

Original Article

AN ASSESSMENT OF PERFORMANCE OF ANGANWADI WORKERS OF JAIPUR ZONE, RAJASTHAN: A CROSS-SECTIONAL STUDY

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ABSTRACT

Background: - Integrated Child Development Service (ICDS) is India's response to the challenge of meeting the holistic needs of children below six years of age, adolescent girls expectant and nursing mothers through the network of *Anganwadis*.

Objectives: - To assess the performance of Anganwadi Workers of Jaipur Zone (Rajasthan) India.

Materials and Methods:- 8 AWCs were selected from each of the 5 Zones of Jaipur. So, total 40 AWCs were included in the present survey. Performance of each of the AWW from identified AWCs was assessed as per the 'Form no. (4) to (6) of ICDS. Performance of various districts and various activities were analyzed with chi-square/ANOVA/Post-Hoc wherever applied

Results: - Average mean time opening of AWCs of Jaipur zone was 18.8 minutes less than the ideal duration of 240 minutes per day. 81.67% mothers received supplementary nutrition distribution for their children of 0-3 years and 61.67% for themselves. 67.50% mothers received Vit-A doses from the AWCs for their children. 58.33% mothers received IFA syrup/tab for their children and 52.18% received IFA for themselves. But only 14.17% mothers mentioned that they had received health check-up for the children.

Conclusion: - Although HNE and distribution of supplementary nutrition was observed excellent but Services for adolescent girls were not at all proper.

Keywords: Anganwadi, Integrated child development Scheme, Nutrition, Education

INTRODUCTION

Integrated Child Development Service (ICDS) is India's response to the challenge of meeting the holistic needs of the child, launched Initially in 33 blocks (5th Five year plan), on October 2, 1975. ¹ Government of India with partnership of the international agencies like UNICEF, CARE and WFP provides a package of services to children below six years of age, adolescent girls, expectant and nursing mothers through the network of *Anganwadis*.¹

The package of services provided by Anganwadis are Supplementary nutrition (SNP), Non-formal pre-school education (PSE), Immunisation, Health check-up, Referral services and Nutrition and Health Education (NHE).

Out of these six, three services viz. immunisation, 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, the responsibility of coordination with the health functionaries for provision of other services rests with the *Anganwadi* worker (AWW).

MATERIALS AND METHODS

This Cross-sectional study was done at Anganwadi Centres of Jaipur Zone in year 2012. Jaipur zone has five districts namely Jaipur, Dausa, Alwar, Jhunjhunu and Sikar. Stratified random technique was done to select the Anganwadi centres. From each of the district five Anganwadi centres were selected in a way to

represent the whole district. From each of the district one CHC was selected randomly and then from selected Community Health Centre, two Primary Health Centres were selected randomly. Now from each of district to have good representation of district, one Anganwadi centre (AWC) was selected from district head quarter(HQ), then one from CHC HQ, three from each of selected PHC. These three AWCs from each of selected PHCs were like; one from PHC HQ, another was nearest to PHC and other one was farthest to PHC. Likewise eight AWCs were selected from each of district thus total 40 AWCs were included in the present study. Performance of Anganwadi workers (AWWs) was assessed by asking randomly selected 3 pregnant women, 3 lactating mothers, 3 mothers of 0-3 year's children, 3 mothers of 3-6 years children and 2 adolescent girls as beneficiaries from each of selected AWC. So total 120 pregnant women, 120 lactating mothers, 120 mothers of 0-3 year's children, 120 mothers of 3-6 years children and 80 adolescent girls as beneficiaries were asked about the services given by AWW of that area. The performance was asked and judged according to forms of ICDS i.e. for pregnant

and lactating women **Form No. 6**, for children 0-6 years **Form No. 6** where respondent was mother of the child and for adolescent girls **Form No.4**. Data thus collected were compiled, analyzed with Primer version 6. To find out significance of difference in proportion chi-square test and to find out significance of difference in means ANOVA test was used. For Significance p value equal to or less than 0.05 was considered significant.

RESULTS

Average mean time opening of AWCs of Jaipur zone was 221.2 minutes per day which was 18.8 minutes less than the ideal duration set by ICDS for AWCs i.e. 4 hours (240 minutes) per day. Maximum time was spend on preparation and distribution of SN (83.4 mins) followed by PSE (50.8 mins); remaining time was spend in other activities like updating records, cleaning utensils etc. Variation in distribution of time as per activity at centre was highly significant (<0.001).

