

PUBLICATIONS

PARADIGM SHIFT IN THE HEALTH SECTOR : A CASE STUDY OF NATIONAL RURAL HEALTH MISSION (NRHM) IN SONITPUR DISTRICT OF ASSAM

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ABSTRACT

NRHM is a national effort at ensuring effective health care for the rural population especially for the disadvantaged group including women and children by improving access, strengthening public health system for efficient delivery, enhancing equity and accountability and promoting decentralization. NRHM in Assam represents a “revolution” in term of improving health of the poor in rural areas. Keeping this in view a study on “Paradigm shift in the rural health sector : A case study of NRHM in Sonitpur district of Assam” was conducted with the following objectives :

(1) To conduct a comparative study on health state of population before and after launching of NRHM, (2) To analyze the impact of NRHM.

The study reveals that after launching of NRHM infant mortality rate, maternal mortality rate, birth rate and death rate is reduced. There has been an increase in numbers of institutional delivery, fully immunized children, out patient visit and twenty four hours health facilities in rural areas. Public Health centers, sub-centers, district hospitals are made functional and overcoming shortage of drug supplies. After the launching of this scheme people residing in remote areas could access basic health care. And a better rural health is the first key steps towards rural development. It was found that NRHM led to multiplied effect on the society.

Key words : National Rural Health Mission (NRHM), Public health centre

INTRODUCTION

The NRHM is a national effort to bring about dramatic improvement in the health system and health status of the people, especially those who live in the rural areas of the country. The mission seeks to provide universal access to equitable, affordable and quality health care which is accountable at the same time responsive to the needs of the people, reduction of child and maternal death as well as population stabilization, gender and demographic balance. It covers the entire country with special focus on 18 states where lies the challenges of strengthening poor health system.

Assam is one of the high focused states under NRHM and is most populated state in the North East. The state exhibits diverse geographical contours and has largely agrarian economy. Assam was covered on 11th of November, 2005 under the programme. Thus it brought to the fore various disease control programmes such as control of malaria, tuberculosis, vector bone diseases, iodine deficiency disorder, Janani Suraksha Yojana, mobile medical unit, boat clinic, Mamoni, Majoni, main streaming AYUSH and creation of ASHA.

NRHM not only gave access to basic services of health care but also created awareness regarding sanitation, nutrition, saving drinking water, social gender equality and hygiene. In addition there is a huge component for infrastructure development of health institutions in terms of civil works and equipment on one hand and additional man power on the other. Institutional integration within the fragmented health sector was expected to provide focus on outcomes measured against Indian Public Health Standards of all health facilities.

NRHM is shifting the focus to a science based health care which treats illness and helps to maintain physical and psychological balance of the individual. Keeping this in view this study was undertaken in Sonitpur district of Assam with the following objectives :

- i) To conduct a comparative study on health state of population before and after launching of NRHM.
- ii) To analyze the impact of work of NRHM.

MATERIALS AND METHODS

The conceptual part of the study was based on secondary sources. The secondary data of the work have been collected from the information available in the District Health Office, District Programme Manager and Block Programme Manager of eight blocks. Primary data has been collected from ASHA volunteer, GNM, Doctors appointed under NRHM, members of MNGO apart from officers of District programme office and block offices.

The study has been undertaken in 8 blocks of Sonitpur districts of Assam, namely Bihaguri, Behali, Balipara, Dhekiajuli, Rangapra, Gohpur, North Jamuguri and Biswanath Charali which is covered by NRHM.

RESULTS AND DISCUSSION

A comparative study on health state of population before and after launching of NRHM :

NRHM represent a revolution in terms of improving access of the rural poor to health care. NRHM has made a remarkable difference compared to the prelaunch situation, which was described as the near zero supply of service and immunization in some rural areas.

Data of present study reveals that after launching of NRHM infant mortality rate, maternal mortality rate is reduced. Institutional delivery has increased by 18,600 fully immunized children have increased by over 65% birth rate and death rate have decreased (Table 1).

Apart from health state, there is an increase in numbers of doctors from 85 to 120 and number of nurses increased from 225 to 584. All health centers are repaired and upgraded with essential medicines, first aid material and test facilities.

The impact of work of NRHM :

NRHM includes a number of schemes and services which are directed towards achieving its objectives. An analysis of the impact created by NRHM is discussed below.

