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Original Research Article

A comparative study of knowledge of accredited social health activist (ASHA) workers regarding child health services working in rural and urban areas of a block of Haryana

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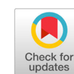

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ABSTRACT

Introduction: National Rural Health Mission (NRHM) has created a cadre of trained female community health activists called Accredited Social Health Activist (ASHA) to strengthen the health care system and to mobilize community towards increased utilization of existing health services. The contribution of the Accredited Social Health Activist (ASHA) to the achievement of the country's targets for new-born & child health services is critical. The present study was planned with objective to assess & compare the level of knowledge of ASHA workers regarding child health services working in rural and urban areas of a block of Haryana.
Materials and Methods: The present cross-sectional, community-based study was conducted in block Barwala, district Hisar of Haryana. The assessment of knowledge of ASHA workers was done on the basis of scoring. Appropriate statistical tests like percentages and chi-square ($\chi 2$) test were applied.
Result: Regarding child health services majority of ASHA workers had good knowledge, assessed by score gained by them and none of them was having poor knowledge about child health services. However, in rural area score gained was better than urban area & the observed difference was found to be statistically significant. Majority of ASHA workers either working in rural or urban areas, were having inadequate knowledge about identification of danger signs during diarrhoea & acute respiratory infection in a child and danger signs of new born. They had adequate knowledge regarding cord stump care; breast Feeding practices; routine Immunization; Vitamin A supplement and home based post natal care (HBPNC) visits.
Conclusion: Inadequate knowledge of ASHA workers regarding new born care should be taken into consideration. Supportive supervision should be done in their working area.

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1. Introduction

Health is a fundamental human right and is the main aspect to be considered for the growth of any society in all terms.The primary health care addresses the majority of a person's health needs throughout their lifetime. It is people-centred rather than disease-centred.[1] In any community, mothers and children constitute a priority group & mother and child health (MCH) is not a new specialty. It is a method of delivering health care to special group in the population which is especially vulnerable to disease, disability or death. National Rural Health Mission has created a cadre of trained female community health activists called Accredited Social Health Activist (ASHA) to strengthen the health care system and to mobilize community towards increased utilization of existing health services.[2] The contribution of the ASHA to the achievement of the country's targets for new-born & child health services is critical. To increase utilization of existing health services, ASHA is the key component of

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the National Rural Health Mission. Assessment of ASHA's knowledge should be assessed regularly to strengthen this grass root level link worker and their activities. A time-to-time assessment of knowledge of ASHA is essential as the success of national health programmes launched by Government of India in rural and urban area mostly depend on them. Considering the above facts the present study was planned with objective- to assess & compare the level of knowledge of ASHA workers regarding child health services working in rural and urban areas of a block of Haryana.

2. Materials and Methods

The present cross-sectional, community-based study was conducted in block Barwala, district Hisar of Haryana, which is a field practice area of the department of Community Medicine, Maharaja Agrasen Medical College, Agroha (district Hisar). The study was conducted during January 2022 to June 2022. All ASHA workers (rural area-70 & urban area-30) under National Health Mission were trained as per module 2 (maternal & child health services) and were having experience of 6 months and above had been included in the study. A predesigned, pretested, semi-structured schedule was used to collect the information. It was prepared in English and Hindi languages. The proforma included details of socio-demographic profile of ASHA workers and questions about knowledge of child health services like breastfeeding practices, immunization, various danger signs during child illness. Official permission for the study was obtained from Senior Medical Officer of Community Health Centre (CHC) Barwala. Details of Primary Health Centre (PHC)-in-charges & ASHA workers had been obtained from Senior Medical Officer of block Barwala. The schedule for interview was prepared. After explaining the purpose of the study and obtaining informed consent from the participants, the interview was conducted at village level depends on availability of ASHA worker by explaining them question in their own language one by one. The confidentiality of the information was assured.

