



ASSESSMENT OF INFRASTRUCTURAL FACILITIES & GENERAL FUNCTIONING AT ANGANWADI CENTRES IN THE TRIBAL PROJECT AREAS OF CHAMARAJANAGAR DISTRICT, KARNATAKA INDIA

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ABSTRACT

Introduction: The word "Anganwadi" means "courtyard shelter" in Indian languages. They were started by the Indian government in 1975 as part of the Integrated Child Development Services programme to combat child hunger and malnutrition. ICDS services are provided through a vast network of ICDS centers, better known as Anganwadi Centres. To improve the functioning of Anganwadi centres in tribal areas, it is necessary to evaluate the services. Hence a study was conducted with the objective of assessment of the infrastructure and functioning of anganwadicentres in tribal area of Chamarajanagara district. **Methodology:** A Cross sectional study conducted in tribal project area of Chamarajanagara district during the period from November 2015 to April -2016. 38 functional Anganwadi centers were selected for the study. Data was collected by using a pretested proforma by interview method from the Anganwadi workers. Data thus obtained was coded and entered into SPSS version 22 and analyzed. Data were analyzed by using descriptive statistics, viz. percentages. Results: In relation to Physical Infrastructure out of 38 AWC's, 13(34.21%) is Average and 25(65.78%) is poor. With respect to Equipments & Educational Aids of the 38 AWC's 7(18.42%) were Good and 29(76.31%) Average and only 2(5.26%) was Poor. **Conclusions:** 94.75% of the centres had no outdoor kit, 71.06% of centres had indoor play kit, 5.26% of centres had no chart & poster. 76.32% of centres had scored average in relation to equipments & educational aids. To conclude, First aid, toilet facilities and educational aids for children should be provided.

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INTRODUCTION

Children are the most important resources of our nation. They constitute not only the priority group but they are also a "vulnerable" or "special risk group". The risk is enhanced with growth, development and survival in case of children (Park, 2011). Children aged less than 6 years constitute 13.1% of population in India (www.censusindia.gov.in). With human development becoming focal point of development initiatives, the first step in this direction logically begins with a focus on the problems of child. This is the foundation on which the journey of human development begins. Meeting the nutritional needs of the child is the most significant requirement for

launching humanity on a journey of a satisfactory physical & mental growth (Kapil Umesh, 1997). A study on assessment of infrastructure of Anganwadi centres in the tribal areas can highlight the deficiencies and hurdles faced in the implementation of programme which can help the programme managers & policy makers in improved decision making regarding the programme and the project. In this regard, this study was undertaken with the objectives of assessment of infrastructural facilities at the anganwadi centres in the ICDS tribal project areas of Chamarajanagara district, Karnataka.

Objectives

To assess the infrastructural facilities of the anganwadi centers.

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MATERIALS AND METHODS

This is a Cross sectional study conducted in the Chamarajanagara district in tribal ICDS blocks of Chamarajanagara district, Karnataka during the period from November 2015 to April 2016. . The list of Anganwadi centers from the tribal project were obtained from the Child Development Project Officer, Chamarajanagara District. From the list of 100 Anganwadi centers, only functional Anganwadi centers of 38 were selected for the study by using convenient sampling. Those Anganwadi centers functioning for a minimum period of one year were included. Data was collected using Pre-tested semi-structured questionnaire.

Data was collected by

- Observation of Anganwadi centers and records at the time of visit
- Interviewing Anganwadi workers, Anganwadi helpers and with pre-tested semi-structured questionnaire .The study was approved by the Institutional Ethics Committee, JSS Medical College, Mysore. . Permission was obtained from the Women and Social Welfare Office, Chamarajanagara for conducting the study. Informed written consent was obtained from the Anganwadi workers.Data thus obtained was coded and entered into Microsoft Excel sheet and analyzed using the SPSS version 22. The qualitative variables were summarized using proportions with 95% confidence interval. For quantitative variables mean with standard deviation was used.

RESULTS

Infrastructure and general functioning

Table 1. Distribution of Anganwadi centers according to adequacy of space (n=38)

Space adequacy	Frequency	Percentage
Indoor space		
Adequate	33	86.85
Not adequate	05	13.15
Outdoor space		
Adequate	19	50.0
Not adequate	19	50.0
Kitchen space		
Adequate	29	76.32
Not adequate	09	23.68
Adequate food storage space		
Adequate	31	81.58
Not adequate	07	18.42

Indoor space was adequate in most of the anganwadi centers 33(86.85%). Outdoor space was adequate only in 19(50%) of the Anganwadi centers. Kitchen space was adequate in 29(76.32%) and food storage space was adequate in 31(81.58%) of the Anganwadi centers.

