Community Health Workers and Reproductive and Child Health Care: An Evaluative Study on Knowledge and Motivation of ASHA (Accredited Social Health Activist) Workers in Rajasthan, India

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Abstract

ASHA-The Community Health Workers are the friends, philosophers and guides to women and children in reproductive and child health care in rural areas. Through orientation training, the Health Care System in India has build up their knowledge and capabilities to deal with Reproductive and Child Health Care at the grassroots. They deliver their duties and responsibilities through participatory approach along with other grassroots level health related workers i.e ANMs(Axiliary Nurse Midwife) and AWWs(Anganwadi Workers) and workers and volunteers of the community based organizations such as Mahila Mandals, Youth Clubs and Panchayati Raj Institutions. In this study, ASHAs knowledge on reproductive and child health care have been assessed with the help of standardized knowledge test which depict that they have scored 90.5, 86.7, and 86.62 percent in general reproductive awareness, maternal health care and child health care respectively. However, their knowledge score in family planning and HIV/AIDS is lower (64.16%) as compared to maternal and child health care. Findings also tells that out of the total number of cases those have adopted ANC(Antenatal Care), conducted deliveries in health institutions, received PNC(Postnatal Care), availed child immunization care facilities and number of eligible couples adopting various family planning methods in ASHA's operational area, 67.33,72.28,74.97 , 80.78 and 30.49 percent of cases respectively have been motivated by the ASHAs. As the study finding shows that their capacity is low in motivating family planning cases for restricting high fertility in rural areas, therefore, ASHAs need motivational and leadership training in the delivery of family planning services and dealing with problems of STDs, HIV/AIDS. However, ASHAs needs to be encouraged and religiously involved in RCH activities to give 100% output and the full potential of ASHA seeds to be used in all areas of reproductive and child health care particularly immunization of children and women and safe institutional deliveries which would prevent infant and maternal mortality in rural areas of Rajasthan. Moreover, another important positive finding of the study is that the representation of different communities as ASHA workers shows the adherence to affirmative action and inclusiveness principle in the selection process of ASHAs. ASHAs are really the 'hope' for impoverished rural women, as they provide counseling and motivational reproductive and child health care services at the door step. Time to time training and taking appropriate steps in solving their grievances will go a long way to strengthen the delivery of reproductive and child health care services through ASHAs at the grassroots.

I. Introduction

Globally, the intermediation of community health workers (CHWs) in health care delivery is widening as they are inevitable to meet the universal healthcare provision and the millennium development goals (WHO,2010).Several countries in Sub-Saharan Africa and South Asia are in the process of scaling up CHW (Community Health Worker) interventions in efforts to meet the Millennium Development Goals in the run up to 2015(Rao, 2013).

The term 'community health worker' encompasses a wide variety of local healthcare providers ranging from nurse-midwives to home-based care givers and salaried-staffs to volunteers (Lehmann and Sanders, 2010).The concept CHW, according to Rifkin (2008), is a term used to refer to a person who lives and works closely with the community on health-related issues like health education, providing health care and so on. According to WHO (1990) "CHWs are men and women chosen by the community and trained to deal with the health problems of individuals and the community and to work in close relationship with the health services. They should have had a level of primary education that enables to read, write and do simple mathematical calculations". Witmer et.al (1995) defined CHWs 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. By identifying community problems, developing innovative solutions, and translating them into practice, community health workers can respond creatively to local needs". The CHWs enable access to and utilization of health services and inculcate healthy behaviours among the communities (Lewin, Munabi-Babigumira and Glenton, 2010). They are preponderantly deployed to cater to underutilized services, unmet health behaviours and underserved populations (Lewin, Munabi-Babigumira and Glenton, 2010).

In 2005, as a key component of efforts to expand access to health services in undeserved areas, India's National Rural Health Mission (NRHM) introduced the accredited social health activists (ASHA), a CHW((IFPS Technical Assistance Project,2012). The ASHA programme under the NRHM, based on the experiences of various CHW schemes in the country, is considered to have the potential to generate community participation through its implementation (Joshi and George, 2012).To be more specific, the government of India launched the NRHM in order to provide accessible, accountable, affordable, effective and reliable primary health care to the poor and vulnerable section of the rural population (MoHFW, 2006). NRHM aims at to create a more holistic approach to overall health care delivery at the local level by integrating many of the vertical public health programmes under MoHFW(Ministry of Health and Family Welfare) with other related sectors such as drinking water, sanitation and nutrition(MoHFW,2005). One of the key components of the NRHM launched is to create a band of trained female health activist called 'Accredited Social Health Activists' popularly called ASHA(Meaning hope) to act as a 'bridge' between the rural people and health services outlets and play a central role in achieving national health and population policy goal (SIFPSA, 2013). ASHA is expected to provide primary medical care with her kit, control of diseases by information and education, sanitation and surveillance, antenatal, natal and postnatal services to women, counseling on family planning, safe abortion, child immunization and Vitamin A supplementations, change in behaviour in breast feeding, birth spacing, sex discrimination, child marriage, girls education, care of the child especially newborn, household survey, collaborating with health functionaries , working with community disease control, to create awareness on health and its determinants, mobilize the community towards local health planning, and increase the utilization of the existing health services (Bhatnagar et.al, 2009). The ASHAs represent the cornerstone of NRHM's strategy to address the Millennium Development Goals (MDG) on health related indicators (Bajpai and Dholkia, 2011).They are being the grass root level worker, the success of NRHM in India depends on how efficiently is ASHA able to perform (Mane and Khandekar, 2014). To sum up, in India, NRHM is accepted as an example of comprehensive Primary Health Care with CHW (ASHAs) as one of its main components (Lawn et.al., 2008).

