the proportion of beneficiaries malnourished decreased in West Bengal but the proportion of total ICDS beneficiaries who are malnourished has been rising. As on March 2015, 15 per cent of total ICDS beneficiaries were malnourished. This increased to 22 per cent as on March 2016 and 25 per cent as on September 2017[14]. To make ICDS successful, nutritional knowledge is an important determinant [15]. Without the knowledge about the revised and pre-revised guidelines for the cost and calories allocated for the beneficiaries under ICDS the workers may not be providing adequate services to the beneficiaries. So, there is an extreme need of regular training to increase the nutritional knowledge of AWWs [16].

One of the important functions of AAW is growth monitoring of children at AWCs for which they should have sufficient knowledge and training [17]. The present study shows that in spite of the fact that all (100%) of the AAWs being trained, it was found that performance as well as awareness among them regarding the growth monitoring was not satisfactory; only 12.86% had acceptable knowledge about the average weight of a 1year old child, and they don't have knowledge about the colour code for growth monitoring. About 31.43% of the AAWs have knowledge about the flattened growth line on growth chart (Table 4). They do not have the knowledge about the meaning of red colour mid arm circumference (MAC) strip. A study revealed that '99% had adequate knowledge about the significance of the lines on the growth charts that indicate different grades of nutritional status….. only 17-30% knew the correct mid-upper arm circumference (MUAC) for an optimally nourished child aged 2 and 4'[18]. Various studies have shown that 'Continued education on various aspects of growth monitoring' or knowledge up-gradation training is important in improving the knowledge of AWWs regarding growth monitoring [19][20].

Table 4 shows that on an average, 89% of AAWs had better knowledge on immunization. 100% of AWWs maintained records of immunization, health check-ups (Table 2). 88.57% knew about the measles vaccine, at what age to be given; 90% knew about the time-gap between two doses of DPT vaccine, and 95.71% of them knew about the number of tetanus toxoids that a pregnant lady should receive. A study on 'Knowledge of Anganwadi Workers Regarding Childhood Immunization' has shown that all AWWs had the best knowledge about immunization [21].

ISSN: 2455-8834

Volume:03, Issue:12 "December 2018"

Some other studies also supported the AAWs have adequate knowledge about the component of Immunization [22] [23]. But AWWs do not have adequate knowledge regarding the prevention of disease through vaccine. They are not aware about newly introduced vaccine [24]. The present study revealed that AWWs do not have knowledge about the side effects of DPT vaccine. Therefore, trainings are required to refresh the knowledge and current information about the vaccines on regular basis is very important for updating the knowledge of AWWs.

AWC serves as a central point for immunization, distribution of vitamin A, iron and folic acid tablets and treatment of minor ailments and first aid. The present study revealed that 87.14 percent of AWWs were having the knowledge about the timing for giving Vitamin-A dose to the children and 84.29 percent of them are aware about the time-gap between the two successive doses of vitamin A. But only 21.43 percent AWWs gave the correct answer of minimum number of tablets of Iron Folic Acid (IFA) that a pregnant woman should consume and the earliest symptom of vitamin-A deficiency. For supplementation of iron folic acid by means of iron folic acid (IFA) tablets, Government of India had implemented a strategy for combating nutritional anemia due to iron deficiency of pregnant women. A study has revealed that the consumption of IFA tablets is more among the mother who were explained properly than those who were not explained by the health worker and ‘an effort should be given at the level of front line health workers by training and re-training them to improve the compliance of IFA consumption’[25].

The awareness regarding the provision of referral services under ICDS was on an average only 20 percent of AWWS. Among all AWWS, only 24.29 percent of them can identify children who are at risk and 15.71 percent of them can identify high-risk pregnancy (Table 4). The study also depicts that 100 percent AAWs were aware regarding the options for places of referral services to be but they do not have the knowledge to identify children or pregnant mother who need referral services. Another study revealed that ‘section of anganwadi workers (10 percent) who were highly aware regarding the options for places of referral services to be made’ [26].