Table 1: Average Mean Time spend on various activities by surveyed AWWs of Jaipur Zone

Activities	Mean Time (mins)					Average Mean Time (mins)
	Jaipur	Alwar	Dausa	Sikar	Jhunjhunu	
Preparation of SN	36	47	40	50	42	43
Serving and feeding supplementary nutrition	72	45	35	25	30	41.4
Cleaning Utensils	16	29	26	15	22	21.6
Pre-school education	24	50	60	80	40	50.8
Updating records	25	47	45	30	36	36.6
Other activities	26	30	28	25	30	27.8
Total Time Spend	199	248	234	225	200	221.2
*Gap from Norms (Colum no. 7 -240)	-41	8	-6	-15	-40	-18.8

* AWCs should remain open 240 minutes per day as per norms; ANOVA=11.77, P <0.001, LS=HS

Table 2: Assessed Performance of AWW for regarding Children of 0-3 years: Respondant Mother

*Activities	Jaipur (%)	Alwar (%)	Dausa (%)	Sikar (%)	Jhunjhunu (%)	Total (%)
SN Received	21 (87.5)	20 (83.3)	21 (87.5)	19 (79.2)	17 (70.8)	98 (81.67)
Health Checkup	5 (20.8)	4 (16.7)	2 (8.3)	3 (12.5)	3 (12.5)	17 (14.17)
IFA received	16(66.7)	13 (54.2)	13 (54.2)	13 (54.2)	15 (62.5)	70 (58.33)
Vit A received	14 (58.3)	19 (79.2)	11 (45.8)	20 (83.3)	17 (70.8)	81 (67.5)
Weight Taken	12 (50)	12 (50)	15 (62.5)	15 (62.5)	20 (83.3)	74 (61.67)
Total Assessed (%)	24 (100)	24 (100)	24 (100)	24 (100)	24 (100)	120 (100)
Chi-square at 4 df	23.281	28.032	31.902	31.549	30.417	125.905
P value, LS	<0.001 HS	<0.001 HS	<0.001 HS	<0.001 HS	<0.001 HS	<0.001 HS

*multiple response

Regarding performance of AWW it was observed that 81.67% mothers received supplementary nutrition for their children of 0-3 years and 67.50% mothers mentioned that they had received Vit-A doses from the AWCs. Majority (61.67%) mothers of 0-3 years children mentioned that AWWs had weighed their children and 58.33% mothers of children of this group mentioned that they had received IFA syrup/tab from

AWCs. But only 14.17% mothers mentioned that they had received health check-up for the children.

It was also reported by mothers of children 3-6 years that only 23.33% PSE beneficiaries attended PSE activities above 20 days otherwise 28.33% of PSE beneficiaries attended the PSE activities 17-20 days, 25.83% PSE beneficiaries attended the PSE activities 10-13 days and 22.50% PSE beneficiaries attended the PSE activi-

ties 14-16 days. Mean days attended PSE at AWC was 17 days per months.

It is also evident from table no. III that 61.67% lactating & pregnant women received SN followed by

52.18% received IFA, 43.33% received TT vaccination, 28.33% received de-worming tab and only one forth (25%) had health check-ups during the AWCs visit. 31.25% lactating and pregnant women were weighed by AWWs at the various AWCs.

Table 3: Performance of AWW Assessed regarding lactating and Pregnant Women

*Activities	Jaipur (%)	Alwar (%)	Dausa (%)	Sikar (%)	Jhunjhunu (%)	Total (%)
SN Received	30(62.5)	33(68.9)	29 (60.4)	28 (58.3)	28 (58.3)	148(61.67)
Health Checkup	8 (16.7)	9 (18.8)	18 (37.5)	14 (29.2)	11 (22.9)	60 (25)
IFA received	24 (50)	31(64.6)	20 (41.7)	27 (56.3)	23 (47.9)	125(52.18)
Deworming	17(35.4)	15(31.3)	13 (27.1)	9 (18.8)	14 (29.2)	70 (29.17)
Weight Taken	36 (75)	13(27.1)	7 (14.6)	9 (18.8)	10 (20.8)	75 (31.5)
TT Given at AWC	24 (50)	18(37.5)	21 (43.8)	20 (41.7)	21 (43.8)	104(43.33)
Total Assessed (%)	48 (100)	48 (100)	48 (100)	48 (100)	48 (100)	240 (100)
Chi-square at 5 df	41.310	42.002	25.899	32.373	23.451	104.091
P value, LS	<0.001 HS	<0.001 HS	<0.001 HS	<0.001 HS	<0.001 HS	<0.001 HS

