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Original Research Article

Assessment of basic infrastructure in anganwadi centres under integrated child development services scheme in district Amritsar of Punjab

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ABSTRACT

Background: In India, Integrated Child Development Services (ICDS) Scheme was launched on 2nd October, 1975. The aim was to provide pre-school non-formal education on one hand and breaking the vicious cycle of malnutrition, morbidity and mortality among mothers and children on the other hand. An anganwadi is the focal point for the delivery of services to the community. Hence, the current study was planned to assess the basic infrastructure in AWCs of Punjab.
Methods: A total of 400 anganwadi workers (AWWs), 200 each from rural and urban areas were randomly selected for the study. A pre-designed, pre-tested proforma was administered to selected AWWs. The purpose of the study was explained to them. The data was compiled and analysed by using SPSS 20.0 version.
Results: It was observed that out of 400 anganwadis, only 24% of anganwadis had their own allotted building. Only 42% anganwadis had functional Salter weighing machine with them. Weighing machine for adults and children in working condition was available in only 38.2% anganwadis. Nearly half of the anganwadis (50.8%) do not have electricity connection. Water supply was found to be available in 53% anganwadis only. 77.5% anganwadis got regular supply of ration. But utensils for distributing ration were present with only 65.2% anganwadis and 69.3% anganwadis had helper to assist anganwadi worker.
Conclusions: Adequate infrastructure along with regular supply of ration need to be ensured for proper functioning of anganwadis.

Keywords: Anganwadis, Assessment, Infrastructure, Punjab

INTRODUCTION

In India, as a symbol of country's commitment to its children and nursing mothers and in pursuance of National Policy for Children, Integrated Child Development Services (ICDS) Scheme was launched on 2nd October, 1975. The aim was to provide pre-school non-formal education on one hand and breaking the vicious cycle of malnutrition, morbidity and mortality among children on the other hand. The beneficiaries under the programme are 0-6 years children, adolescent girls, pregnant and lactating mothers and mothers in the reproductive age.[1]

An anganwadi is the focal point for the delivery of services to the community. Each anganwadi is run by anganwadi worker supported by a helper to provide integrated service delivery and to improve the linkage

with the health system. The scheme is operational in 13.46 lac anganwadis throughout the India.[1]

In spite of the big infrastructure under the scheme, the nutritional status of the women and children remains almost same as of previous years.[2] Nearly half of the preschool children (50.3%) have been found undernourished whereas as much as 60% are stunted.[3] Nearly 80% of the children and 40% of pregnant women are suffering from anaemia in Punjab.[4] An assessment of infrastructure available at various anganwadi centres in Delhi have shown that only 71% anganwadis had weighing machines. More than 80% anganwadis did not have toilet facility.[5] Poor infrastructure availability can hamper the routine activities in anganwadis. Therefore, the current study was planned to assess the basic infrastructure in anganwadi centres of Punjab.

METHODS

There are 1850 anganwadis in the District of Amritsar. A training of all AWWs was held in the Department of Community Medicine of Sri Guru Ram Das Institute of Medical Sciences and research, Sri Amritsar in May 2014 to June 2014. A total of 1650 AWWs reported for the training. By adopting convenience sampling, 400 AWWs, 200 each from rural and urban areas were randomly selected for the study. A pre-designed, pre-tested proforma was used for the study. Pilot testing was done before the start of the study and required changes were made. The proforma was administered to selected AWWs. The purpose of the study was explained to them. The data was compiled and analysed by using SPSS 20.0 version.

RESULTS

Table 1 showed that a large majority of anganwadis (94.7%) were placed in pucca or semi-pucca house. But, out of 400 anganwadis, only 24% of anganwadis had their own allotted building, other 143 (35.7%) were situated in a gurudwara/ panchayat ghar or a vacant house and 161 (40.2%) are working in rented building.

Table 1: Status of building of anganwadis.

Building	Rural n=200 (%)	Urban n=200 (%)	Total n=400 (%)
Pucca/ semi-pacca	186 (93.0)	193 (96.5)	379 (94.7)
Gurudwara/ Panchayat Ghar/ vacant house	75 (37.5)	68 (34.0)	143 (35.7)
Rented	88 (44.0)	73 (36.5)	161 (40.2)
Alloted building	37 (18.5)	59 (29.5)	96 (24.0)

Table 2: Provision of weighing machines in aganwadis.