The assessment of knowledge was done on the basis of scoring. For each correct response score one (1) was given & incorrect response was awarded zero (0). Information regarding child services consists of total 17 questions. The range of scores for child health services was 0-17. ASHA worker who had scored between 0-5, was assessed as having poor knowledge, who had scored between 6-11, was assessed as having average knowledge and who had scored between 12-17, was assessed as having good knowledge of child health services.

The data thus collected was first coded, then entered and compiled in the MS excel sheet. Statistical analysis was carried out using Statistical Package for Social Sciences (SPSS) Software version 20.0. Appropriate statistical tests (percentages & chi-square test) were applied in order to draw relevant inference. $P<0.05$ was considered as level of significance statistically.

3. Results

Majority of ASHA workers (55.7%) were >36 years old in rural area, however equal participation of each category of age group is seen in urban area. Mostly ASHA workers (93%) were married in the study. More than half (51.4%) were educated up to high school in rural area whereas 46.7% were educated till senior secondary in urban area. Out of total 88% ASHA workers were having >5 years of work experience.

Majority of ASHA workers had good knowledge, assessed by score gained by them and none of them was having poor knowledge about child health services. However, in rural area score gained was better than urban area and the observed difference was found to be statistically significant (Table 1).

Majority of ASHA workers either working in rural or urban areas, were having inadequate knowledge about identification of danger signs during diarrhoea & acute respiratory infection in a child. Out of three conditions described in the table, maximum percentage of adequate knowledge of the danger signs was related to acute respiratory infection in child.(Table 2)

Most of ASHA workers had adequate knowledge regarding cord stump care; breast Feeding practices; routine Immunization; Vitamin A supplement and home based post natal care (HBPNC) visits. All ASHA workers in urban area and 95.7% ASHA workers working in rural areas were having inadequate knowledge regarding detection of danger signs of new-born. The difference of knowledge level regarding routine immunization among rural and urban ASHA workers was found to be statistically significant (Table 3).

4. Discussion

The present study was conducted to assess the level of knowledge of ASHA workers regarding child health services in rural and urban areas of block Barwala, district Hisar of Haryana. No study of ASHA workers working in urban areas was found so all the studies which are compared with our study were related to knowledge of ASHA workers working in rural areas.

In the Present study, in rural area majority of ASHA workers (55.7%) were >36 years old, however equal participation of each category of age groups is seen in urban area. Singhal P et al[3] found in their study that 52.7% of ASHA workers were in the age group of 30-39 years. Sugandha BK et al[4] and Grover K et al[5] observed that majority (51.9% & 62.12% respectively) of study subjects belonged to younger age group as compare to our study. Pal J et al[6] and Ratnam AL et al[7] found that majority (98.9%)

Table 1: Area wise distribution of ASHA workers based on scores gained by them regarding knowledge of child health services

Area	Good knowledge	Average knowledge	Total	p Value / χ^2 Value / (df-1)
Rural	69 (98.6)	1 (1.4)	70 (100)	0.003 8.648
Urban	25 (83.3)	5 (16.7)	30 (100)	

(Figures in parentheses indicate percentages)

Table 2: Knowledge of ASHA workers regarding identification of danger signs of child illness during home visits

Identification of dangers sign	Rural n=70 (100)		Urban n=30 (100)		p-value / χ^2/ (df=1)
	Adequate Knowledge	Inadequate Knowledge	Adequate Knowledge	Inadequate Knowledge	
During diarrhoea	4 (5.7)	66 (94.3)	3 (10.0)	27 (90.0)	0.441 0.592
During acute respiratory infection	27 (38.6)	43 (61.4)	9 (30.0)	21 (70.0)	0.413 0.670

(Figures in parentheses indicate percentages)

Table 3: Knowledge of ASHA workers regarding child health services during home visits