*multiple response

Table 4: Performance Gap in Services of surveyed AWCs: Respondent Mother

Services	Beneficiaries Assessed (%)	Services Given (%)	Gap (%)
Immunization (12-24 mths)	120 (100)	78 (65)	*42 (35)
PSE (>20 days)	120 (100)	28 (23.33)	92 (76.67)
HNE	120 (100)	120 (100)	0(0)
Health Checkups	120 (100)	17 (14.17)	113 (85.83)

*complete immunization (one BCG, 3 OPV, 3 DPT and one Measles)

Referrals were only 3, out of that one was pregnant women and two infants

Immunization status was assessed by survey of 12-24 months children in the area in this study. Consensus regarding immunization was made either by immunization card or by interviewing mother. It was found in this study that only 65% were fully immunized (atleast one dose of BCG, 3 doses of OPV, 3 doses of DPT and one dose of measles vaccine) and 28.33% were partially immunized. 6.67% were unimmunized. TT to pregnant woman was given in 43.33% of surveyed women.

Health checkups were reported to be conducted in very few i.e. 14.17 % of children and 25% of surveyed women. Weight was taken in 61.67% of children and

31.5% of surveyed women. IFA was distributed to 58.33% of children and 52.18% of surveyed women. **Referral services** were reported to be received from 30% of AWWs by surveyed ANMs.

Reasons for performance gap of AWWs: All surveyed AWWs were complaining of irregular supply of medicine, contingency, Honorarium, TA/DA, and slow carrier progression as reason for service gap in ICDS.

Beneficiary's satisfaction was observed that 83.75% of Adolescent girls, 73.75% mothers for their children and 75% mother for themselves were satisfied with the services given by AWWs.

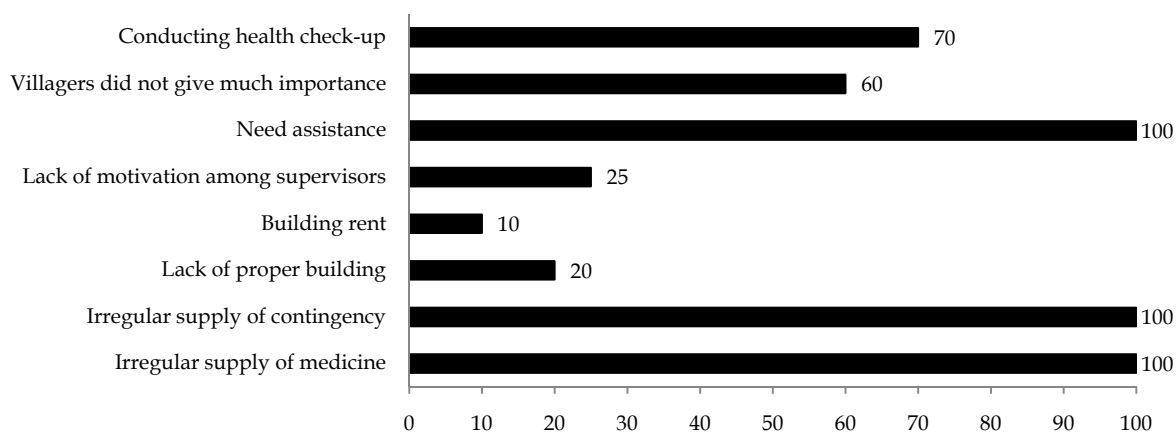


Fig 1: Reasons given by AWW for Gap in Performance (in %)

DISCUSSION

Regarding timing of AWCs remain open per day with distribution of time for various activities; it was found in the present study that average mean time AWCs of Jaipur zone remain open was 221.1 minutes which was only 18.8 minutes lesser than the norms of ICDS.

Average mean time spent on various activities were well in resonance with study of Population Research Centre Department of Economics University of Kashmir Srinagar (2009)² i.e. on preparation, serving food and feeding of the children was 44.4 v/s 87 minutes, PSE 50.8 v/s 53 minutes etc.

