Evaluation of knowledge of ASHA regarding family planning services provided under NRHM in Bhojipura block, District Bareilly

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Abstract

Background: The role of community health workers (CHWs) in healthcare delivery system is considered inevitable to meet the millennium development goals. One of the key components of ASHAs services are the primary community-based contacts for distribution of contraception & counseling for family planning**.** Family planning is the most effective individual intervention to reduce pregnancy-related mortality in India.

Materials & Methods: A descriptive cross-sectional study was conducted in Bhojipura Block, district Bareilly among ASHA workers recruited under NRHM. Total 48 villages ASHAs were interviewed using predesigned semi-structured questionnaire including brief socio-demographic information of ASHA along with details of their knowledge regarding family planning.

Results: About knowledge regarding family planning methods, 45 (70.3%) ASHA said that MALA D was available with them as oral contraceptive pills and 37 (57.8%) ASHA said that emergency contraceptive pills are effective only within 72 hours after unprotected sex. Majority of ASHA 47 (73.4%) didn't know the correct method for disposal of condom.

Conclusion: The present study showed that knowledge of ASHA is good in certain areas of family planning, but improvement is needed. Family planning and correct choice of contraceptives is very essential. ASHA have to ensure the spread of information regarding all the modes of contraception available these days.

Keywords: ASHA, Knowledge, Family planning.

Introduction

The concept of using community members to render certain basic health services to the communities from which they come has a 50-year history at least. The Chinese barefoot doctor programme is the best known of the early programmes, although Thailand, for example, has also made use of village health volunteers and communicators since the early 1950s.[1,2] The role of community health workers (CHWs) in healthcare delivery system is considered inevitable to meet the millennium development goals. CHWs are defined as "community members who work almost exclusively in community settings and who serve as connectors between health care consumers and providers to promote health among groups that have traditionally lacked access to adequate care."[3] Most CHW programs enroll female health workers, due to importance of maternal and child health.[4] India has a long and rich history of small and large CHW programmes. A large national CHW scheme was established in the late 1970s that aimed to provide one CHW for every 1000 population in order to provide adequate health care to rural people and to educate them in matters of preventive and promotive health care.[5,6] Introduction to Child Survival and Safe Motherhood program in 1992 and the Reproductive and Child health programme in 1997 by the Government of India (GOI) marked a paradigm shift in the provision of maternal and child care by CHW. In continuation of these programme, GOI launched the National Rural Health Mission (NRHM) on 12th April 2005, to provide accessible, accountable, affordable, effective and reliable primary health care, especially to the poor and vulnerable sections of the population. One of the key strategies under the NRHM is having a community health worker who is an Accredited Social Health Activist (ASHA) for every village with a population of 1000. These ASHA workers should preferably be female, in the 25-45 years age group and have a qualification of at least eighth class. One of key component of ASHAs services are the primary community-based contacts for distribution of contraception & counseling for family planning.[7] India was among 179 countries to pledge to promote a policy grounded in informed choice, ensuring that women and men would be provided with comprehensive counseling and services that supported them in determining what method (if any) befit their needs. Family planning is the most effective individual intervention to reduce pregnancy-related mortality in India. In Bareilly, only 1.8% women of reproductive age are using intra uterine devices, 2.4% oral contraceptive pills, while 14.4% use a terminal method.[8] although one of the primary responsibilities of ASHAs is to meet the family planning needs of women and men in their community. ASHA workers would be able to perform their duties if they are equipped with adequate knowledge and skills for the same. Thus it is important to study this aspect since it may give us an insight into the effectiveness of training programs for ASHA workers and may have future policy implications for any changes if required in the same. Therefore the present study was planned to

evaluate the knowledge of ASHA workers regarding family planning services provided under NRHM in Bhojipura Block, District Bareilly.

Materials and Methods

A descriptive cross- sectional study was conducted in Bhojipura Block, district Bareilly among ASHA workers recruited under NRHM. Study area was chosen by using convenience sampling method since it is field practice area under Department of Community Medicine, Shri Ram Murti Samarak Institute of Medical Sciences, Bhojipura, Bareilly. After getting the ethical committee clearance from the institute research committee and obtaining prior permission from the Medical Officer (MO), the study was conducted. The geographical area covered by this block is spread over 311.88 sq.km, consisting of 100 villages & 24 Sub-centre. Bhojipura block has a population of 1,91,181 (population of Town area: 20784, Rural population: 1,70,397) according to census 2011.

Sampling Technique for selection of villages

Out of 100 villages, all twenty-four villages having sub centre were selected purposively for the study. Sub centre is the most peripheral unit for providing basic health services including family planning. Thus all Sub centre were taken for the study. List of villages which were situated at the distance of 3-5 km of their respective sub-centre obtained from block and 24 villages were selected randomly for the study. Thus total of 48 villages were included in the study.