Since the implementation of ASHA several studies have been conducted in order to know the impact of ASHA on the delivery of primary health care in general and maternal and child health care in particular at the grassroots level. One of the study on voluntary health workers has found that the VHWs covered the population effectively and provided continuous primary health care to the people whom the health professional were not able to reach (Arole and Arole, 1975).An evaluative study on ASHA reveals that they do provide constellation of services and play a potential role in providing primary health care but still they need to put into practice their knowledge about while providing services and/or advice to negotiate health care for women and children (Garg et.al., 2013). A study conducted in Uttar Pradesh shows that ASHA is accepted as a part of the society and is looked upon as one who promotes health in the village community and is considered as an opinion leader and well wisher of the village community as far as health services are concerned (SIFPSA, 2013). Srivastava and Srivastava(2012) found that despite the training given to ASHAs lacunae still exists in their knowledge regarding various aspects of child health morbidity and suggested that refresher training should be conducted for newly recruited ASHA workers. The effectiveness of ASHA worker largely depends on the training and support from both the health system and the community (Shashank et. al., 2013).

It is opined that with the involvement of ASHA, the country has been making remarkable strides in the improvement of maternal health and some health indicators like maternal mortality ratio, infant mortality rate and total fertility rate have shown decline (Mane and Khandekar, 2014). Some even considered that the ASHA's role in the community is more important compared to ANMs as they belong to the community and work to address the health needs of the community on various fronts (Joshi and Mathew, 2012).

The present study was conducted in Jaipur and Tonk district of Rajasthan, India. The main objectives of the study are to assess the knowledge of ASHA workers and evaluate their role in motivation of eligible couples for acceptance various Maternal and Child Health care services and family planning methods. Rajasthan is one the low performing States as far as health status is concerned. District Level Household and Facility Survey (IIPS,2008) envisaged that only 48.8 percent of children 12-23 months have been fully immunized, 56.6 percent of ante-natal women have received any ante-natal check up; as far as delivery is concerned, percentage of institutional delivery is 45.5; 53.7 percentage of delivery was conducted at home and only 7.2 percent has been conducted by skilled personnel and so far as use of family planning method was concerned, 57 percent of eligible couples have been using any methods of family planning (IIPS, 2008). The Annual Health Survey 2010-11 of Rajasthan envisages the Maternal Mortality Ratio of 331 of the state, of which Jaipur district is 319 and Tonk district 338(GOI, 2011). The high maternal mortality speaks out the poor MCH status of the state. Vora et.al. (2009) have also opined that the MMRs vary across the states, with the large North Indian states contributing a disproportionately large proportion of deaths, Uttar Pradesh and Rajasthan for example, have high rates of fertility and mortality while Kerala and Tamil Nadu have rates comparable with middle-income countries.

II. Objectives and Methodology

This study which covered 200 ASHA workers was conducted in two districts of Rajasthan such as Tonk (one of the Backward Region Grant Fund (BRGF) districts) and Jaipur , the former is a socio-economically backward district and the later is an advanced one. The objectives of the study are: (i) to assess the social status of the ASHA workers;(ii) to evaluate the knowledge of the ASHA workers on various aspects of primary health care and particularly Maternal and Child Health Care ; and (iii) to evaluate the motivational capabilities of ASHA workers in maternal and child health care and family planning. A standardized knowledge test was administered on 200 ASHA workers, 100 each from Jaipur and Tonk district of Rajasthan to gauge their knowledge about the MCH and various packages of practices: (i) general reproductive health awareness; (ii) maternal health care; (iii) child health care; (iv) family planning service delivery; (v) HIV/ AIDS; and (vi) environmental sanitation. The study also analyses the motivational capabilities of ASHAs with regard to antenatal, natal, postnatal care, child immunization and family planning.

