



A CROSS-SECTIONAL STUDY TO ASSESS FUNCTIONING OF ANGANWADI CENTERS UNDER BADAGAON BLOCK, DISTRICT JHANSI (UP)

Harpreet Singh*

Postgraduate Student Department of Community Medicine, Maharani Laxmi Bai Medical College, Jhansi (UP). *Corresponding Author

Anil Kumar Malhotra

Professor and Head Department of Community Medicine, Maharani Laxmi Bai Medical College, Jhansi (UP).

ABSTRACT **Background:** Launched on 2nd October, 1975, the Integrated Child Development Services (ICDS) Scheme is a response to the challenge of providing pre-school non-formal education on one hand and breaking vicious cycle of malnutrition, morbidity, reduced learning capacity and mortality on the other.
Objectives: To assess the functioning of anganwadi centers, maintenance of records and regularity in visits by the supervisors.
Material and Methods: An observational cross-sectional study conducted at 30 AWCs under Badagaon block in Jhansi district using a pretested structured questionnaire. Data analysis was performed using EpiInfo.
Results: All the centers were regular in providing NFPSE, weighing children and arranging VHNDs. Other activities were also performed fairly at majority of the centers with good record maintenance in most of the centers.
Conclusion: The goal of proper functioning of all of the centers is yet to be achieved.

KEYWORDS : ICDS, Anganwadi, Pre-school Education

INTRODUCTION

Healthy mothers produce healthy children which in turn build healthy nations.

According to 2011 census children in the age group of 0-6 years constitute around 158 million of the population of our country. Childhood is the most crucial time when an individual needs special care mainly regarding nutrition and education. Investing in children is important on practical grounds because it yields positive benefits to economies and societies. Besides safe motherhood and safe delivery practices, child's nutrition plays an important role in reducing child mortality. Frederick Douglass, an African-American social reformer has said "It is easier to build strong children than to repair broken men". Keeping these issues in mind, the Ministry of Women and Child Development is implementing various schemes for welfare, development and protection of children. The ICDS Scheme offers a package of six services, viz.

- Supplementary Nutrition
- Pre-school non-formal education
- Nutrition & health education
- Immunization
- Health check-up and
- Referral services

All children below 6 years of age, pregnant women and lactating mothers are eligible for availing of services under the ICDS Scheme. All the services in the ICDS Scheme are provided by the Anganwadi Worker (AWW). Each AWW is assisted by a lady helper belonging to the local community. Proper functioning of AWCs includes timely and adequate delivery of the services to be offered and requires supervision from different officers. This served the basis for conducting the present study.

OBJECTIVE

- To evaluate the functioning of anganwadi centers regarding different services.
- To assess the record maintenance at the centers.
- To evaluate the regularity in visits by the supervisors.

MATERIALS AND METHODS

The present observational, cross-sectional, community-based study was conducted at the anganwadi centers under Badagaon block of district Jhansi. Under Badagaon block there are a total of 147 anganwadi centers. Out of these 147 anganwadi centers, 30 were selected keeping feasibility in mind by simple random sampling using lottery method. The study was carried out from April 2017 to September 2017. Anganwadi Centers were observed and AWWs were interviewed to assess the functioning of the centers. Anganwadi workers of the selected centers were interviewed in Hindi language using a structured questionnaire which was pretested. The inclusion criteria for the center and the worker were-

- Selected in the lottery method.
- Centers open during the visit.
- Workers available at the time of data collection.
- Willing to participate in the study.

All the selected centers were open during the first visit to them and AWWs of those centers were also present during the visit and none of the anganwadi workers objected for participation in the study after the procedure and purpose was explained to them. Permission to conduct this research study in the community was taken from the Institutional Ethics Committee of Maharani Laxmi Bai Medical College, Jhansi. Informed verbal consent was taken from the anganwadi workers and then face to face interview was done. To maintain the anonymity, strict confidentiality with regard to their information was assured to every respondent. The responses were entered in Epi Info software and the collected data were consolidated on visual dashboard and further analyzed in Epi Info version 7.1.3.0. Frequency of data was presented in the form of tables and graphs. The data were analyzed by using descriptive statistics.