Sample size for ASHA

All ASHA who were posted by government of Uttar Pradesh of the selected 48 villages of Bhojipura Block were included in the study. Thus total **64 ASHAs** were interviewed.

Inclusion Criteria for ASHA

1. All ASHA working under the selected villages of block Bhojipura.
2. Living within premises of allotted village.
3. ASHA who were willing to participate and ready to give consent.

Data collection

A total of 64 ASHA workers who provide services in area constituted the study population of 48 villages. Primary data were collected by face-to-face interviews from ASHA of the respective villages. Visits were made to all selected 48 villages with the help of medico social worker. ASHA were interviewed at their houses only. After explaining the purpose of the study and obtaining oral consent, the study was conducted using predesigned semi-structured questionnaire including brief socio-demographic information of ASHA along with details of their knowledge regarding family planning.

Data analysis

The data was entered in MS- Excel, critically analyzed and tabulated using SPSS- 20 version software. Appropriate statistical tests of significance (Logistic regression) were applied to test and validate the findings of the study.

Results

Mostly ASHAs 27 (42.2%) belonged to age group of 31-40 years, Hindu by religion 56 (87.5%), OBC caste 36 (56.3%), married 57 (89.1%), educated up to middle class 45 (70.3%), joint family 42 (65.6%) and 33 (51.6%) ASHA were from social class II (Upper middle). **(Table I)**

Table I: Distribution of ASHA according to their biosocial characteristics (n=64)

Bio-social characteristics	Number (%)
Age (years)	
21-30	24(37.5)
31-40	27(42.2)
41-50	11(17.2)
50+	2(3.1)
Religion	
Hindu	56(87.5)
Muslim	8(12.5)
Caste	
General	10(15.6)
Other Backward Class (OBC)	36(56.3)
Scheduled Caste (SC)	18(28.1)
Marital status	
Married	57(89.1)
Widow	7(10.9)
Education	
Primary	10(15.6)
Middle	45(70.3)
High School	5(7.8)
Intermediate	4(6.3)
Type of Family	

Nuclear	22(34.4)
Joint	42(65.6)
Socio economic status (modified B.G Prasad Classification)	
Class II (upper middle)	33(51.6)
Class III (middle)	28(43.7)
Class IV (upper lower)	3(4.7)

While assessing knowledge regarding family planning methods, 45 (70.3%) ASHA said that MALA D was available with them as oral contraceptive pills and 37 (57.8%) ASHA said that emergency contraceptive pills are effective only within 72 hours after unprotected sex. As for the Intra Uterine Devices (IUD) insertion, 35 (54.7%) ASHA said that ANM inserts IUD and 7 (10.9%) said female itself inserts it. The ideal time for IUD insertion was within ten days of last menstrual period was said by 49 (76.6%) ASHA followed by after six weeks of child birth by 17 (26.6%) ASHA but 12 (18.7%) ASHA didn't know the ideal time. Majority of ASHA 61 (95.3%) knew that a new condom is to be used for each sexual act by the partner but 47 (73.4%) ASHA didn't know the correct method for disposal of condom. 35 (54.7%) ASHA had knowledge regarding family planning counselling. **(Table II)**

Table II: Knowledge of ASHA regarding family planning (n=64)

Knowledge regarding Family planning	Number (%)
Oral Contraceptive Pills (OCP) available with you	
MALA D	45(70.3)
MALA N	14(21.9)
Don't know	5(7.8)
Emergency contraceptive pills are effective only within 72 hours after unprotected sex	
Yes	37(57.8)
No	6(9.4)
Don't know	21(32.8)
Intra Uterine Device (IUD) insertion is done by	
ANM	35(54.7)
Medical officer	9(14.1)
Female itself	7(10.9)
Dai	5(17.2)
ASHA	2(3.1)
Ideal time to insert IUD*	
Within ten days of last menstrual period	49(76.6)
After six weeks of child birth	17(26.6)
Don't know	12(18.7)
A new condom is to be used for each sexual act by the partner	
Yes	61(95.3)
No	3(4.7)
Disposal of condom should be done by	
Dumping & pitting	17(26.6)
Don't know	47(73.4)
Counselling for family planning methods	
Yes	35(54.7)
No	29(45.3)

*Multiple Responses

In the present study while applying logistic regression analysis on factors affecting knowledge of ASHA regarding Emergency Contraceptive Pills, age group (21-30 years), Hindu religion, OBC & SC caste, Married ASHA, Middle and High school educated ASHA, Nuclear family and Middle socioeconomic status of ASHA were the prime factors which affects knowledge of ASHA regarding Emergency Contraceptive Pills. **(Table III)**

Table III: Logistic regression on factors affecting knowledge of ASHA regarding Emergency Contraceptive Pills