III. Discussion

III.1 Social status of ASHA

The ASHA is a female volunteer selected by the community, deployed in her own village (one in every 1000 population) after a short training on community health(MoHFW, 2005). She is preferred to be between 25 and 45 years old, with minimum formal education of 8 years and demonstrable leadership quality (MoHFW, 2005). It is important to know the socio-economic status of ASHAs, as it will help the health system to design appropriate training and orientation programme taking into consideration their education level. Their caste status will help to know as how the inclusive principle was adhered to in selection process of ASHAs at the grassroots level, so that there is no bias and different caste and community group has been given due representation. One of the studies has found that the poor socio-economic status of ASHAs makes them depend on the incentives offered since this is their main source of income (Joshi and George, 2012). It is found from the analysis of the data that highest 42 percent of them are 10^{th} standard pass and even 34 percent of them are qualified up to class 8^{th}.On the other hand only 14 percent of them are class 12^{th} pass and 11 percent of them have been qualified graduation and above. Shrivastava and Shrivastava(2012) found from their study that 45.9 percent of ASHA workers received less than a secondary level education. The analysis of data shows that three fourth of ASHAs are educated up to secondary level and below and this suggests that considering their lower level of education they must be provided with adequate training in order to enable them to effectively discharge their duties and responsibilities.

Table -1: Age, Caste, Qualification & Work Experience Profile of ASHAs

Categories	Total
Age	
20 – 25 yr.	30(15%)
26 – 30 yr.	84(42%)
31 – 35 yr.	62(31%)
36 - 40 yr.	14(7%)
>41 yr.	10(5%)
Caste	
General	68(34%)
SC	30(15%)
ST	52(26%)
OBC	50(25%)
Qualification	
8th pass	64(32%)
10th pass	86(43%)
12th pass	28 (14%)
Graduation & Above	22(11%)
Work Experience	
Jeevan Dhara Project	6(3%)
Teacher pvt. school	4(2%)
AW Sahaika	10(5%)
ASHA Sahyogini	16(8%)

Source: Filed Data collected in 2014

Table-1 shows that majority of the of ASHAs are in the age-group between 25 to 35; 42 percent of them are in the age group of 26 – 30 years and 31 percent of them are in the age-group 31-35. Garg et.al.(2013) also found from their study that majority of ASHA workers were in the age-group of 20-29year (39.05), while Shrivastava and Shrivastava(2012) found from their study that 47.9 percent of ASHA workers were under the age 25 year. As far as caste wise distributions of ASHAs are concerned, it is found from the Table-1 that 34, 26, 25 and 15 percent belonging to General Caste, Scheduled Tribes, Other Backward Castes and Scheduled Castes respectively. The spatial selection of ASHAs shows inclusiveness, which cover all the caste composition available in the rural community. The analysis of data shows that only 18 percent of the total ASHAs having work experience in various social development related projects before joining as ASHA.

III.2 Knowledge of ASHAs on General Reproductive Health Awareness

The ASHA Guide of NRHM brought out by the MoHFW, government of India has recommended eight tasks for ASHA workers which were divided into five essential areas (i) knowledge about and planning for the village; (ii) technical information on the NRHM, Family Planning/Reproductive Health and linkages using the life cycle approach; (iii) Behavioural Change Communication with an emphasis on life skills education; (iv) depot and record keeping; and (v) referral and first aid (IFPS Technical Assistance Project, 2012).ASHAs play an important role in general health care and it was revealed that due to the excessive focus of ASHAs on curative care, the community considers them more an extended arm of the health service system, not as change agents as envisaged in the programme (Joshi and George, 2012).

Table-2: Knowledge Score of ASHA on General Reproductive Health Care

Age	**N-200**	**Mean Score**	**Std. Deviation**	**Coefficient of Variation**	**Chi-Square**
20 - 25	30	1.80 (90%)	.561	.314	.260*
26 - 30	84	1.76 (85%)	.431	.186	
31 - 35	62	1.87 (93.5%)	.341	.116	
36 - 40	14	1.71 (85.5%)	.488	.238	
>41	10	2.00 (100%)	.000	.000	
Total	200	1.81 (90.5%)	.419	.176	
Caste					
General	68	1.79 (89.5%)	.410	.168	.308*
SC	30	1.80 (90%)	.561	.314	
ST	52	1.85 (92.5%)	.368	.135	
OBC	50	1.80 (90%)	.408	.167	
Total	200	1.81 (90.5%)	.419	.176	
Qualification					
8th pass	64	1.88 (94%)	.336	.113	.170*
10th pass	86	1.67 (83.5%)	.522	.272	
12th pass	28	2.00 (100%)	.000	.000	
Graduation & Above	22	1.91 (95.5%)	.302	.091	
Total	200	1.81 (90.5%)	.419	.176	

Source: Filed Data collected in 2014
Note-* not significant at .05 level of probability

Table-2 on analysis of data on knowledge of ASHAs on a few general health care practices shows that 90 percent of ASHAs have knowledge about different questions asked on general health care. ASHAs, those are above 40 years of age have perfect knowledge about the general health care practices. Similarly, those who have educational qualification above 12^{th} pass are found to score high as compared to those who are lower level of education. As far as knowledge of different caste group of ASHAs is concerned, it is observed that that there is little variation in the knowledge score of different groups. The table depicts that there is no significant differences in knowledge among ASHAs belonging to different caste groups, having different levels of education and with different age-group.