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Table 1. NRHM's significant gain in health state of population

Indicators	Health State 2000-2005	Health state 2006-2009 (till March, 2009)
Infant mortality rate	80 per 1000 live birth	68 per 1000 live birth
Maternal mortality rate	490 per 1000 live birth	458 per 1000 live birth
Institutional delivery	5000 (approx.)	22640 cases
Fully immunized children	38.9%	65.6%
Anemia among 6-35 months children	87.3%	56.1%
Anemia among women aged 15-49 yrs.	69.7%	56.1%

1. Janani Suraksha Yojana (JSY) :

JSY, under NRHM integrates the case assistance with antenatal care during the pregnancy period, institutional care during delivery and immediate postnatal care by field level health worker. The main motto of this scheme is to reduce overall maternal mortality rate (MMR) and infant mortality rate (IMR) by promoting institutional deliveries.

Impact of JSY :

JSY incentives has contributing a significant improvement in numbers of hospital deliveries. Number of institutional deliveries during the year 2007-2008 is 19126 in Sonitpur district which is regarded as 100%.

Social implications :

Well being of the mother and the child giving way to a healthy society, reduced fear for the would be mother and receiving care through trained people. People have stated about developing confidence in the system.

2. Mamoni :

The scheme has been effective from 1st of March, 2009. During the first

registration, the pregnant women will be given 'Mamoni' a book on food and a mother and child health card (MCH card). During her second antenatal care (ANC) the pregnant women will receive an account cheque of Rs. 500. During her third ANC she will be given Rs. 500 along with a voucher for referral transport.

Impact of Mamoni :

Increased institutional deliveries, better care in pregnancy, especially amongst the poor. Providing financial support to pregnant women of below poverty line to have nutritious food and iron supplement as the pregnant lady is the only source of nutrition for the baby in the womb, which has helped in decreasing maternal and infant mortality rates. This has helped to prevent anemia prevalence among pregnant women and children.

Social implication :

This scheme has helped pregnant women by taking care of their monetary needs during pregnancy to some extent. Now they need not be neglected by their family members and can be less dependent on them for getting medical care and nutritional support. Previously many of them were not able to bear the cost of

transportation to visit a doctor, get medicine and adequate nutritional support. The male members were not ready to forego their daily wage earnings by accompanying the women. Now she is accompanied by the health workers whenever needed. This had boosted the morale of these women, who in future are more aware of health care needs and is likely to spread this awareness among other women and also provide assistance to others if required.

3. Mojoni :

This scheme has been started from March, 2009 to provide special assistance to new born girl children under Assam Bikash Yojana. According to this scheme, every girl child will receive a fixed deposit amount of Rs. 5000.00 at the time of birth. The maturity period of the fixed deposits is 18 years of the girl.

Impact of majoni :

It provide financial support for the girls education and helps in eradicating gender differences prevalent in the society. Till now beneficiaries are benefited from the scheme in Sonitpur. (Public Health Centres of Sonitpur district).

Social implications :

This scheme is likely to encourage the parents not to discriminate a girl child and plan a bright future for her. This would definitely be a significant component for winds of change in the society. In future she could be an important pillar of development. With this scheme the women also have felt more empowered.

4. Accredited social health activist (ASHA):

ASHA is a female voluntary worker

in the rural area resident of same village for which she is selected as per selection process. She should be age of 25-45 years with formal education up to class VIII (eight). At present 1435 trained ASHAs are appointed for Sonitpur district of Assam. They have to bring the pregnant women of her village for registration and minimum 3 antenatal care in 5 months, 8 months and 9 months, ASHA organized health day in centres of her village with 'Angan wari' workers, ANM, NGO, PRI member, district media expert, block programme manager, and medical officer if necessary.

Impact of ASHA :

ASHA is playing a role of decision maker in the rural areas, after the creation of ASHA institutional deliveries have increased from 5000 to 22640, maternal mortality rate is reduced by 32 per 1000 live birth, infant mortality rate is reduced by 12 per 1000 live birth, and fully immunized children are increased by 25.7%. ASHA help in preventing any causality due to malaria and also provide DOTs to TB patients, create awareness about the programmes of NRHM, about good health and nutrition.