Facility	Rural n=200	Urban n=200	Total n=400	OR (CI)	P value
Salter weighing scale	147 (73.5)	119 (59.5)	266 (66.5)	1.89 (1.24-2.9)	0.003
If yes, working	83 (41.5)	85 (42.5)	168 (42.0)	0.96 (0.6-1.4)	0.83
Bathroom (adult) weighing scale	117 (58.5)	126 (63.0)	243 (60.7)	0.82 (0.6-1.2)	0.4
If yes, working	63 (31.5)	90 (45.0)	153 (38.2)	0.56 (0.4-0.8)	0.006

Table 3: Provision of electricity, water supply and toilet facility in anganwadis.

Facility	Rural n=200	Urban n=200	Total n= 400	OR (CI)	P value
Electricity	91 (45.5)	106 (53)	197 (49.2)	0.74 (0.5-1.10	0.134
Water supply	106 (53.0)	103 (51.5)	209 (52.2)	1.06 (0.7-1.6)	0.76
If Yes, source of water					
Hand pump	40 (20.0)	52 (26.0)	92 (23.0)		
Piped supply	48 (24.0)	39 (19.5)	87 (21.7)		
Submersible pump	18 (09.0)	12 (06.0)	30 (07.5)		

Table 4: Provision of regular supply of ration and resources for cooking and distributing ration.

Facility	Rural n=200	Urban n=200	Total n=400	OR(CI)	P value
Regular supply of ration for the past 3 months	147 (73.5)	163 (81.5)	310 (77.5)	0.63 (0.4-1.0)	0.056
Utensils	126 (63)	135 (81.5)	261 (65.2)	0.82 (0.5-1.2)	0.34
Helper	134 (67)	143 (71.5)	277 (69.3)	0.80 (0.5-1.2)	0.32

Table 2 depicted that 66.5% anganwadis had salter weighing machine, but less than half of the anganwadis i.e. 42% (41.5% in rural and 42.5% in urban) had functional Salter weighing machine with them. Among

rest of the anganwadis, 33.5% anganwadis did not have salter weighing machine at all and 24.5% of all had it in non-functional condition. There is no significant difference in urban and rural anganwadis as for as working salter machine is concerned (p=0.83).

Weighing machine for adults and children was present in only 58.5% anganwadis in rural areas and 63% anganwadis in urban areas. But weighing machine in working condition was present in only 38.2% anganwadis. Rural anganwadis were less likely to have working weighing machine in comparison to urban anganwadis (OR=0.56, p=0.006).

Table 3 showed that nearly half of the anganwadis i.e. 54.5% in rural areas and 47% in urban areas did not have electricity connection. Water supply was found to be available in 53% anganwadis in rural areas and 51.5% anganwadis in urban slum areas. There was no significant difference in rural and urban ananwadis. Piped water supply was available for 21.7% anganwadis whereas other 23% and 7.5% anganwadis were using water from hand pump and submersible pump respectively.

Table 4 showed that 73.5% anganwadis in rural areas and 81.5% anganwadis in urban areas got regular supply of ration. But utensils for distributing ration were present with only 63% and 81.5% anganwadis in rural and urban areas respectively. Only 67% rural anganwadis and 71.5% urban anganwadis had helper to assist anganwadi worker. There is no significant difference in rural and urban anganwadis.

DISCUSSION

In the present study, 400 anganwadi workers, two hundred each from rural and urban areas were enrolled for the study to get information regarding basic infrastructure in the anganwadis. It was observed (Table 1) that a large majority of anganwadis (94.7%) were working in pucca or semi-pucca house. In a similar study conducted in Gujarat showed that 73.3% anganwadis were working in pucca buildings.[6] In the present study, very few i.e. 24% anganwadis had their own allotted building. The figure was 29.5% for urban areas but 18.5% for rural areas. Other 161 (40.2%) anganwadis had rented building and 143 (35.7%) were situated in a gurudwara/ panchayat ghar or a vacant house. A study conducted in rural field practice area of Banglore Medical College showed that 81% anganwadis were functioning in their own allotted buildings, 4.8% were functioning in rented premises and remaining 14.2% were functioning in non-allotted government buildings like school or punchayat building.[7] These findings indicate that situation is worse in Punjab as regards to availability of building for anganwadis.

