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Indian Journal of Forensic and Community Medicine

Journal homepage: <https://www.ijfcm.org/>

Original Research Article

Assessment of knowledge of accredited social health activists regarding antenatal & neonatal care in a block of Haryana

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ARTICLE INFO

Article history:

Received 31-01-2024

Accepted 25-02-2024

Available online 04-04-2024

Keywords:

ASHA workers

Antenatal care

Neonatal care

Knowledge

ABSTRACT

Background: Improving maternal & child health has been an essential tool for achieving health for all. The discourse on the Accredited Social Health Activist's (ASHA's) role centers around three typologies - as an activist, as a link worker or facilitator, and as a community level health care provider.

Objective: To assess knowledge of ASHA workers regarding antenatal and neonatal care in a block of Haryana.

Materials and Methods: The present cross-sectional, community-based study was conducted in block Barwala, district Hisar of Haryana. Universal sampling technique was used. A predesigned, pretested, semi-structured schedule was used to collect the information, which included details of socio-demographic profile of ASHA workers and questions about knowledge of antenatal & postnatal care. Appropriate statistical tests like frequencies and percentages test were applied to analyze the collected data.

Results: Only 6.9% ASHA workers told about benefits of early registration of pregnancy. Majority of ASHA workers had inadequate knowledge about identification of danger signs during pregnancy and infancy, duration of trimester. Majority of ASHA workers had adequate knowledge about breast-feeding practices however about half of ASHA workers had inadequate knowledge about duration of colostrum. Only about one third ASHA workers had adequate knowledge regarding weighing machine & colour zone used for identify malnutrition.

Conclusion: It is important to reorient ASHA workers at field level and supportive supervision also plays an important role.

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1. Introduction

Improving maternal & child health has been an essential tool for achieving health for all. In light of past experiences, Millennium Development Goals, National Population Policy, National Health policy and feedback of National Maternity Benefit Scheme, the Union Government, Ministry of Health and Family Welfare had decided to launch a new initiative.¹ The Government of India launched an umbrella programme called as National Rural Health

Mission (NRHM, implemented on 12th April 2005 and National Urban Health Mission (NUHM) on 1st may 2013, now it is collectively known as National Health Mission (NHM).² One of the key components of the National Rural Health Mission is to provide every village in the country with a trained female community health activist or Accredited Social Health Activist (ASHA) selected from the same village.³ ASHA will be entitled for Performance Based Incentives fixed by the NRHM State headquarter for prefixed activities only which is to be given on monthly basis to ASHA workers. There will be no provision of fixed honorarium/ incentive/salary. However, in Haryana Rs

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4000/- monthly fixed honorarium is paid in addition to their performance based incentives. Non-monetary compensation is also provided to her in the form of recognition, awards given at district and state level meetings of ASHA workers.

The discourse on the ASHA's role centers around three typologies -as an activist, as a link worker or facilitator, and as a community level health care provider. She counsels women on birth preparedness, importance of safe delivery, breastfeeding and complementary feeding, immunization for mother & child, contraception and prevention of common infections including reproductive tract infection/sexually transmitted infection (RTIs/STIs) and care of the young child. ASHA will be the first port of call for any health related demands of deprived sections of the population, especially women and children, who find it difficult to access health services.^{4,5}

In the primary healthcare sector, NRHM is the principal programme of the government to achieve the health related sustainable development goals; as well as control of specific diseases, and improvement of nutrition status of children and mothers. The performance of ASHAs is, therefore, crucial for the success of NHM and so it is important to assess the knowledge of ASHA workers time to time. Hence, the study is conceived to assess knowledge of ASHA workers regarding antenatal and neonatal care in a block of Haryana.

2. Materials and Methods

Considering operational feasibility, the study was conducted in block Barwala, which is a field practice area of the department of Community Medicine, Maharaja Agrasen Medical College, Agroha (district Hisar, Haryana). It was a cross-sectional community-based study, conducted over a period of August 2021 to July 2022. Universal sampling technique was used and so all ASHA workers, working under block Barwala were enrolled in the study. ASHA workers, who were trained as per module 2 (maternal & child health services) and having work experience of 6 months and above had been included in the study. Eligible participants who were not willing to give consent were excluded from the study.