Table 2. Distribution of Anganwadi centers according to availability of basic amenities (n=38)

Amenities	Frequency	Percentage
Toilet		
Available	08	21.05
Not available	30	78.95
Electricity		
Available	32	84.22
Not available	06	15.78

Toilet facilities were available only in 8(21.05%) of Anganwadi centers. Electricity was available in majority of 32(84.22%) of the Anganwadi centers.

Grading of AWC According to Physical Infrastructure

Classification	Frequency	Percentage
Good	0	0
Average	13	34.22
Poor	25	65.78

Most of the Anganwadi centers (65.78%) were having poor infrastructure. Other centers were having average (34.22%) infrastructural facilities.

Equipments and Educational aids for Children

Table 3. Distribution of Anganwadi centers according to the availability of equipments (n=38)

Equipments	Frequency	Percentage
Salter machine		
Available	38	100
Adult weighing machine		
Available	24	63.15
Not available	14	36.85

All the Anganwadi centers were having Salter machine and adult weighing machines were available only in 24(63.15%) of AWC's.

Table 4. Distribution of Anganwadi centers based on number of educational aids (n=38)

Educational aid	Frequency	Percentage
Indoor playing kit		
Available	11	28.94
Not available	27	71.06
Outdoor playing kit		
Available	02	5.26
Not available	36	94.74
Pre-school education kit		
Available	32	84.22
Not available	06	15.78
Chart and poster		
Available	36	94.74
Not available	02	05.26

Indoor Playing kit 27(71.06%) and outdoor playing kit 36(94.74%) were not available among the Anganwadi centers.

Preschool education kit were available in most of the Anganwadi centers 32(84.22%). Chart and posters were available in 36(94.74)% of the Anganwadi centers.

Grading of AWC According to Equipments & Educational Aids (n=38)

Classification	Frequency	Percentage
Good	07	18.42
Average	29	76.32
Poor	02	05.26

Based on the availability of equipments and educational aids 76.32% of the Anganwadi centers were graded average.

Logistics and Food Supply

Table 5. Distribution of AWC according to availability of furniture (n=38)

Logistic facility	Frequency	Percentage
Chair & table for worker		
Available	36	94.74
Not available	02	05.26
Chair & table for children		
Available	00	00
Not available	38	100
Shelf's		
Available	37	97.36
Not available	01	02.64

None of the Anganwadi centers were having tables and chairs for the children. There were tables and chairs for workers in 36 (94.74%) Anganwadis. Majority of the Anganwadi centers 37(97.36%) were having Shelf.

Table 6. Distribution of Anganwadi centers According to Register Maintenance (n=38)

Registers maintained	Frequency	Percentage
Survey	38	100
Pregnant and lactating women service	38	100
Separate child service	38	100
Immunization	38	100
IFA & Vitamin-A	38	100
Birth and death register	38	100
Mothers meeting	38	100
Adolescent girl meeting	38	100
Supervision cum visitor	38	100
Attendance	38	100
Other stock	38	100
Medicine stock	38	100
Food stock	38	100
THRS(Take home ration service)	38	100
Growth chart	38	100

All the Anganwadi centre were maintaining the all types of register and records 38(100%)

Table 7. Distribution of Anganwadi centers According to availability of medicine and drug register (n=38)

	Frequency	Percentage
At least 5 drugs available	38	100
No expired date drugs	38	100
First aid box		
Available	24	63.15
Drug register maintenance	38	100

All the Anganwadi centers were having at least 5 drugs in their centre and they didn't have any expired date medicines 38(100%), 24 Anganwadi centre had first aid box(63.15%) rest of 14 Anganwadi centre didn't have first aid box. All the 38 Anganwadi centre maintained drug register.

Table 8. Distribution of Anganwadi centers According to according to the food supply (n=38)

Particulars	Frequency	Percentage
Regular food supply	38	100
Quantity of food adequate	38	100
No transport problem while food supply	38	100

All the 38 Anganwadi centers were having 100% regular food supply and adequate quantity of food supply and there was no

transportation problem for supplying food to the Anganwadi centers.

