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CHILD CARE SERVICES FOR THREE TO SIX YEARS OLD CHILDREN IN URBAN ANGANWADI'S IN KOZHIKODE CORPORATION IN KERALA -AN EVALUATION STUDY

Sivakumar¹, Thomas Bina², Deepika³

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Author's Affiliation:

¹Assistant Professor, Community Medicine, Meenakshi Medical College, Kanchipuram; ²Professor & Head, Community Medicine, Kozhikode Medical College, Kozhikode; ³Medical Officer, District Hospital

Correspondence:

Dr.Sivakumar D E mail: kumarsiva2010@yahoo.com

Date of Submission: 19-05-15 Date of Acceptance: 17-08-15 Date of Publication: 30-09-15 **Introduction:** Integrated Child Development Services is the largest national programme for the development of mothers and children in the world. The services are rendered through Anganwadi worker (AWW) at Anganwadi centre (AWC). An evaluation study is carried out to assess the services provided by the anganwadi centres to 3 to 6 year old children in Urban ICDS blocks in Kozhikode Corporation to study the shortcomings in implementation, improving the services and in decision making of the programme.

ABSTRACT

Methods: A cross sectional descriptive study was carried out in 4 urban ICDS blocks in Kozhikode. Data was collected using pretested semi structured questionnaire and by observation of anganwadi centres and records at the time of visit and interviewing anganwadi workers and anganwadi helpers.

Results : Among 117 anganwadi centres, 73(62.4%) of AWC's provided average services to 3 to 6 year old children , only 26(22.2%) of centres provided good services and 18 (15.4%) of AWC's with poor performance needs to be targeted for improvement .

Conclusions: There is a need for effective coordination between the health functionaries and the anganwadi workers in immunisation, growth monitoring, health checkups and referral services, nutrition and health education.

Key words: Supplementary nutrition, Preschool education, Health checkups, Referral services, Immunisation, Health education

INTRODUCTION

"The lives of children are the important indicators for the development of communities and nations, the health of the youngest and most vulnerable are vital to nations economy, hence special programmes were launched in India for these under 6 years who constitutes 13.1 % of population in India¹.Various national programmes launched for health of children such as, mid day meal (1962-63), Balwadi –community child care centre (1970-71) and Special nutrition programme (1970-71), Integrated Child Development Services (ICDS) scheme (1975).

ICDS is the largest national programme for the development of mothers and children. The bene-

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ficiary includes children less than 6 years , pregnant and lactating mothers ,women in the age group between 15 -44 years. The package of services provided by ICDS scheme includes Supplementary nutrition & Growth monitoring, preschool education, Immunisation, Health checkups, referral and Nutrition and Health education services. The services are rendered through Anganwadi worker (AWW) at Anganwadi centre (AWC).

ICDS has expanded remarkably in its scope and coverage, and today it covers around 33.738 million children between three to six years of age, 39.871 million children between 6 months to three years, 18.047 million expectant and nursing mothers². In Kerala, it covers around 4,64,249 children between three to six years of age and 4,21,540 children between 6 months to 3 years and 1,95,927 pregnant and lactating mothers ². A number of studies on evaluation of ICDS centres are available but there is a scarcity of studies regarding the functioning of urban ICDS blocks .In Kerala there are 11 urban ICDS blocks functioning of which 5 are in Kozhikode, so an evaluation study was undertaken to improve the childcare services at urban areas in Kozhikode.

METHODS

A cross sectional descriptive study was carried out in 4 urban ICDS blocks in Kozhikode city. Using Simple random sampling method sample size of 117 anganwadi centres were selected from total 543 anganwadi centres in Urban Kozhikode Corporation. Keeping in view of prevalence of average and below average anganwadis in a study in Bangalore city by Vaijayanthi et al in 2010 noted as 54%, a confidence level of 95%, absolute precision of 9.2%, a sample size of 117 anganwadi centres was calculated¹⁴. Data was collected over a period of one year from July 2012 to June 2013. Ethical clearance was obtained from institutional ethics committee and relevant permission from Social welfare department in Kerala. Using various tools for data collection which included pretested semi structured questionnaire and by observation of anganwadi centres and records at the time of visit and interviewing anganwadi workers and anganwadi helpers. An ad hoc - scoring system for services was devised and the AWC's were graded. The Anganwadi centres that have achieved more than 75% of scores were graded as Good, 50 to 75% as Average and less than 50% as poor. Data entered in MS excel and analysed using SPSS Software.