Table 2 depicted that salter weighing machine for infants was available in 266 (66.5%) anganwadis but only 42.0% anganwadis had this machine in working condition. There is no significant difference in rural and urban anganwadis as far as availability of working weighing machine is concerned. Similarly 243 (60.75) anganwadis had adult weighing machine with them, but the machine was in working condition in only 58.5% anganwadis. The availability of working weighing machine was found to be higher in urban areas (45%) in comparison to rural areas (31.5%) and the difference was statistically significant (p=0.006). A study conducted in Aurangabad city also showed that weighing machine was present in 93% of anganwadis but 86% anganwadis had weighing machines in working condition.[8] In delhi, weighing machine was present in 71% of anganwadis.[5]

Table 3 showed that nearly half (49.2%) of the anganwadis (54.5% in rural areas and 47% in urban areas) did not have electricity connection and the findings are in congruence with a similar study conducted in Aurangabad city.[8] Water supply was present in 53% anganwadis in rural areas and 51.5% anganwadis in urban slum areas. Whereas, a national analysis of anganwadis in the country showed that 86.3% of Anganwadis had safe water supply reflecting poor infrastructure in anganwadis of Punjab.[9]

Table 4 showed that 73.5% anganwadis in rural areas and 81.5% anganwadis in urban areas got regular supply of ration. But utensils for distributing ration were available with only 63% and 81.5% anganwadis in rural and urban areas respectively. Only 67% rural anganwadis and 71.5% urban anganwadis had helper to assist anganwadi worker. A study in Aurangabad showed that all anganwadis had continous nutrition supply showing the poor performance of anganwadis in Punjab.[8]

CONCLUSION

It has been observed that infrastructure in majority of anganwadis in Amritsar district of Punjab is poor. The main objective of ICDS programme is to assess and prevent malnutrition which is not feasible without the provision of weighing machines in working condition. Regular supply of ration also needs to be ensured with provision of infrastructure required.

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Ethical approval: The study was approved by the Institutional Ethics Committee of Sri Guru Ram Das Institute of Medical Sciences and Research, Amritsar

REFERENCES

1. Government of India. Ministry of women and child development. Integrated Child Development Services Scheme. Available at: http://icds-wcd.nic.in/icds/icds.aspx. Accessed on 17 December 2016.
2. Kishore J. National Health Programmes of India. Nutrition Programmes. 10th Ed. Century Publications. New Delhi; 2012: 439-464.

3. Laxmaiah A, Rao KM, Brahmam GNV. Diet and nutritional status of rural preschool children in Punjab. Indian Pediatr. 2002;39(4):331-8.
4. Bhatia M. Hunger and under-nutrition in green revolutionary state of Punjab. Int J Agriculture Food Sci Tech. 2013;4(4):359-70.
5. Malik A, Bhilawar M, Rustagi N, Taneja DK. An Assessment of facilities and services at Anganwadi centers under the Integrated Child Development Service scheme in Northeast District of Delhi, India. Int J Quality Health Care. 2015;27(3):201-6.
6. Debata I, Anand P, Ranganath TS. A study to assess availability of basic infrastructure of anganwadi centres in a rural area. Int J Community Med Public Health. 2016;3(8):1992-7.
7. Chudasama RK, Patel UV, Verma PB, Vala M, Rangoonwala M, Sheth A, et al. Evaluation of Anganwadi centres performance under Integrated Child Development Services (ICDS) program in Gujarat State, India during year 2012-13. J Mahatma Gandhi Inst Med Sci. 2015;20(1):60-5.
8. Thakare MM, Kuril BK, Doible MK, Goel NK. A study of functioning of anganwadi centres of urban ICDS block of Aurangabad city. Indian J Prev Soc Med. 2011;42(3):253-8.
9. Government of India. NITI AAYOG Programme Evaluation Organisation. A Quick Evaluation Study of Anganwadis Under ICDS. June 2015. Government of India. New Delhi; 2015.

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