Grading of Anganwadis according to Logistics and food supply: (n=38)

Classification	Frequency	Percentage
Good	34	89.48
Average	4	10.52
Poor	0	0

Out of 38 Anganwadis, majority of the Anganwadis 34(89.48%) showed Good performance, 4(10.52%) had Average performance.

Overall Performance of Anganwadi centers for Infrastructure and General Functioning

Total scores for all the variables under infrastructure and general functioning was added and the maximum score calculated was 58

Overall Grading of Anganwadi centers for infrastructure and general functioning. (n=38)

Classification	No.(n=38)	Percentage
Good	0	0
Average	37	97.36
Poor	1	2.64

In majority of Anganwadi centers 37(97.36%), the performance was average and .1(2.63%) Anganwadi scored poor grades for infrastructure and general functioning.

DISCUSSION

Adequacy of space: In the present study, majority 33(86.84%) of the anganwadi Centers had adequate indoor space. Outdoor space was adequate in 19(50%) of the anganwadi Centers. Kitchen space was adequate in 29(76.31%) and food storage space was adequate in 31(81.57%) of the anganwadi Centers. Planning commission report (2011) observed that 71.8% of the anganwadi Centers had adequate indoor space, 55.6% had adequate cooking space and 57.5% of AWC's had adequate storage space². A study by FORCES in Rajasthan (2005) had observed that 58% AWC had inadequate indoor space (The Status of the Young Child in Rajasthan, 2005).

Basic Amenities: In the present study, toilet facilities were available among 8(21.05%) of anganwadi Centers. Electricity was available in majority of 32 (84.21%) of the anganwadi Centers. Drinking water was available in 35(92.10%) of the anganwadi Centers. A study by NCAER (2001) showed that only 17 % AWC had toilet facility (NCAER, 2001). Similarly study by NIPCCD (2006) observed that 41 % of AWC had toilet facility (NIPCCD, 2006). A study from Bihar by N.C. Saxena et al in 2007 showed that 10.7% of AWC's had toilet facility and 6.8 % of AWC's had electricity (Saxena, 2004).

Equipments

All the anganwadi Centers were having Salter weighing machine and adult weighing machines were available only in 24(63.15%) of AWC's. Indoor Playing kit 27(71.06) and Outdoor playing kit 36(94.74) were not available in most of

the anganwadi Centers. Preschool education kit was available in most 32(84.22%) of the anganwadi Centers. Charts and posters were available in 36(94.74)% of the anganwadi Centers. A study on ICDS & Child survival issues in Madhya Pradesh (2009) showed that 72% AWC's had Salter machine and 66 % AWC had adult weighing machine (SANKET, 2009). According to NIPCCD study (2006) 90.71% AWC's had weighing machines and 55.9% AWC's had learning kits (National Institute of Public Cooperation and Child Development, 2006).

Furniture and food Supply

In the present study, all the anganwadi Centers were not having tables and chairs for the children. There were tables and chairs for workers in 36(94.73%) anganwadi Centers. Majority of the anganwadi Centers 37(97.36%) were having shelves. All the Anganwadi Centers had Kitchen utensils like serving vessels and cooking vessels and regular food supply and adequate food supply. Planning commission (2011) observed inadequacy of cooking and serving utensils (www.censusindia.gov.in). A Delhi study by Neenv organization (2006) revealed that 74 % of anganwadis had regular food supply and in 100 % of AWC's supplementary nutrition programme was provided (Rajwir Bhalwar, 2009).

Register Maintenance: In the present study all the anganwadi Centers were maintaining the 14 types of register and records 38(100%). Vijayanti et al in 2011 noted that in Bengaluru 99% of anganwadi workers maintained staff attendance register, 98% maintained stock register and only 31 % maintained children service register (Vijayanti, 2010).

Availability of Medicine: In the present study 24 anganwadi centre had first aid box (63.15%) and rest of 14 anganwadi Centers were not having first aid box availability. N.C.Saxena et al (UNICEF 2007) observed that only a meager proportion, 4.9 % AWC's had medicine kits (Saxena, 2004).

Overall Performance

In majority of anganwadi Centers 37(97.36%), the performance was average and 1(2.63%) anganwadi scored poor grades for infrastructure and general functioning. In a study by Vijayanthi et al (Bengaluru 2001), 45% of Anganwadi's showed good performance, 26% average and the rest 28% poor performance (Vijayanti, 2010).