III.3 Knowledge and Motivation of ASHAs in Maternal Health Care

As ASHA is the link between community and health care system, her services becomes very crucial for the success of MCH aspects under NRHM (Roy and Sahu, 2013). Shukla and Bhatnagar(2012) from their study found that ASHAs have optimal knowledge of expected work and are the major source of information and support for pregnancy related services.

Table-3: Knowledge Score of ASHAs on Maternal Health Care

Age	N-200	Mean Score	Std. Deviation	Coefficient of Variation	Chi-Square
20 - 25	30	6.13 (87.57%)	.743	.552	
26 - 30	84	6.14 (87.71%)	.814	.662	
31 - 35	62	6.06 (86.57%)	.680	.462	
36 - 40	14	6.00 (85.71%)	.577	.333	.066*
>41	10	5.40 (77.14%)	1.517	2.300	
Total	200	6.07 (86.71%)	.795	.631	
Caste					
General	68	5.88 (84%)	.913	.834	
SC	30	6.13 (87.57%)	.516	.267	
ST	52	6.31 (90.14%)	.838	.702	.178*
OBC	50	6.04 (86.28%)	.676	.457	
Total	200	6.07 (86.71%)	.795	.631	
Qualification					
8th pass	64	6.09 (87%)	.928	.862	
10th pass	86	6.05 (86.42%)	.815	.664	
12th pass	28	6.21 (88.71%)	.579	.335	.640*
Graduation & Above	22	5.91 (84.42%)	.539	.291	
Total	200	6.07 (86.71%)	.795	.631	

Source: Filed Data collected in 2014
Note-* not significant at .05 level of probability

Table –3 shows that the average score of the ASHAs in maternal health care is 86.71 percent. It is found that ASHAs in younger age group have scored more than those are in middle and higer age group. The knowledge score of ASHAs in maternal health care in the age group of 20-25 and 26-30 are 87.57 and 87.71 percent respectively as against those who are above 41 year of age having knowledge score of 77.14 percent . It is seen from the analysis of data that 8th class passed ASHAs have higher knowledge score 87 percent as compared to those who have educational qualification of graduation and above with 84.42 percent. However, there is no significant different in knowledge score among these three categories of ASHA respondents based on their age, caste and qualification.

Table-4: Motivation of Antenatal Care by ASHAs

Sl. No.	Age	Mean Number of Antenatal Cases	Mean Number of Antenatal Cases Motivated by ASHAs	Mean difference in %	Chi-Square
1.	20 - 25	17.07	11.00 (64.44%)	35.56	.228*
2.	26 - 30	19.88	13.52 (68.00%)	32	
3.	31 - 35	25.19	17.19(68.24%)	31.76	
4.	36 - 40	2.71	2.00 (73.80%)	26.20	
5.	>41	21.57	14.71(68.19%)	31.81	
Total		17.28	11.68 (68.53%)	31.46	
	Caste				
1.	General	22.21	14.21(63.98%)	36.02	.261*
2.	SC	22.67	16.33(72.03%)	27.98	
3.	ST	22.92	15.69(68.45%)	31.55	
4.	OBC	16.36	11.12(67.97%)	32.03	
Total		21.04	14.33(68.54%)	31.47	
	Qualification				
1.	8th pass	23.53	16.44(69.86%)	30.14	.718*
2.	10th pass	21.86	14.35(65.64%)	34.36	
3.	12th pass	17.79	11.29(63.46%)	36.54	
4.	Graduation & Above	14.36	10.27(71.51%)	28.49	
Total		19.41	13.08(68.54)	31.47	

Source: Filed Data collected in 2014
Note-* not significant at .05 level of probability

It is the role of ASHA to identify the pregnant women to make sure that they receive adequate antenatal care, natal care and postnatal care (Vora et.al. 2009). Singh et.al (2012) has found that ASHA was the major facilitator for higher utilization of antenatal care (except IFA consumption/receipt) and natal care. It is found from the present study that out of the total number of antenatal cases, 68.54 percent of them have been motivated by ASHAs and who have been send by them to the nearest health care centre to receive antenatal care such as early registration of pregnancy, BP checkups, administration of TT injection and IFA tablets.

Table-5: Motivation of Institutional Delivery by ASHAs

Sl. No.	Age	Mean Number of Intuitional Deliveries	Mean Number of Institutional Deliveries Motivated by ASHAs	Mean difference in %	Chi-Square
1.	20 - 25	15.67	10.07 (64.26%)	35.74	.669*
2.	26 - 30	18.48	12.76(69.04%)	30.96	
3.	31 - 35	22.39	17.29(77.22%)	22.78	
4.	36 - 40	18.71	13.71(73.27%)	26.73	
5.	>41	22.20	13.80(62.16%)	37.84	
Total		19.80	14.18(71.46%)	28.53	
	Caste				
1.	General	18.97	13.15(69.31%)	30.69	.127*
2.	SC	22.60	16.47(72.87%)	27.13	
3.	ST	22.00	16.08(73.09%)	26.91	
4.	OBC	15.64	11.04(70.58%)	29.42	
Total		19.80	14.18(71.46%)	28.53	
	Qualification				
1.	8th pass	23.50	16.91(71.95%)	28.05	.072*
2.	10th pass	18.49	13.26(71.71%)	28.29	
3.	12th pass	17.29	11.64(67.32%)	32.68	
4.	Graduation & Above	14.36	10.36(72.14%)	27.86	
Total		19.80	14.18(71.46%)	28.53	