Supplementary nutrition was distributed to 84.94% of registered beneficiaries. These findings are well supported by N.C. Dash (2006)³ who also found in his study that 96% mothers of children received SN from AWCs. Whereas Forum for Creches Child Care Service (2005)⁴ found that 62% of eligible children (0-6 yrs) and 64% pregnant and lactating mothers beneficiaries have received SN at AWCs. Almost similar was observed by Moh. M Patni et al⁵ who reported 67.3% of eligible children has received supplementary nutrition.

Distribution of supplementary nutrition was assessed in surveyed pregnant women and lactating mothers in the present study it was found that 61.67% mothers (pregnant & lactating) received supplementary nutrition which is quite lower than SEEDS, Haryana (2005)⁶, where 83% of the families were getting SN. N.C. Dash (2006)³ study also support, where 76% of the pregnant mothers received SN from the AWWs.

Only 23.33% PSE beneficiaries attended AWCs above 20 days in contrast to the findings of NIPCCD (2006)⁷ who found that 75% registered beneficiaries for PSE attended the AWCs.

Health and nutritional Education was given to each of registered beneficiaries during the HNE session conducted by AWWs. Well comparable finding were of NIPCCD (2004)¹ and Sen.(2004)⁸ they found that almost all AWWs conducted HNE session.

In the present study it was found that 67.50% mothers of children age group belonged to 0 - 3 years received Vitamin A doses, 58.33% received IFA Tab/ syrup and 14.17% received health check-up for their children. Further in the study it was found that 61.67% mothers of children age group belonging to age group 0 - 3 year mentioned weight was taken by AWWs. These observations are well supported by N.C. Dash (2006)³ study where it was reported that 90% children age group belonging to 0 -3 years received Vitamin A. The study is further supported by SEEDS Haryana (2005)⁵ who reported 15% respondents mentioned that health check-up camps were organized once a week. NIPCCD (2006)⁶ found in study that 59.6% get IFA tabs from AWCs and this is also strengths the findings of present study.

The present study revealed that 65% of surveyed 12-24 months children were fully immunized whereas

28.33% were partially immunized and 6.67% were not immunized at all. Whereas Mehra, et al, (1990) who surveyed. 210 children in rural and 212 children in urban area aged 12 to 23 months and observed that children fully immunized age per age were only 30.0% and 37.3% in the two zones. Non immunized in rural area were 8% and in urban area were 2.3%.⁹

The study revealed that 25% of surveyed mothers (pregnant & lactating) received health check-ups. These observations are supported by the NIPCCD (2006)⁶ study where 18.68% were observed to go through health checkups. Other comparable studies are Bhaumik (2001)¹⁰ NIPCCD(2004)¹ and SEEDS Haryana (2005)⁵ where it was found 13.16%, 43.33% and 15% of mothers received health check-up respectively.

Further in the present study it was found that 43.33% mothers received tetanus toxoid, which is significantly higher than Bhansali (1988)¹¹ Other studies were Burman (2001),¹² NIPCCD (2006)⁶ and N,C, Dash (2006)³ they found 54.25%, 76.2% and 27.67% mothers received complete doses of tetanus toxoid.

This study revealed that 25% of surveyed mothers (pregnant & lactating) received health check-ups, these observations are supported by the NIPCCD (2006)⁶ study where 18.68% were observed to go through health checkups. Other comparable studies are Bhomik (2001),¹⁰ NIPCCD(2004)¹ and SEEDS Haryana (2005)⁵ where 13.16%, 43.33% and 15% of mothers received health check-up respectively.

The present study revealed that 100% AWWs besides complaining of less honorarium & TA/DA and slow carrier progression in their working condition, they faced problem about irregular supply of medicine, contingency etc. Well supported findings were of SEEDS Haryana⁵ & Himachal Pradesh⁸ (2005), Boban (2006)¹³ and FORCES (2007)¹⁴

CONCLUSION

Average mean time opening of AWCs of Jaipur zone was little less than the ideal duration. Although HNE and distribution of supplementary nutrition was observed excellent but Services for adolescent girls were very poor. Other services like PSE, Immunization, Health Checkups, Vitamin A distribution, IFA distribution etc were also quite deficient.

Abbreviations:

AWC: Anganwadi Center
 AWW: Anganwadi Worker
 SN: Supplementary Nutrition
 PSE: Pre-school Education
 HNE: Health and nutritional education
 ICDS: Integrated child development Scheme
 SEEDS: Socio-Economic and Educational Development Society
 NIPCCD: National Institute of Public Cooperation and Child Development

SEDEM: Society of Economics Developments and Environmental Management
FORCES: Forum for Creches and Child Care Services

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