Social implications :

ASHA is a forerunner in bringing overall health awareness amongst the masses. She is the key person behind the success of many programmes of NRHM. She is a motivator and an important part of their social life giving support whenever needed. Thus she has a great impact on the society having the power to transform it.

5. 24 hours health facilities in rural areas :

A total 283 numbers of sub-centres

A STUDY OF THE KNOWLEDGE, SKILL AND ATTITUDE OF ASHA WORKERS IN FACILITATING HEALTH CARE SERVICES IN ASSAM

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ABSTRACT

ASHA (Accredited Social Health Activist) Provide health related services to their community and are working as a grass root level workers. Thus it is important to assess the knowledge of ASHAs towards their roles and responsibilities, their attitude and the skills in facilitating health care services. Therefore a descriptive cross-sectional study was conducted and survey method was used to collect relevant information from ASHAs of the three districts of Assam namely Sonitpur, Nagaon and Sivasagar district. Data was collected by using pretested structured questionnaire and was entered in MS-Excel and analyzed by using SPSS software version 16. Study reveals that ASHA workers have good knowledge regarding their roles and responsibilities in the area of maternal health, children health and about their community. They have lack in knowledge about their roles and responsibilities in the areas of hygiene and sanitation, food and nutrition. Findings shows that 100% ASHAs are not mastery in performing their work. Their attitude is positive towards their work, further it was found that there was no significant difference between their knowledge and attitude but a significant difference was found between the mean score of knowledge and skills of ASHA workers.

INTRODUCTION

Health is an importance area in the process of social and economic development, considering this the government of India launched NRHM (National Rural Health Mission) in 2005 to provide accessible and effective primary health care by strengthen the health care delivery system. The ASHA was created as important component of NRHM who work as a link between community and health care system (Hota P.K 2006). The main responsibilities of ASHA's are creating awareness and provide information to community about health, nutrition sanitation, and hygienic practices. They Counsel Women on birth preparedness, institutional delivery, importance of safe delivery, and breastfeeding. They have to accompany pregnant women to health centers for antenatal check up, delivery and post natal checkup. They mobilize community and facilitate them in accessing health related services such as medical care for minor ailments, new bore care, maintenance of birth and death statistics. The ASHA is also expected to work with the AWW (Anganwadi workers) to conduct various health activities within the village (NRHM ASHA guideline, 2005). ASHA provides help for any health related issues to the deprived section of the population, who find it difficult to access health services. (Bajpai & Dholakia 2011) reported in their study that some of ASHAs have no clear idea about roles and responsibilities and due to lack of knowledge and insufficient training they were not able to perform up to the level necessary. Thus ASHAs knowledge, skill and attitude are the crucial aspects of health care to the effective outcomes (Vichita & Ngam 2007). The success of NRHM a lots depends on ASHAs who helps the people to meet their health needs at the grass root and peripheral level. Hence it is essential to study whether they have adequate knowledge and skills to facilitate health care services at the same time it is important to study their attitude towards their work. With this rationale, the present study was carried out with the following objectives:

- To determine the Knowledge of ASHAs regarding their roles and responsibilities
- To determine skills of ASHAs in facilitating health care services
- To find out the attitude of ASHA workers towards their work
- To find out significant difference among knowledge, skills and attitude of ASHAs across facilitating health care services.

Materials and Methods

This study was conducted in three districts of Assam namely Sonitpur, Sivasagar and Nagaon district. Survey method was used to collect relevant information from ASHAs of the selected districts. Data was collected by using pretested structured questionnaire. 30% health development block from each district are selected on the basis of their performance as good, medium and low performing block which was considered by referring evaluation report published by district programme office of the three districts. Hence 3 blocks from Sonitpur, 4 blocks from Nagaon and 3 health development blocks from Sivasagar district were selected. 10 percent villages from each health development blocks were selected by using random number generator table. From each selected village one ASHA is considered. Therefore total of 144 ASHAs were selected for this study. The data was entered in MS-Excel and analyzed by using SPSS software version 16. Data analysis was done with the help of frequency distribution tables, measure of central tendency and one way ANOVA. A reliability test of questionnaire containing questions in interval scales was carried out by applying cronbach's alpha method and the reliability coefficient was 0.70