Source: Filed Data collected in 2014
Note-* not significant at .05 level of probability

Under NRHM, the ASHA scheme launched in some state has improved community-mobilization efforts significantly by linking the community through a local volunteer with government field workers and with facilities for institutional delivery (Vora et.al., 2009). Das(2012) from his study found that with ASHA's interventions, the institutional delivery has increased from 25 percent in 2007 to 61.2 percent in 2010.The present study finding shows that out of the total number of institutional delivery, 71.46 percent have been motivated by ASHAs(Table-5). Similarly, the Table-6 reveals that out the total number of post natal mothers who have received postnatal care services from the health centres, 74.62 percent have been motivated by the ASHAs. Generally acceptance of postnatal care among lactating women is very low. As Singh et.al. (2012) from their study opined that utilization of postnatal care was found to be very low and is a matter of concern. The finding of this study clearly shows that ASHAs are playing vital role in motivating women for availing postnatal care from the health centres. ASHAs are the harbingers of antenatal, natal and postnatal care in the countryside.

Table-6: Motivation of Postnatal Care by ASHAs

Sl. No.	Age	Mean Number of Postnatal Cases	Mean Number of Postnatal Cases Motivated by ASHAs	Mean difference in %	Chi-Square
1.	20 - 25	13.60	10.13(74.48%)	25.52	.482*
2.	26 - 30	18.29	13.90(75.99%)	24.01	
3.	31 - 35	19.26	14.48(75.18%)	24.82	
4.	36 - 40	23.57	17.14(72.71%)	27.29	
5.	>41	13.20	16.28(66.66%)	33.34	
Total		17.58	13.73 (74.62%)	25.37	
	Caste				
1.	General	18.35	13.74(74.87%)	25.13	.083*
2.	SC	21.80	16.27(74.63%)	25.37	
3.	ST	19.08	14.92(78.19%)	21.81	
4.	OBC	14.12	10.00(70.82 %)	29.18	
Total		17.58	13.73(74.62%)	25.37	
	Qualification				
1.	8th pass	22.78	17.16(75.32%)	24.68	.774*
2.	10th pass	17.49	13.30(76.04%)	23.96	
3.	12th pass	12.57	12.43(75.01%)	24.99	
4.	Graduation & Above	13.00	10.14(67.15%)	32.85	
Total		17.58	17.73(74.62%)	25.37	

Source: Filed Data collected in 2014
Note-* not significant at .05 level of probability

III.4 Knowledge and Motivation of ASHAs in Child Health Care

ASHA plays an important role in reaching primary health care to rural areas and preventive services rendered by ASHAs like awareness generation, sanitation and preventive immunization are utilized by community and ASHA has high acceptance from the community (Nellisserry,2013). Child health care is one of the important focused areas of ASHAs work. Immunization coverage has increased after the introduction of ASHAs (Roy and Sahu, 2013).

Table-7: Knowledge Score of ASHAs in Child Health Care

Age	N-200	Mean Score	Std. Deviation	Coefficient of Variation	Chi-Square
20 - 25	30	7.13 (89.12%)	.990	.981	.849*
26 - 30	84	6.90 (86.25%)	1.055	1.113	
31 - 35	62	6.71 (83.87%)	1.006	1.006	
36 - 40	14	7.57 (94.62%)	.787	.619	
>41	10	7.00 (87.5%)	1.225	1.500	
Total	200	6.93 (86.62%)	1.027	1.056	
Caste					
General	68	6.94 (86.75%)	1.278	1.633	.022*
SC	30	6.47 (80.87%)	.915	.838	
ST	52	7.00 (87.5%)	.894	.800	
OBC	50	7.12 (89%)	.781	.610	
Total	200	6.93 (86.62%)	1.027	1.056	
Qualification					
8th pass	64	6.84 (86.75%)	1.019	1.039	.378*
10th pass	86	7.00 (87.5%)	1.069	1.143	
12th pass	34	7.07 (88.37%)	.997	.995	
Graduation & Above	22	6.73 (84.12%)	1.009	1.018	
Total	200	6.93 (86.62%)	1.027	1.056	

Source: Filed Data collected in 2014
Note-* not significant at .05 level of probability

Table –4 shows that the average score of the ASHAs in child health care is 86.62 percent. It is found that ASHAs in younger age group have scored more than those are in middle and above age group. The knowledge score of ASHAs in maternal health care in the age group of 20-25 is 89.12 as against those who are above 41 year of age having knowledge score of 87.5 percent . The finding of the study also reveals that 8th class passed ASHAs have higher knowledge score (86.75 percent) as compared to those who have educational qualification graduation and above (84.12 percent). However, there is no significant different in knowledge score among these three categories of ASHAs classified based on age, caste and qualification. Table-8 shows that out of the total number of children in the age-group 0-5 having received immunization, 80.61 percent of them have been motivated by ASHAs. The study reveals that the ASHAs performance in child health care is higher as compared to maternal health care. It is pertinent to note here that, Srivastava and Srivastava(2012) from their study found that ASHAs lack in knowledge of various aspects of child health mortality.