Child health services	Rural n=70 (100)		Urban n=30 (100)		p-value / χ^2 / (df=1)
	Adequate Knowledge	Inadequate Knowledge	Adequate Knowledge	Inadequate Knowledge	
Cord stump care	66 (94.3)	4 (5.7)	28 (93.3)	2 (6.7)	0.854 0.034
Danger signs of new-born	3 (4.3)	67 (95.7)	0 (0)	30 (100)	0.250 1.325
Initiation of Breast Feeding	64 (91.4)	6 (8.6)	24 (80)	6 (20)	0.175 2.597
Exclusive Breast Feeding	69 (98.6)	1 (1.4)	30 (100)	0 (0)	0.511 0.433
Routine Immunization	67 (95.7)	3 (4.3)	24 (80)	6 (20)	0.012* 6.332
Vitamin A supplement	61 (87.1)	9 (12.9)	26 (86.7)	4 (13.3)	0.948 0.004
HBPNC visits	**69 (98.6)**	**1 (1.4)**	**30 (100)**	**0 (0)**	**0.511 0.433**

(Figures in parentheses indicate percentages)

of ASHA workers were in the age group of 40-50 years, which was older age group than observed in our study.

In our study, More than half (51.4%) workers were educated up to high school in rural area whereas 46.7% were educated till senior secondary in urban area. Grover K et al[8] observed that 95% ASHA workers were educated up to high school or above. Bajpai N et al[9] observed that nearly 90% of ASHA workers had completed eight years of schooling & similarly Sexena S et al[10] were find that majority of participants (70.3%) were educated up to middle school which is quite different than our study however Shet S et al[11] observed that majority of the ASHA workers (65%) have finished secondary level of education.

Regarding child health services majority of ASHA workers in our study had good knowledge, assessed by score gained by them and none of them was having poor knowledge. However, in rural area score gained was better than urban area. Choudhary ML et al[12] observed that almost half of the ASHA workers (47.9%) had average knowledge & Sugandha B K et al[4] observed that among ASHA workers 30.8% had good knowledge and 43.4% had average knowledge.

In present study, majority of ASHA workers (91.4% in rural and 80% in urban area) were having adequate knowledge of correct time to initiate breast feeding. A higher percentage of knowledge of ASHA workers regarding correct time of initiation of breast feeding were observed by Saxena S et al[10] (96.9%) and Sugandha BK et al[4](96.6%). In this study, 98.6% in rural and 100% in urban areas ASHA workers had adequate knowledge about exclusive breast-feeding. Similar finding was observed by Shet S et al.[11] In contrast to present study, Sexena S et al[10] and Sugantha BK et al[4] found that 71.9% and 49.2% of ASHA workers respectively responded that water, honey, cows' milk and other formulation could be given to baby up to 6 months. In the Present study, majority of ASHA workers (95.7.1% in rural and 80% in urban areas) had adequate knowledge of routine immunization schedule. Similar finding was seen in a study conducted by Saxena S et al.[10] Lower percentages, 86.32%, 78.0% and 60% were

observed by Pal J et al,[6] Sugandha BK et al[4] and Kori S et al[13] respectively in their study.

None of ASHA workers in urban area and 4.3% ASHA workers working in rural areas was having adequate knowledge regarding detection of danger signs of new-born. In contrary to our findings Pal J et al[6] found that majority of ASHA workers (80.53%) had correct knowledge regarding danger sign of new-born. In the present study, majority of ASHA workers (94.3% in rural and 93.3% in urban areas) had adequate knowledge regarding cord stamp care. Similarly, Sugandha BK at al[4] observed that 97.6% ASHA workers had adequate knowledge regarding cord care. In this study 98.6% and 100% ASHA workers in rural and urban areas respectively were having adequate knowledge of home-based postnatal care visits. Lower percentage (86.1%) of knowledge of ASHA workers regarding home-based PNC observed by Sugandha BK at al.[1]

5. Conclusion

In this study majority of ASHA workers were having their work experience more than 5 years but still there are some lack of basic and essential knowledge which was observed in this study. It should be taken into consideration as as a link worker ASHA has a major role in reducing infant and child mortality.

6. Limitations

No study of ASHA workers working in urban areas was found so all the studies which are compared with our study were related to knowledge of ASHA workers working in rural areas.

7. Source of Funding

None.

8. Conflict of Interest

None.

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