	Frequency	B	Sig.	Exp(B)	95% C.I.for EXP(B)	
					Lower	Upper
Age(years)						
>40*	13					
21-30	24	0.470	0.503	**1.600**	0.405	6.324
31-40	27	-0.061	0.931	0.941	0.241	3.679

Religion						
Muslim*	8					
Hindu	56	0.223	0.774	**1.250**	0.272	5.750
Caste						
General*	10					
OBC	36	0.154	0.842	**1.167**	0.255	5.333
SC	18	1.540	0.071	**4.667**	0.878	24.796
Marital Status						
Widow*	7					
Married	57	1.616	0.146	**5.032**	0.569	44.527
Education						
Primary*	10					
Middle	45	0.118	0.919	**1.125**	0.117	10.841
High-school	9	1.974	0.114	**7.200**	0.622	83.342
Type of Family						
Joint*	42					
Nuclear	22	0.77	0.151	**2.160**	0.756	6.173
Socioeconomic Status						
Upper Middle*	33					
Middle	31	0.495	0.332	**1.641**	0.604	4.458

*Reference Category

In the present study while applying logistic regression analysis on factors affecting knowledge of ASHA regarding disposal method of condom, age group (>40 years), Muslim religion, OBC & SC caste, Married ASHA, Primary and Middle school ASHA, Nuclear family and Middle socioeconomic status of ASHA were the prime factors which affects knowledge of ASHA regarding disposal method of condom. **(Table IV)**

Table IV: Logistic regression on factors affecting knowledge of ASHA regarding disposal method of condom

	Frequency	**B**	**Sig.**	**Exp B)**	**95% C.I. for EXP(B)**	
					Lower	**Upper**
Age(years)						
21-30*	24					
31-40	27	-0.405	0.516	0.667	0.196	2.263
>40	13	0.606	0.501	**1.833**	0.313	10.735
Religion						
Hindu*	56					
Muslim	8	0.093	0.915	**1.098**	0.199	6.045
Caste						
General*	10					
OBC	36	0.693	0.356	**2.000**	0.458	8.725
SC	18	0.847	0.324	**2.333**	0.433	12.568
Marital Status						
Widow*	7					
Married	57	1.616	0.146	**5.032**	0.569	44.527
Education						
High-school	9					
Primary	10	0.154	0.876	**1.167**	0.168	8.09
Middle	45	0.435	0.580	**1.545**	0.33	7.235
Type of Family						
Joint*	42					
Nuclear	22	0.307	0.616	**1.360**	0.409	4.52
Socioeconomic Status						
Upper Middle*	33					
Middle	31	0.355	0.556	**1.427**	0.437	4.654

*Reference Category

When knowledge of transmission of HIV/AIDS was assessed, it was found that 58 (90.6%) ASHA said that were said that its spread by the use of contaminated Needles/skin piercing equipment followed by unscreened blood transfusion which was the option of 57 (89.1%) ASHA 56 (87.5%) ASHA said that Unprotected sex with infected partner is the culprit of the transmission of HIV/AIDS while it transmission could be from infected mother to child, by mosquito bite and by touching was told by 54 (84.4%), 52 (81.3%) and 50 (78.1%) ASHA respectively. **(Table V)**

Table V: Knowledge of ASHA regarding HIV/AIDS Transmission (n=64)

Mode of HIV/AIDS transmission	Yes	No	Don't know
	Number (%)	Number (%)	Number (%)
Contaminated needles/skin piercing equipment	58(90.6)	0(0)	6(9.4)
Unscreened Blood transfusion	57(89.1)	1(1.6)	6(9.4)
Unprotected sex with infected partner	56(87.5)	2(3.1)	6(9.4)
Infected mother to child	54(84.4)	4(6.3)	6(9.4)
Mosquito bite	52(81.3)	6(9.4)	6(9.4)
Touching	50(78.1)	8(12.5)	6(9.4)

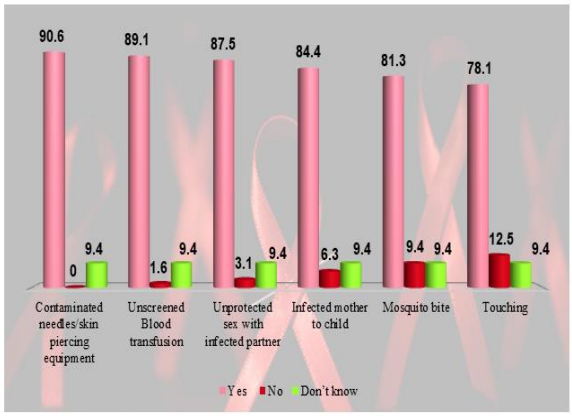

Fig. I: Knowledge of ASHA regarding HIV/AIDS transmission

Discussion

Bio-Social Characteristics of ASHA

Majority i.e. 27 (42.2%) ASHA were from age group 31-40 years. Although in the selection criteria of ASHA (according to Training Module of ASHA Workers-NRHM 2005-2012), the minimum age of selection is 25years but in our study, the ASHA in age group of 21-30 years were 24 (37.5%).