Table-8: Motivation of Child Immunization & Child Care by ASHAs

Sl. No.	Age	Mean (average No. of cases per ASHA)	Mean (average No. of cases motivated by ASHA)	Mean difference in %	Chi-Square
1.	20 - 25	50.00	39.80(79.6%)	20.4	.777*
2.	26 - 30	74.00	57.83(78.14%)	21.86	
3.	31 - 35	60.71	51.13(84.22%)	15.78	
4.	36 - 40	58.00	49.71(85.70%)	14.3	
5.	>41	6.00	6.00(100%)	0	
Total		61.79	49.85(80.61%)	21.88	
	Caste				
1.	General	63.15	51.91(82.20%)	17.8	.362*
2.	SC	64.40	52.20(81.05%)	28.95	
3.	ST	72.42	57.92(79.97%)	20.03	
4.	OBC	47.20	37.40(79.23%)	20.77	
Total		61.79	49.85(80.61%)	21.88	
	Qualification				
1.	8th pass	74.84	61.13(81.68%)	18.32	.908*
2.	10th pass	65.49	52.86(80.71%)	19.29	
3.	12th pass	42.14	33.14(78.64%)	21.36	
4.	Graduation & Above	34.09	26.91(78.93%)	21.07	
Total		61.79	49.85(80.61%)	21.88	

Source: Filed Data collected in 2014
Note-* not significant at .05 level of probability

III.5 Knowledge of ASHAs in Family Planning and HIV/AIDS

ASHA workers are required to hold monthly community meetings to discuss various health issues such as antenatal care, postnatal care, complication during delivery, nutrition and diet and family planning and HIV/AIDS (IFPS, 2012). They are key motivational agent in the community to adhere small family norm by adopting various family planning methods. ASHAs have become a backbone of National Rural Health Mission and have become an integral part of social life in the villages of India (Mane and Khandekar, 2014).

Table-9: Knowledge Score of ASHAs in Family Planning and HIV/AIDS

Age	N	Mean Score	Std. Deviation	Variance	Chi-Square
20 - 25	30	3.67 (61.16%)	1.633	2.667	.904*
26 - 30	84	4.07 (67.83%)	1.488	2.214	
31 - 35	62	3.90 (65%)	1.578	2.490	
36 - 40	14	3.29 (54.83%)	1.604	2.571	
>41	10	3.00 (50%)	1.225	1.500	
Total	200	3.85 (64.16%)	1.533	2.351	
Caste					
General	68	4.06 (67.66%)	1.632	2.663	.022*
SC	30	3.53 (58.83%)	1.552	2.410	
ST	52	4.35 (72.5%)	1.355	1.835	
OBC	50	3.24 (54%)	1.393	1.940	
Total	200	3.85 (64.16%)	1.533	2.351	
Qualification					
8th pass	64	3.97 (66.16%)	1.576	2.483	.411*
10th pass	86	4.02 (67%)	1.520	2.309	
12th pass	28	3.36 (56%)	1.447	2.093	
Graduation & Above	22	3.45 (57.5%)	1.572	2.473	
Total	200	3.85 (64.16%)	1.533	2.351	

Source: Filed Data collected in 2014
Note-* not significant at .05 level of probability

The Table-5 depicts that percentage total score in family planning and HIV/AIDS is 64.16 is lower than that of the maternal health care and child health care which are 86.71 and 86.26 percent respectively. The percentage of knowledge of younger age group ASHAs in the age group 26-30 is 67.83, while those are in the age group 40 and above it is 50 percent only. This clearly shows that with the increase in age, the community health workers lose interest particularly in counseling eligible couple regarding family planning and HIV/AIDS. However there is no significant difference in knowledge among different group of ASHAs based on their age, caste and qualification with regard to family planning and HIV/AIDS.

As far as role of ASHAs in motivation of family planning cases are concerned, it is found that out of the total mean number of eligible couples using various family planning methods, only 30.47 were being motivated by ASHAs(Table-10). It is one of the weakest areas of AHSAs and considering higher fertility rate in the state of Rajasthan, ASHAs' role is not adequate and thus they are playing meager role in the areas of promotion of use of family planning methods and adoption of small family norms by the population in their areas. Certainly, as compared to maternal and child health care services, ASHAs' approach to delivery of family planning services is weak.