RESULTS

A total of 117 anganwadi centres were selected from 543 anganwadi centres in Urban Kozhikode Corporation. Out of 117 urban anganwadi's, majority of the anganwadi's 100(85.47%) covered a population of 800-1600, in 10 (8.55%) had more than 1600 population and Only 7(5.98%) anganwadis covered a population of less than 800.

The total number of children 3 to 6 years in urban locality was 4517. Around 2325 (51.5 %) were registered in anganwadi centres out of 4517 three to six years old children in the locality of which 1159 (49.84%) were boys and 1166(50.16%) were girls. However only 1535 (66.02%) were utilised services against the registered 2325 three to six year old children. The results are discussed based on the package of services provided by ICDS scheme includes Supplementary nutrition & Growth monitoring, preschool education, Immunisation, Health checkups, Referral and Nutrition and Health education services.

It was observed that most of the anganwadi centres, (82.1%) had more than75% attendance of enrolled children for Supplementary Nutrition Programme. In all the anganwadi's food is prepared in the centre itself .Take home food is not given to the children .The model menu supplies total calories-500 kcal and total protein - 12.15 gm to children as per norms. There is no irregularity in food supply. The mean duration of feeding days in last one year was noted to be 268.85(± 3.33) days which was lesser than the ICDS norms.

About (72.6%) of anganwadi's had more than 80% attendance of enrolled children for Preschool Education .The mean time spent in preschool activity was 2.28(±0.412)hours. In the present study, at least 3 or more types of language activities and Small activities like rhythmic movements, dramatisation was conducted in all the anganwadi's. Lesser number of indoor play activities and outdoor play activities were noted as shown in table 1. Natural walk, outings, field trips were not conducted in any of the anganwadi's. Language activities like storytelling, songs and rhymes were conducted in all anganwadis but writing was conducted only in (57.3%) of anganwadi centres. Similarly among anganwadi centres (117), indoor activities noted were drawing & painting (35.9%), paper cutting-folding (38.5%), threading (59.8%) respectively. About (58.9%) had outdoor activities like ball/swing.

Table 1: Major Preschool Education activity con-ducted in anganwadis

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| Preschool education activity | n=117 (%) |
|----------------------------------|-----------|
| Language activities ≥ 3 | 117 (100) |
| Indoor play activities ≥ 3 | 46 (39.3) |
| Outdoor play activities ≥ 3 | 13 (11.1) |
| Small activities | 117 (100) |
| Outings | 0 (0) |

In the present study among 1535 children , there were no Unimmunised children in anganwadi centres , the coverage of fully Immunised children was 1258(81.95%) and partially immunised children was 277(18.05%). The coverage of DPT 3 doses was 88.9%, the OPV 3 doses was 88.9% and the measles coverage was 85.9% as shown in Table 2. Vitamin A was not given to any of the children during last 1 year in anganwadi centres as shortage of Vitamin A was reported by state administration and it was not available.

Table 2: Vaccination Status of Children

| Immunisation | No. of children (n=1535) (%) |
|-----------------------------|------------------------------|
| BCG | 1535 (100) |
| DPT (3Doses) | 1365 (88.93) |
| OPV(3Doses) | 1365 (88.93) |
| Measles | 1320 (85.99) |
| DPT 1 st booster | 1197 (77.98) |

In this study out of 1535 children, 276(17.98%) of children were moderately underweight and 30(1.95%) were severely malnourished as per the WHO Growth chart. In (72.6%) of anganwadi centres, more than 80% of enrolled children were weighed monthly. The growth registers were maintained regularly for all the children in all the centres.