A predesigned, pretested, semi-structured schedule was used to collect the information, which included details of socio-demographic profile of ASHA workers and questions about knowledge of antenatal & postnatal care like early registration of pregnancy, antenatal visits, Janani Suraksha Yojna (JSY), preparedness of birth, on breastfeeding of new-born, immunization and various danger signs during pregnancy & childhood illness.

After obtaining permission from Senior Medical Officer in charge of CHC Barwala, details of ASHA workers was collected from CHC and interview was conducted at village level. After explaining the purpose of the study and obtaining informed consent from the study subjects,

the interviewer himself administered the tools of data collection. The confidentiality of the information was assured. The data thus collected was first coded, then entered and compiled in the MS excel sheet. Statistical analysis was carried out by applying simple frequencies & percentages in order to draw relevant inference.

3. Results

About 60% ASHA workers served for more than 1000 population and more than 90% workers had working experience >5 years (Table 1). Only 6.9% ASHA workers were able to told about benefits of early registration of pregnancy. Majority of ASHA workers had inadequate knowledge about identification of danger signs during pregnancy and number of vaccines given during pregnancy. Majority (96.1%) of them were having adequate knowledge about minimum ANC visits, birth preparedness while had inadequate knowledge about duration of trimester (72.4%). About 90% workers were not able to diagnose anaemia but majority (83.3%) were able to talk about treatment of anaemia (Table 2).

Table 1: Distribution of ASHA workers according to population allocation and their work experience (n=203)

Characteristics	Frequency	Percentage (%)	
Population Allocation	< 1000 Population	48	23.6
	1000 Population	33	16.3
	> 1000 Population	122	60.1
Work Experience	≤5 years	18	8.9
	>5 years	185	91.1

Majority of ASHA workers were having inadequate knowledge about danger signs of new born (97.0%) and danger signs related to diarrhoea (85.7%) during home visits. Out of total, less than half (47.8%) had adequate knowledge of identification of danger signs during acute respiratory infection. Majority of ASHA workers had adequate knowledge about breast-feeding practices however about half of ASHA workers had inadequate knowledge about duration of colostrum. Majority of ASHA workers had adequate knowledge of routine immunization but only 4.9% and 11.8% ASHA workers had adequate knowledge regarding minor and serious adverse events following immunization respectively (Table 3).

4. Discussion

In contrast to study done by Kohli C et al⁶ (80%) and Sugantha B K et al⁷ (49.5%) in which they observed a high percentages of knowledge among ASHA workers, in this study very few ASHA workers (1.5%) adequately knew about identification of all danger signs during pregnancy.

Table 2: Knowledge of ASHA workers regarding deferent components of antenatal care (n=230)

Components of antenatal care	Adequate Knowledge n (%)	Inadequate Knowledge n (%)
Diagnosis & registration of pregnancy		
Name of pregnancy test	181 (89.2)	22 (10.8)
Early registration of pregnancy	198 (97.5)	5 (2.5)
Benefits of early registration	14 (6.9)	189 (93.1)
Antenatal care (ANC)		
Minimum ANC visits	195 (96.1)	8 (3.9)
Duration of trimesters	56 (27.6)	147 (72.4)
Birth preparedness	195 (96.1)	8 (3.9)
Preventive Measures		
Identification of anaemia	22 (10.8)	181 (89.2)
Treatment of anaemia	169 (83.3)	34 (16.7)
Immunization during pregnancy	203 (100)	0 (0.0)
Danger signs during pregnancy	3 (1.5)	200 (98.5)

Table 3: Knowledge of ASHA workers regarding deferent components of neonatal care (n=230)

Components of Postnatal care	Adequate Knowledge n (%)	Inadequate Knowledge n (%)
Breast Feeding Practices		
Initiation of breast feeding	174 (85.7)	29 (14.3)
Exclusive breast feeding	201 (99.0)	2 (1.0)
Prelacteal feeding	175 (86.2)	28 (13.8)
Duration of colostrum	106 (52.2)	97 (47.8)
Immunization programme		
Routine immunization	189 (93.1)	14 (6.9)
Immunization at birth in institutional delivery	198 (97.5)	5 (2.5)
Vitamin A supplement	183 (90.1)	20 (9.9)
Minor adverse events following immunization	10 (4.9)	193 (95.1)
Serious adverse events following immunization	24 (11.8)	179 (88.2)
New borne care		
Danger signs of new-born	6 (3.0)	197 (97.0)
Birth weight	196 (96.6)	7 (3.4)
Cord stump care	185 (91.1)	18 (8.9)
Weighing machine & colour zone	71(35.0)	132 (65.0)
HBPNC visits	196 (96.6)	7 (3.9)
Danger signs during Diarrhoea	29 (14.3)	174 (85.7)
Danger signs during ARI	97 (47.8)	106 (52.2)