All of AWWs were having a satisfactory knowledge that breastfeeding should be started immediately after birth. Similar observation is found in a study of AWWs on their knowledge, attitude, and practice surveys on breastfeeding, and reported that an average knowledge regarding breastfeeding was adequate [27]. It might ‘be due to increased emphasis on the importance of teaching of the subject of breastfeeding and because of repeated health educational messages on this topic through mass media’[28]. 84.29 percent of them are aware about the type of diet to be given during diarrhea. The present study revealed that 90% workers had right knowledge about ORS (Oral Rehydration Solutions/salts).

ISSN: 2455-8834

Volume:03, Issue:12 "December 2018"

CONCLUSION

A total of 70 Anganwadi Workers of 70 Anganwadi Centres of Champasari gram panchayat of Matigara block were interviewed for the study by adopting a survey schedule. Major findings of the study are as follows: Maximum numbers of workers (38.57%) were in the age group of 31-40 years. 55 (78.57%) of them were married. The respondents hailed from different castes; 40 (51.14%) of the AAWs were of general category and 20% from Scheduled Castes. 36 (51.43%) AAWs had studied up to secondary school and 41 (58.57%) had experience less than 10 years. As is evident from the data, 57% workers complained of inadequate salary, 16% workers complained of infrastructure of AWC, work overload complained by 20% as their work involves daily home visits, a lot of record maintenance or they have to assist for other health programmes apart from their Anganwadi related work.

The present study found that only 6.19% of AAWs have adequate or proper knowledge about the calories and proteins given to children in the age group of 6 months to 6 years and no one had the correct knowledge about the amount of calories and proteins given to severely underweight children through supplementary nutrition. Only 12.86% had correct knowledge about the average weight of a 1-year old child, and they don't have knowledge about the colour code for growth monitoring. About 31.43% of the AAWs have knowledge about the flattened growth line on growth chart. They do not have the knowledge about the significance of red colour mid arm circumference (MAC) strip. The present study shows that on an average 89% of AAWs had better knowledge on immunization. 100% of AWWs maintained records of immunization, health check-ups. 88.57% knew the correct knowledge about the measles vaccine at what age to be given, 90% knew about the time-gap between two doses of DPT vaccine and 95.71% of them knew about the number of tetanus toxoids that a pregnant lady should receive. The present study revealed that 87.14 percent of AWWs were having the knowledge about the timing for giving Vitamin-A dose to the children and 84.29 percent of them are aware about the time-gap between the two successive doses of vitamin A. But only 21.43 percent AWWs gave the correct answer of minimum number of tablets of Iron Folic Acid that a pregnant woman should consume and the earliest symptom of vitamin-A deficiency. Among all AWWS, only 24.29 percent of them can identify children who are at risk and 15.71 percent of them can identify high-risk pregnancy. All of AWWs were having the correct knowledge that breastfeeding should be started immediately after birth. The present study revealed that 90% workers had correct knowledge about ORS (Oral Rehydration Solutions/salts). The study revealed the fact that although the large section of AAWs were aware about the vaccination of children, but the knowledge of information regarding the requirement of calorie and proteins for malnourished children was very poor. It is assessed from the study that the knowledge level of the AWWs about the ICDS Services was not satisfactory.

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Volume:03, Issue:12 "December 2018"

It can be concluded that AAWs were mostly familiar with the various services of ICDS like immunization, health check-up services but the provision of other services including technical knowledge about them are not clear. Therefore, the study strongly felt the need of improving the quality of knowledge of AAWs through rigorous training and evaluation process before letting them go into the field jobs. There is a need for frequent interactions between the supervisors and AWWs for imparting information and awareness. To make ICDS successful, Anganwadi centres need to be strengthened in infrastructure and supplies and AWWs need to be given more salary so that they can be motivated to take interest in all activities of the project.

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