RESULTS

While observing the functioning of the selected anganwadi centers, it was seen that they were running at the population ranging from 780 to 1572. Average (mean) population per center was 1104 which is higher than the norms. Children from 3-6 years are to attend the pre-school activities at the anganwadi center daily. Out of 1306 registered children in this age group only 190 (14.55%) were present during the visit with the lowest attendance being 6% and the highest being 50%. Attendance average for each center was calculated by taking the attendance of last one week from the register maintained by the anganwadi workers. It ranged from 5% to 48% for these centers and the combined average was 33.84% (only 13 children per center were present during the last week out of 44 children per center on an average). Regarding opening hours of the centers, it was informed by the anganwadi workers that it remained open from 8 AM to 12 PM from April to September and from 10 AM to 2 PM from October to March. Thus the working duration of each center was 4 hours. The centers remain open on all days except Sundays and gazetted holidays and this was being followed by all the centers as enquired for the period of last one month. No center remained closed for more than a week at a stretch during last 12 months.

Below is the status of various services being provided at the centers and their overall functioning.

1. Supplementary Nutrition

It was being provided in the form of ready to eat food at 24 centers 6 days in a week. Only one center which was running at anganwadi worker's home was providing hot cooked meal to the children as per weekly menu in addition to ready to eat food. Children attending

centers for pre-school education were given about 50 gm (one small bowl) of food every day. Other beneficiaries (children up to 3 years, pregnant and lactating mothers and adolescent girls) were given food packets of 1 kg on 5th, 15th and 25th of every month.

2. Immunization

28 centers reported to conduct one at least immunization session in a month. ANMs from respective subcenters visited anganwadi centers on specified days of the week to conduct the session. Vit A supplementation sessions were being conducted every 6 months.

3. Growth Monitoring

Each center was maintaining weight records of their registered children properly. Weight was being taken every month at all the centers. Growth charts were available at all the centers and maintained for all the registered children. Shakir's tape was found to be available at 50% of the centers. Although anganwadi workers were not aware of the mathematical values for classification of malnutrition according to Shakir's tape, they were aware of the color coding provided in the tape.

4. Non-formal Pre-school Education

It was being imparted to children 6 days a week according to the curriculum booklet given by the government known as "Pahal". Various charts, paintings and toys were being used to teach the children about alphabets, numbers, body parts, fruits etc.

5. Nutrition and Health Education

It was being imparted to pregnant females, mothers of children up to 6 years, adolescent girls and other women in reproductive age group on the day of distribution of food packets which was 5th, 15th and 25th of every month. In addition to this, village health and nutrition days were being organized in every village once in a month to spread awareness and answer concerns of the beneficiaries and other individuals.

6. Health Checkup

Health checkups were being conducted at almost all the centers once in 3-6 months with the help of ANM and Medical Officer of that area.

7. Referral Services

Referral services were found to be regular at 25 centers with well-maintained referral registers.

Regularity of different services mentioned before is shown in the table 1.

Table 1: Regularity in Services at Anganwadi Centers (N=30)

| Type of service | Expected frequency of service | Regular | Irregular |
|-------------------------|-------------------------------|------------|-----------|
| Supplementary Nutrition | Daily | 24 (80) | 6 (20) |
| Immunization | Daily | 28 (93.33) | 2 (6.67) |
| Weighing of Children | Monthly | 30 (100) | 0 (0) |
| Pre-school Education | Daily | 30 (100) | 0 (0) |
| VHND | Monthly | 30 (100) | 0 (0) |
| Health Checkups | Once in 3-6 months | 29 (96.67) | 1 (3.33) |
| Referral Services | As and when required | 25 (83.33) | 5 (16.67) |
| Deworming | Once in 6 months | 24 (80) | 6 (20) |

With respect to record maintenance, it was seen that each center is expected to maintain 9-16 registers which consumed 70 minutes of anganwadi worker's time on an average. Most of the registers were well maintained at most centers which is shown in the table 2.