Table-10: Motivation of Family Planning Cases by ASHAs

Sl. No.	Age	Mean (Number of eligible couple adopted family planning method per ASHA)	Mean (Number of family planning cases motivated by ASHA)	Mean difference in %	Chi-Square
1.	20 - 25	6.13	1.73(28.22%)	71.78	.641*
2.	26 - 30	10.45	3.60(34.44%)	65.56	
3.	31 - 35	8.35	2.68(32.09%)	77.91	
4.	36 - 40	14.14	2.14(15.13%)	84.87	
5.	>41	9.15	2.79(30.49%)	69.51	
Total		9.69	2.83(30.47%)	69.53	
	Caste				
1.	General	7.50	2.91(38.8%)	61.2	.379*
2.	SC	13.20	3.33(25.22%)	74.78	
3.	ST	10.19	2.38(23.35%)	76.65	
4.	OBC	7.88	2.72(34.51%)	65.49	
Total		9.69	2.83(30.47%)	69.53	
	Qualification				
1.	8th pass	10.53	3.22(30.57%)	69.43	.426*
2.	10th pass	9.37	3.12(56.01%)	43.99	
3.	12th pass	5.57	1.00(17.95%)	82.05	
4.	Graduation & Above	8.82	2.55(28.91%)	71.09	
Total		9.69	2.83(30.47%)	69.53	

Source: Filed Data collected in 2014
Note-* not significant at .05 level of probability

III.6 Knowledge of ASHAs in Health and Sanitation

ASHA has to work in coordination with the Village Health and Sanitation Committee for the improvement of village sanitation condition. The Village Health and Sanitation Committee fund shall be credited to a bank account, which will be operated with the joint signature of ASHA/Health Link Worker/Anganwadi Worker along with the President of the Village Health and Sanitation Committee/Pradhan of the Village Panchayat (Kumar, 2008).With ASHA's keeping continuous touch with each and every rural women, they became aware about different practices to live a healthy life which included child immunization, nutrition, basic sanitation and hygienic practices (Das,2012).

Table-11: Knowledge of ASHAs in Health and Sanitation

Sl. No.	Age	N-200	Mean	Std. Deviation	Coefficient of Variation	Chi-Square
1.	20 - 25	30	3.00 (100%)	.000	.000	.936*
2.	26 - 30	84	2.98 (99.33%)	.154	.024	
3.	31 - 35	62	2.97 (99%)	.180	.032	
4.	36 - 40	14	3.00 (100%)	.000	.000	
5.	>41	10	3.00 (100%)	.000	.000	
	Total	200	2.98 (99.33%)	.141	.020	
	Caste					
1.	General	68	2.94 (98%)	.239	.057	.266*
2.	SC	30	3.00 (100%)	.000	.000	
3.	ST	52	3.00 (100%)	.000	.000	
4.	OBC	50	3.00 (100%)	.000	.000	
	Total	200	2.98 (99.33%)	.141	.020	
	Qualification					
1.	8th pass	64	3.00 (100%)	.000	.000	.439*
2.	10th pass	86	2.95 (98.33%)	.213	.045	
3.	12th pass	28	3.00 (100%)	.000	.000	
4.	Graduation & Above	22	3.00 (100%)	.000	.000	
	Total	200	2.98 (99.33%)	.141	.020	

Source: Filed Data collected in 2014
Note-* not significant at .05 level of probability

Table- 11 shows that mean score of ASHAs in health and sanitation is more than 98 percent. Thus ASHA's Knowledge in health and sanitation issues is very high, which veritably testifies their role as health counselors. There is no significant difference in knowledge among different caste, age and education group of ASHAs.

IV. Conclusions and Suggestions

Since the implementation Primary Health Care Services in India, the community level workers in various nomenclatures from time to time are being serving at the grassroots level for the improvement of maternal and child health care status and reduction of high fertility in rural areas by motivating people for adoption of various family planning methods. The community health workers named ASHAs created under NRHM are the go-between the government grassroots level health functionaries and the people in general and the eligible couples in particular. Some of the important conclusions drawn from the study are: (i) out of the total number of ASHAs- 34, 15, 26 and 25 percent of them belong to General Caste, Scheduled Caste, Scheduled Tribes and OBCs (Other Backward Castes) respectively, this shows that in the selection process of ASHAs due emphasis has been given to different sections of the community in the stratified Indian rural society. In other words, this shows the adherence to affirmative action and inclusiveness principle in the selection process of ASHAs; (ii) the knowledge and motivation level of ASHAs in child health care is higher as compared to the maternal health care. ASHAs are effective in motivating more than 68 percent of antenatal women those who have adopted various antenatal care practices such as early registration of pregnancy, three trimester checkups, administration of TT injection and consumption of IFA tablets; 71 percent of institutional deliveries and 74 percent of post natal care are found to be motivated by ASHAs. However, they have to make sincere effort to enhance their motivational achievement up to 90-100 percent; (iii) ASHAs have motivated more than 80 percent of eligible women having children in the age-group 0-5 and empowered them through education and communication to adopt immunization and other preventive health care services from the health care centers and this shows that ASHAs are more knowledgeable and keen to promote child health care as compared to maternal health care and family planning services ; (iv) One of the weakest areas of knowledge and low motivational level is family planning and out of total mean number of eligible couples adopting various family planning methods only 30 percent of them are found to be motivated by ASHAs and therefore the performance of ASHAs is low in family planning service delivery as compared to MCH; and (v) ASHAs knowledge in heath and sanitation is quite high as compared to maternal and child health care , family planning and HIV/AIDS. This in other words, ASHAs as per the stipulation of duties and responsibility consider themselves as health educators, motivators and counselors rather than MCH and family planning service providers.