Similar to observation done by Pal J et al⁸ (99.79%), in the present study 97.5% ASHA workers were having adequate knowledge regarding early registration of pregnancy. In this study in spite of inadequate knowledge of identification of anaemia, most of ASHA workers (83.3%) were able to talk about treatment of anaemia. Pal J et al⁸ observed that only 34% ASHA workers knew about updated dose schedules to treat anaemia however Shashank K J et al.⁹ observed that 90% of ASHA workers knew about treatment of anaemia. Like Sugandha B K et al⁷ observation, 96.1% ASHA workers had adequate knowledge about minimum ANC visits. However, a lower percentage (79.5%) was observed by Shashank KJ et al.⁹ Like present study, Shashank KJ et al⁹ observed that 100.0% ASHA workers knew about name & number of vaccines given during pregnancy, some lower percentage (96.6%) of knowledge regarding vaccination during pregnancy was observed by Sugandha BK et al.⁷ Out of total 96.1% ASHA workers were having adequate knowledge about birth preparedness. In a study done by Grover K et al.¹⁰ > 80.0% ASHA workers Knew about birth preparedness.

In this study, 85.7% ASHA workers were having adequate knowledge regarding timing to initiate breast feeding. Saxena S et al¹¹ (96.9%) and Sugandha BK et al⁷ (96.6%) observed quite higher percentage of knowledge of ASHA workers regarding correct time of initiation of breast feeding. Like Shet S et al¹² observation, 99.0% ASHA workers had knowledge about exclusive breast-feeding practices in the present study. In contrast to this, lower level of knowledge were observed by Sexena S et al¹¹ (71.9%) and Sugantha BK et al⁷ (49.2%). In this study 86.2% ASHA workers had adequate knowledge regarding pre-lacteal feeding which is quite lower then that was observed by Sugandha BK et al⁷ (99.7%) and Thakre et al¹³ (94.4%). According to current study, about half of the ASHA workers (52.2%) knew adequately about duration of colostrum, a much higher percentages and of knowledge regarding duration of colostrum was studied by Sugandha BK et al⁷ (98%) and Shet S et al¹² (93%).

As observation done by Saxena S et al¹¹ in this study also majority of ASHA workers (93.1%) adequately knew about routine immunization schedule. However Pal J et al⁸ (86.32%), Sugandha BK et al⁷ (78.0%) and Kori S et al⁵ (60%) found lower percentages of ASHA workers who were having adequate knowledge of routine immunization. In our study, only 4.9% and 11.8% ASHA workers were having knowledge regarding minor and serious adverse events following immunization respectively. Shashank KJ et al⁹ observed in that only 43.9% ASHA workers knew about adverse events following immunization. Only 3.0% of ASHA workers had adequate knowledge about danger signs of new born in this study. However, Pal J et al⁸ found 80.53% ASHA workers had adequate knowledge regarding danger sign of new-born. Like present study, Sugandha

BK et al⁷ observed that more than 90% ASHA workers knew adequately regarding cord care. Sugandha BK et al⁷ observed lower percentage (86.1%) of knowledge among ASHA workers regarding home-based PNC as compare to present study (96.1%).

5. Conclusion

Though ASHA workers were trained at the time of induction, lack of knowledge was observed regarding antenatal and neonatal care, so importance of reorientation, training at periodic intervals at the local Health centres and field level should be emphasized. Quality of training should be enhanced. A process of community level monitoring, regular problem solving, and skill up-gradation should be developed.

6. Source of Funding

None.

7. Conflict of Interest

None.

8. Ethical Approval

The study was approved by Institutional Ethical Committee of Maharaja Agrasen Medical College, Agroha, Hisar (Haryana).

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Cite this article: Sharma S, Kumar A, Poonia A, Pandey S. Assessment of knowledge of accredited social health activists regarding antenatal & neonatal care in a block of Haryana. *Indian J Forensic Community Med* 2024;11(1):15-18.