Table 2: Record Maintenance by Anganwadi Workers (N=30)

| Type of Register | Maintained | Not Maintained |
|----------------------------|------------|----------------|
| Survey Register | 30 (100) | 0 (0) |
| Immunization Register | 30 (100) | 0 (0) |
| Family Planning Register | 29 (96.67) | 1 (3.33) |
| Growth Monitoring Register | 30 (100) | 0 (0) |
| Birth and Death Register | 30 (100) | 0 (0) |
| ANC Register | 29 (96.67) | 1 (3.33) |
| Referral Register | 25 (83.33) | 5 (16.67) |
| Register for Malnourished | 28 (93.33) | 2 (6.67) |
| Stock Register | 28 (93.33) | 2 (6.67) |
| Visit Register | 30 (100) | 0 (0) |

Next, anganwadi workers were enquired about the guidance and supervision that they receive from other functionaries of health system like ANM, Medical Officer etc. Table 3 shows regularity of visits by these persons and if they proved to be helpful according to anganwadi workers. The table shows that ANMs were most consistent with their visits to the subcenters among all. 93.33% of anganwadi workers were satisfied with the visits that are made to their centers and described them to be helpful.

Table 3: Regularity of Visits by Superiors to Anganwadi Centers (N=30)

| Visit by | Regular | Not Regular |
|-----------------|------------|-------------|
| ANM | 30 (100) | 0 (0) |
| Supervisor | 24 (80) | 6 (20) |
| CDPO | 25 (83.33) | 5 (16.67) |
| Medical Officer | 26 (86.67) | 4 (13.33) |

DISCUSSION

SUPPLEMENTARY NUTRITION

In our study, distribution of supplementary food was regular in only 80% centers and it was being provided in the form of ready to eat food at 24 centers 6 days in a week (Table 1). Only one center out of these 24, which was running at anganwadi worker's home, was providing hot cooked meal to the children as per weekly menu in addition to ready to eat food. In a study it was seen that children often receive less than the recommended 300 kcal of food and, in some instances; food is also distributed to indigent adults. It is common practice for Anganwadi Helpers (AWHs), and occasionally AWWs, to take home the cooked food rations⁽¹⁾.

Meenal M Thakare⁽²⁾ (2011) reported that supplementary nutrition was being provided in 60.71% of Anganwadi Centers. Likewise in a study by Nidhi Thomas et al⁽³⁾ (2015) provision of supplementary nutrition to the beneficiaries was found inadequate which is similar to the present study.

IMMUNIZATION

In our study 93.33% centers conducted at least one immunization session in a month and vitamin A supplementation sessions were being conducted every 6 months (Table 1). Contrasting results were found in a study in which Seema (2001) reported that 68% of AWCs had not conducted any vaccination camp during Jan-Nov 1997⁽⁴⁾. Meenal M Thakare et al⁽²⁾ in 2011 found that immunization camps were being conducted only in 60.71% of AWCs. This shows that regularity in immunization sessions has improved to a great extent. It may be attributed to firm political commitment and increased awareness among people about immunization.

NON-FORMAL PRE-SCHOOL EDUCATION

In the present study it was found to be imparted to all the attending children on all days except holidays on a very regular basis in 100% of the centers according to the curriculum booklet 'Pahal'. Though the attendance of registered children was found very poor and out of 1306 registered children only 190 (14.55%) were present during the visit with the lowest attendance being 6% and the highest being 50%. On the contrary, Meenal M Thakare et al⁽²⁾ found in their study in 2011 that 40% AWCs were providing NFPSE.