The average number of health checkups conducted in a year was noted to be 9.41 (\pm 2.934). The ranges was 4 to 12. In (86.3%) of anganwadi centres had more than 6 health checkups during last 1year. For health checkups, in (52.1%) of anganwadis, health workers made monthly visits and in (47.9%) they made 3 monthly visits .In (46.15%) of anganwadis there were monthly or 3 monthly visits by medical officer and in (53.85%) visits were infrequent. In (69.2%) of anganwadi's had more than 80% coverage of enrolled children for health checkups during last 3 months.

Almost all the anganwadi's have a practice of referring children to sub centre or urban health centre or district hospitals. Among 117 anganwadi worker's, 36(30.8%) and 56(47.9%) of workers have referred to medical college and private hospitals respectively too. More than nine sessions were conducted only in (24.8%) of anganwadi centres and (75.2%) of the anganwadi's conducted 5-9 health education session during last one year. The mean number of health education session was noted to be $7.68(\pm 2.188)$. The average attendance of women at the health education sessions was $18.51(\pm 7.848)$. Only 10.96% of women between 15-45 years in the area attended the session. The average number of sessions in which health personnel participated was noted to be 3.74 (±0.675). On an average 48.18% of the session was conducted by the health personnel. Some of the topics discussed were prevention of malnutrition, common childhood disease / ARI, growth monitoring, safe drinking water, diarrhoea prevention, breast feeding, immunisation, complementary feeding, hygiene and sanitation, complementary feeding .In all the AWC's more than 6 topics were discussed during last one year.

Based on scoring the results of provision of services to 3 to 6 years old beneficiary children, the grading of anganwadi centres is shown in figure 1. Among 117 anganwadi centres, 73 (62.4%) of AWC'S provided average services to 3 to 6 year old children whereas only 26 (22.2%) of centres provided good services. 18 (15.4%) of anganwadi's with poor performance needs to be targeted for improvement.



DISCUSSIONS

Similar to our study findings, the NCAER report (2001 India) showed that 60% of the children were noted to be enrolled in the anganwadis ³. The NIPCCD study (2006 India) showed that 63% of the eligible children were enrolled in AWC's and out of these 75% were availing benefits ⁴. The

Pratichi child report (West Bengal 2009) noted 50 % attendance among eligible children ^{5.}

Similar findings were by noted in Delhi study (Neenv in 2006) with 100% of the centres providing supplementary nutrition ⁶. In contrast to the present study, Arundathi dhuru etal in Uttarpradesh reported that only 23% of AWC's had regular Supplementary Nutrition Programme ⁷. According to the Moribund ICDS – study on child survival issues by Vikas Samvat, Sanket et al (In Madhya Pradesh 2009), cooked meals were given only in 28% of anganwadi centres ⁸.

A study by Seema et al (Kerala 2001) noted that in only 53% of anganwadis story telling was conducted, and 60% of centres undertook painting⁹.

Immunisation coverage is similar to DLHS-3 study (Kerala) where 79.6% were fully immunised, 19.9% were partially immunised and only 0.5% were unimmunised ¹⁰.The present study reveals a higher proportion of fully immunised children (81%) as compared to DLHS-3 data of Kozhikode (65%) ¹⁰. Our findings are similar to DLHS-3 (Kerala) where coverage of DPT 3 doses was 87.1%, the OPV 3 doses was 86.6 % and the measles coverage was 87.9%¹⁰

DLHS -3 in Kerala noted that 35.8% among children between 0-6 years were moderately under weight and 9.3% were severely malnourished. In Kozhikode 46.6% children were moderately under weight and 18.7% were severely malnourished ¹⁰ which was higher than the present study.

In contrast to present study Health checkups in Orissa was irregular based on a study -gram sabha for social audit of ICDS programme (2007) by Adhar ¹¹ and a study on human development in India –challenges for a society in transition in Madhya Pradesh in 2009 (WHO and UNESCO) showed that health checkups and referral services was the weakest link of ICDS ¹². A Study by Dayanandh singh etal (Rajasthan 2013) noted that referral services were received from 30% of anganwadi workers ¹³. A study by Seemetal (Kerala 2001) showed that 63% of AWC's were not visited by medical officer ³ as similar to our findings.