Table-12 Motivation of MCH/Family Planning Cases by ASHA

Sl. No.	Types of Services	Mean Number of cases	Mean number of cases motivated by ASHA	Mean difference
1.	Antenatal Care	21.00	14.14 (67.33%)	6.86 (32.67%)
2.	Institutional Delivery	19.47	13.88 (71.28%)	5.59 (28.71%)
3.	Escort for Institutional Delivery	19.47	11.37 (58.39%)	8.1 (41.60%)
4.	Postnatal Care	18.10	13.57 (74.97%)	4.53 (25.03%)
5.	Child Immunization	61.76	49.89 (80.78%)	11.87 (19.22%)
6.	Family Planning cases	9.15	2.79 (30.49%)	6.36 (69.51%)

Source: Filed Data collected in 2014

Some of the suggestions which would effectively promote the participation of ASHAs in the reproductive health care at the community level are: (i) ASHAs need to be given orientation training progamme from time to time and an integrated training programme of ASHAs along with other grassroots level health functionaries such as elected representatives of panchayati raj institutions and members of Community Based Organizations like Youth Clubs and *Mahila Mandals* will promote greater cooperation between ASHAs and the rural community at large. Mishra (2012) suggested greater involvement of community in recruitment of ASHAs, so that ASHA can efficiently act as a bridge between community and health system; (ii) Area based and community specific specialized training on need and importance of various family planning methods and HIV/AIDS is required for ASHAs; (iii) timely payment of remuneration will motivate them to put their effort regularly and sincerely in community services;

(iv) the grassroots level health functionaries i.e. Health Worker (male)and Health Workers (Female) need to consider ASHAs as their co-worker not as a temporary low paid village health volunteers and should give hands on training to ASHAs in various areas of maternal and child health care ; and (v) last not the least, there must be an activity mapping of various grassroots level functionaries i.e. Anganwadi workers, ANMs (Auxiliary Nurse and Midwife) and similar other grassroots level workers deployed by the government, private and non-governmental agencies dealing with health care delivery services at the grass roots level, so that there would not be any replication of effort leading to wastage of resources. Gasavi et.al(2009) have also found that challenges faced by most of the ASHA were lack of support from PHC staff, the lack of good training, unclear reimbursement policy and poor clarity in how to collaborate work with the ANM and Anganwadi worker. ASHAs have to efficiently coordinate with the other grassroots level workers in order to deliver their assigned duties and responsibility effectively. Community Health Worker (ASHA) is found to be one of the important grassroots level community workers in primary health care dedicated towards the effective delivery of primary health care services at the grassroots in India and are the "hope" of impoverished and illiterate rural women in reproductive and child health care.

Notes

(i) Scheduled Castes and Scheduled Tribes- The **Scheduled Castes** (SCs)and **Scheduled Tribes** (STs) are two groups of historically disadvantaged people recognized in the Constitution of India. The Scheduled Castes and Scheduled Tribes comprise about 16.6 percent and 8.6 percent, respectively, of India's population (according to the 2011 census). The *Constitution (Scheduled Castes) Order, 1950* lists 1,108 castes across 25 states in its First Schedule, and the *Constitution (Scheduled Tribes) Order, 1950* lists 744 tribes across 22 states in its First Schedule. Since independence, the Scheduled Castes, Scheduled Tribes were given reservation in India. The Constitution lays down the general principles of affirmative action for SCs and STs(Source- Wikipedia the free encyclopedia, http://en.wikipedia.org/wiki/Scheduled_Castes_and_Scheduled_Tribes accessed on 26/05/2014).

(ii) Other Backward Castes (OBCs)- Other Backward Class (OBC) is a collective term used by the Government of India to classify castes which are educationally and socially disadvantaged. It is one of several official classifications of the population of India, along with Scheduled Castes and Scheduled Tribes (SCs and STs). The OBCs were found to comprise 52% of the country's population by the Mandal Commission report of 1980, a figure which had shrunk to 41% by 2006 when the National Sample Survey Organization took place. In the Indian Constitution, OBCs are described as "socially and educationally backward classes", and the Government of India is enjoined to ensure their social and educational development - for example, the OBCs are entitled to 27% reservations in public sector employment and higher education. The list of OBCs maintained by the Indian Ministry of Social Justice and Empowerment is dynamic, with castes and communities being added or removed depending on social, educational and economic factors (Source- Wikipedia the free encyclopedia, http://en.wikipedia.org/wiki/Other_Backward_Class, accessed on 26/05/2014).

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