Our study findings is similar to the findings of **Singh et al[9]** where most of the ASHA were in the age group of 30-35 years 61 (45.2%) and only 11 (8.1%) ASHA in the age group of 25-30 years. But in contrast in the study **Shashank et al[10]** majority 71 (53.8%) of ASHA were in the age group of 26 to 30 years.

In the present study out of 64 ASHA, 57 (89.1%) ASHA were married, 45 (70.3%) completed education up to middle class, 56 (87.5%) were Hindu by religion, 36 (56.3%) were OBC by caste, 42 (65.6%) were from joint family.

The above findings is similar to the findings of **Garg et al[11]** where out of 105 ASHA, 93 (88.57%) were married, 101 (96.19%) ASHA worker completed 8th standard of the schooling and 89 (84.76%) ASHA worker were Hindus. Whereas study done by **Kansal et al[12]** found that out of 135 ASHA, 59 (43.7%) were from OBC caste and 42 (31.1%) were educated up to eight standard.

In the present study, 33 (51.6%) ASHA belong to class II (upper middle) socioeconomic status according to modified B.G Prasad classification.

On the contrary study done by **Singh et al[9]** where out of 135 ASHA, most of the ASHA 93 (68.9%) belong to class IV (upper lower) socioeconomic status according to modified B.G Prasad Classification.

Knowledge of ASHA regarding Family Planning Methods

In the present study majority of ASHA 61 (95.3%) knew that a new male condom is to be used for each sexual act by the partner but only 17 (26.6%) ASHAs knew the correct technique to dispose condom. Regarding the OCPs, 45 (70.3%) ASHAs said that the MALA D was available with them instead of MALA – N and 37 (57.8%) ASHAs said that emergency contraceptive pills were effective only within 72 hours after unprotected sex. Amongst knowledge regarding Intra Uterine Devices (IUD) insertion, 35 (54.7%) ASHAs said that ANM inserts IUD and ideal time for IUD insertion was within ten days of last menstrual period was said by 49 (76.6%) ASHA followed by after six weeks of child birth by 17 (26.6%) ASHA but 12 (18.7%) ASHAs didn't know the ideal time. 35 (54.7%) ASHAs had knowledge regarding family planning counselling.

The findings in the present study were similar to the study by **Waskel et al[13]** where out of 206 ASHA, 102(49.51%) had poor knowledge of family planning methods. The activities for family planning have assumed least priority among the ASHA because of less incentive and social issue.

On the other hand, a study done in Bihar reported that 80 % ASHA facilitators says that they knew about ECP's, but reality is they can't differentiate between OCP and ECP. Predominantly 94 % ASHA facilitators said that they knew about condom, and 41 % said they knew about female condom, but in reality they thought that male condom is the female condom, because in the field they distributed these condoms to only females.[14]

Contrary to this was the study done by **Jain et al[15]** which reported that 40% were counselled for acceptance of any method of family planning by the ASHAs, out of whom 6% turned up as acceptor of tubectomy, 26 % as condom users while less than 2 % got IUD inserted and 3 % started the use of either oral pills or some other traditional methods. A study done by **Mahyavanshi et al[16]** in Surendranagar observed that 43.9 % of ASHA's wrongly advised OCP as a method of family planning during lactation.

Assessment done in Udaipur reported that very few ASHAs mentioned motivation of clients for family planning or provision of oral pills and condoms as their responsibilities.[17] A report from SIFPSA concluded that 151 (32.8%) ASHA were generating awareness about family planning and 18.7% eligible women that they were supplied condoms, pills etc for family planning by ASHA.[18] In family planning services,

more than half (50.5%) and three fourth (77.5%) of ASHAs were assessed into poor category of performance for motivating to eligible couples to adopt Tubectomy and IUDs, respectively.[19] The findings of present study were less comparable with others because of non-availability of the studies.

Conclusion

Over the past decade, maternal and neonatal mortality reduction has emerged as clear priorities in the Indian national political agenda, with family planning listed as a key strategy. Unfortunately, the policy rhetoric on family planning based on informed choice has not translated into choice on the ground action. The present study showed that ASHA knowledge is good in certain areas of family planning, but improvement is needed. Family planning and correct choice of contraceptives is very essential. ASHA have to ensure the spread of information regarding all the modes of contraception available these days. Guidelines should be followed strictly in recruitment and selection of ASHA workers. The training programme should focus on making the ASHA understand the importance of her role in providing family planning services for the community. Monitoring should be made an integral part of ASHA working in the field to ensure that knowledge is converted into practices as well.

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