Similar to the present study low percentage of attendance of women was noted in Jammu and Kashmir study (2009 PRC) -35% ³ and ICDS study (UP) - 5 % ⁷

CONCLUSION

The study revealed that in majority of anganwadis the performance of services provided to 3 to 6 year's old beneficiary children in urban Integrated Child Development Services blocks in Kozhikode Corporation was noted to be average. The supplementary nutrition services provided under Anganwadi centres is noted to be as per Integrated Child Development Services norms and there is no irregularity in food supply. But low enrolment and attendance of the children for SNP is a drawback. There was not much variety in food items served in Anganwadis. Under non-formal Preschool education services more emphasis is being on language activities whereas indoor and outdoor play activities are less. Majority of the AWC's showed average performance in relation to immunisation services. A few partially immunised beneficiaries in the AWC's are notable finding. Health checkups were mainly conducted by the female health workers and with lesser involvement of Medical officers. Though Growth chart monitoring and maintenance were regular, presence of malnourished beneficiaries are noted which suggests lack of timely intervention .This may be linked to the fact that the attendance of women in nutrition and health education sessions were noted to be low. The practice of referral services in AWC'S was found to be satisfactory. Based on scoring and grading more attention needs to be given to Preschool education, health checkups and nutrition &health education. According to mother's perception health checkups and health education services were poor. There is a need for effective coordination between the health functionaries and the anganwadi workers in immunisation, growth monitoring, health checkups and referral services, nutrition and health education.

REFERENCES

- Child population in the age group 0-6years. Available at: http:// www.census India .giving.// html. Accessed October 12th, 2012.
- 2. Statewide number of beneficiaries under ICDS scheme. Available at: http://www.wcd.nic.in/NAP aug16A.pdf.html. Accessed October 12th, 2012.
- 3. National Council of Applied Economic Research, Concurrent Evaluation of Integrated Child Development Services, Volume1.New Delhi: NCAER; 2001.p72.
- National Institute of Public Cooperation and Child Development, National Evaluation of Integrated Child Development Services, Volume 1. New Delhi: NIPCCD; 2006. p114.
- Partech trust, The Pratichi child report A Study on the delivery of ICDS in West Bengal, Edition 1.West Bengal: Pratichi trust; 2009.p4.

- ICDS in Delhi: A reality check- FORCES Delhi (Neenv), 1st edition. Newdelhi: ICDS; 2007. p12
- ICDS in Uttarpradesh, An abandoned vehicle, 1st edition. Uttarapradesh: ICDS; 2009.p38.
- SANKET Centre for budget studies and Right to food campaign, Moribund ICDS, A Study on the ICDS and child survival issues, Volume1.Madhya Pradesh: ICDS; 2009.p14.
- Kerala research programme on local development centre for development studies, Performance of anganwadi centre's in Kerala an evaluation and experiment to develop a model centre with community participation, Volume 1.Trivandrum: 2001.p28.
- International Institute for Population Sciences, District level household survey (DLHS-3), Volume3. Newdelhi: MOHFW; 2007-08. P94-95.

- ADHAR, Report on Gram sabha for social audit of ICDS programme in Ratakhandi Gram panchayat of Losingha block Dist -Bolangir, Odisha, edition 1. Orissa: ADHAR;2007.p18.
- WFP & UNESCO, Human development in India: challenges for a society in transaction, volume1. Newdelhi: UNESCO; 2007. p234.
- Dayanand singh etal .An assessment of performance of anganwadi workers of Jaipur zone, Rajasthan: A crosssectional study. NatJ Community Med . 2013; 4(4): 613-617
- 14. DELL foundation,,Analysing the ICDS anganwadi centres in Bengaluru,edition 1.Bengaluru :DELL ; 2010.p1