Similar to our study Nidhi Thomas et al⁽³⁾ (2015) reported that while 826 children 0-6 years old were registered in the AWCs, only 93 (11.3%) were found to be attending the Center but none of the AWCs were following the time table in spite of having it. Contrary to our study, Chudasama RK et al (2016) reported that only 14.6% of the AWCs reported 100% preschool education (PSE) coverage among children⁽⁵⁾.

The average duration of ECE activity in our study was found to be 120 minutes/day. Another study was conducted to assess status of early childhood education in Bankura municipality, West Bengal by Samanta S et al⁽⁶⁾ in 2017 which showed that average duration of ECE activity was 66.0 min/day which was far less than the norm. More or less similar finding was there in a study conducted by Qadiri and Manhas⁽⁷⁾ (Srinagar, 2009). Somaiah and Vijayalakshmi⁽⁸⁾ (2007) in their study reported that study duration of preschool in 47% of the centers was <1 hr.

Growth Monitoring and Health Check ups

In our study, 100% centers measured weight of the children at least

once in a month and all of them maintained growth monitoring registers well. Health checkups were being conducted at almost all (96.67%) centers once in 3-6 months with the help of ANM and Medical Officer of that area (Table 1). In contrast to our study, Meenal M Thakare et al⁽²⁾ (2011) reported that health checkups were not being conducted at the studied AWCs. Nidhi Thomas et al⁽³⁾ (2015) reported that growth monitoring of the children was non-existent. None of the AWCs were monitoring the growth of the children. The growth chart registers were available in all these AWCs but they were not maintained. Regular monthly health check-up of the children was done in 4 AWCs out of 9 by the ANMs of the nearby dispensary/health center. So our study has reported a much better growth monitoring activity by the AWWs.

NUTRITION AND HEALTH EDUCATION

This was also being provided to the beneficiaries on a regular basis in our study. All the centers arranged village health and nutrition days once in a month (Table 1). The findings of the present study regarding nutrition and health education are supported by Meenal M Thakare et al⁽²⁾ (2011) who in their reported that 100% AWCs were providing nutrition and health education on a regular basis.

Contrasting results were found in a study conducted in Jammu and Kashmir which revealed that the nutrition and health education (NHE) activity was quite irregular; discussions on growth promotion of children and their better nutrition were neglected. Moreover NHE was restricted to the women in the close vicinity of the AWC and when meetings were held, only 30% women attended such meetings regularly⁽⁹⁾. Nidhi Thomas et al⁽³⁾ (2015) found that 4 out of 9 AWCs organized meetings with mothers and pregnant women of their AWC area but not on a regular basis.

MAINTENANCE OF RECORDS

Maintenance of records was quite fair in the present study. 100% centers maintained registers for survey, immunization, growth monitoring, birth and death and visits. 96.67% centers were maintaining family planning and ANC registers well with 93.33% centers maintaining registers for malnourished children and stock. 83.33% centers maintained referral register (Table 2).

Earlier studies have indicated lesser percentage of record maintenance. Thakare M et al⁽²⁾ (2011) reported that 55% of the AWCs were maintaining records properly as compared to 75.7% in the NITI Aayog report⁽¹⁰⁾ (2015). Study in Jammu & Kashmir (2009) also showed that maintenance of records was poor and the information recorded regarding the attendance and immunization was grossly inaccurate⁽⁹⁾. None of the AWC had any record of the immunization status of the children in the study conducted by Nidhi Thomas et al⁽³⁾ (2015).

CONCLUSION

All the centers were regular in providing NFPSE, weighing children and arranging VHNDs. 80% were providing supplementary nutrition on a regular basis. 93.33% were providing regular immunization service and health checkups were being conducted on a regular basis in 96.67% centers. Maintenance of record was also found satisfactory for most of the registers. ANMs of respective subcenters visited the AWCs on a regular basis. 80% reported visit by supervisors on a regular basis with 83.33% rating the visit by CDPS regular. 86.67% centers informed that the visit by the medical officers was regular.

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