Summary & Conclusions

Indoor space was adequate in 33(86.85%) AWC's. Kitchen Space was Adequate in 29(76.32%) while Food storage Space was Adequate in 31(81.58%). Outdoor facility for playing was available only in 2(5.26%) of AWC's. The basic amenities like toilets were available only in 8(21.05%) of AWC's. 32 (84.22 %) of AWC's had electricity supply. Drinking water supply was available in 35(92.10%) of AWC's. 25 (65.78%) of the AWC's showed poor performance followed by 13 (34.22%) of AWC with average performance and none of the Anganwadi center shows good grading. Salter weighing machine was available in all Anganwadis but adult weighing machine was available only in 24(63.15%) of AWC's. Less Number of AWC's had at least 3 types of indoor playing kits 11(28.94%). Outdoor playing kits were available only in 2(5.26%) of AWC's and at least 3 types of preschool educational kits were

available in 32(84.22%) of AWC's, 36(94.74%) AWC's had either poster-charts or picture- story books. 29(76.32%) of AWC's showed average performance followed by 7(18.42%) with good performance and only 2(5.26%) of AWC's with poor performance for equipments and educational aids for children. Chair and table for workers were available in 36(94.74%) Anganwadi centers but none of the AWC's had chairs and tables for children. Majority of AWC's 37 (97.36 %) had shelf for keeping registers/ equipments. Kitchen utensils like serving vessels and cooking vessels were available in all AWC's. AWW's report that frequency of supply of food is regular and adequate in AWC's. All the AWC's maintained at least 10 out of 14 registers. At least 5 medicines were available only in all the AWC's. 34(89.48%) showed Good performance, and only 4(10.52%) of Anganwadi centers had Average performance for logistic facilities. Anganwadi center got average 34(89.47%) grade for other activities followed by good grades is only 1(2.63%) There were 3(7.90%) Anganwadi center with poor grades. In terms of Overall performance in infrastructure were 37(97.36%) showed average performance and 1(2.64%) good performance. none of the AWC'S had Good Performance.

Limitations

- The perception of CDPO and supervisors on problems and issues in provision of services to 3 to 6 years old children was not assessed.
- Qualitative assessment by focus group discussion with ICDS functionary and beneficiaries was not done.

Recommendations

- Measures should be taken to provide toilet and wash facilities to all anganwadi centers.
- Local resources and cost effective play materials like paint/brushes, dolls, animal/fruit/vegetable cards or play kits made by the AWW itself can be used to facilitate the preschool education activities.
- CDPO's have to make regular supervisory visits to monitor the activities.
- Indoor and Outdoor preschool education activities like writing, threading, painting/brushing, paper cutting /folding, ball throwing and swing need to be included in all anganwadi centers to have an enabling environment for the development of children

REFERENCES

- Park K. Park's Text Book of Preventive and Social medicine (2011), Edition 21.M/s Banarsidas. Bhanot Publishers, 1167, Prem nagar, Jabalpur, India.
- Kapil Umesh, Saxena N, Nayar D. ICDS scheme - A programme for Maternal health and Child Development. *Indian Journal Public Health* 1997; 36:93-99.
- The Status of the Young Child in Rajasthan: A Study by FORCES- FORCES (Forum for Creche and Child Care Services), New Delhi, Delhi. (2005).
- National Council of Applied Economic Research (NCAER) 2001. "Concurrent Evaluation of Integrated Child Development Services, 1998", National Report, volume-1, New Delhi.
- SANKET - Centre for Budget Studies and Right to Food Campaign Madhya Pradesh Support Group, 2009.

- “Moribund ICDS, A Study on the ICDS and Child Survival issues in Madhya Pradesh”
- Rajwir Bhalwar Textbook of public health and community medicine Department of Community medicine ,Armed Forces medical college, Pune with WHO India office New Delhi (2009) 1st edition.
- National Institute of Public Cooperation and Child Development (NIPCCD) 2006. “National Evaluation of Integrated Child Development Services”, New Delhi.
- Saxena, N.C. 14-17 March 2004. “Review of ICDS Programme in Bihar”. www.righttofoodindia.org/data/biharicdsreviewmarch04.pdf.
- K.Vaijayanti March 2010 Analysing the ICDS anganwadi centres in Bengaluru. Akshara preschool programme supported by DELL foundation.
- www.censusindia.gov.in . accessed on 12-10-2012