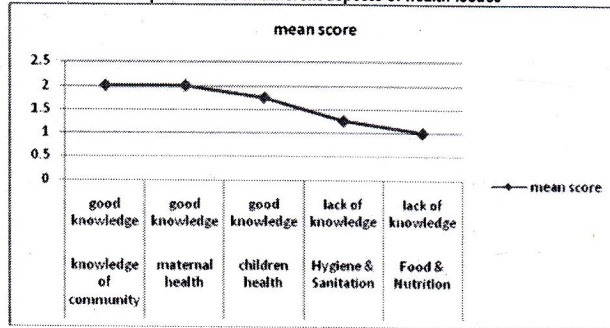
ANALYSIS AND FINDINGS

Knowledge of ASHAs regarding their Roles and Responsibilities: The components viz., Maternal health, Children health, Knowledge about their community, Sanitation and hygiene, and Food and nutrition were used to measure the Knowledge of ASHAs regarding their roles and responsibilities. For this, a knowledge test was administered against a checklist that was prepared based on training module for ASHA and health department feedback that ASHAs must have adequate

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knowledge of their roles and responsibilities of the components mentioned above. Responses were measured in 2 point scale as 'yes' and 'no'. Scores were given as 2 for every correct answer and 1 for incorrect answer. To interpret the level of knowledge of ASHA workers the score were distributed as follows: Maximum score for knowledge test = 40 (with an average mean score 2); For good knowledge = if respondent obtained > 30 marks (With average mean score > 1.4), For lack of Knowledge = if respondent obtain 20-30 (with mean score less than 1.5)

Figure 1: Mean scores of ASHAs knowledge regarding their roles and responsibilities in different aspects of health issues



The findings present in the Figure 1, shows that ASHA workers have good knowledge regarding their roles and responsibilities in the area of maternal health, children health and about their community with the mean score (2.0), (1.75), (2) respectively. They motivate their client for institutional delivery and accompany them to hospital for antenatal, postnatal check up and institutional delivery, they properly handle their record book and register clients name and help them to get Janani Sureksha card. They informed ASHAs about exclusive breast feeding to a baby for the first six months and immunization of children to be done against six killer diseases by doing home visit and organizing awareness camp. Similar findings

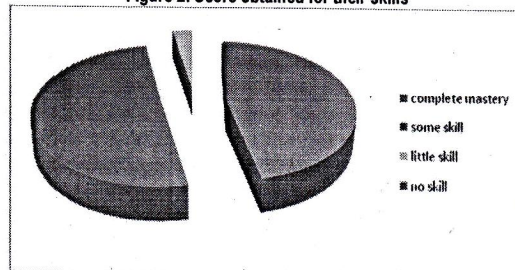
were in the line of Mahayavanshi et al. 2011. They have lack in knowledge about all reasons of mosquitoes breed and symptoms of malaria. Their involvement in motivating community for construction of low cost sanitary latrines and cleanliness of surrounding is very less. Similar findings were reported by khan et al. 2006

Skills of ASHAs in Facilitating Health Care Services: Skill is also an important factor for ASHA workers to improve their competency in order to improve their performances. One may have no skill, little skill, some skill and complete mastery. Communication skill, Interpersonal skill, Organizational skill, Advocacy skill, Coordination skill, and Teaching skill of ASHA workers were studied which are needed by them to perform their task effectively. To find out the skills of ASHA workers a systematic observation method was undertaken which was done with the help of a structured schedule. A 4 point likert scale was use to measure their skills such as "to large extent", "to some extent", "to little extent" and "not at all" and they were given score 4, 3, 2, and 1 respectively. Here, to large extent indicate complete mastery in skills, to some extent indicate some skill, to little extent indicates very little skill and not at all means no skill. Health Day, Vaccination Day, Village Health and Sanitation Day, group discussion and meetings organized by ASHA workers was attended to observe ASHAs performance and on the basis of researcher's observation they were awarded scores for their skills during performing activities. 24 statements were structured under above mentioned six skills in order to observe ASHA skills. Thus a total 96 marks were given by the researcher on the basis of observation. To interpret the quality of skills the scores were distributed as follows: Maximum scores for skills = 96, (with average mean score 4); Mastery in skill= if respondent scored in between 72-96 marks, (with average mean score > 3.5); Some skill = if respondent scored in between 48-71marks, (with average mean score 2.5 to 3.4); Little skill = if respondent scored in between 24 - 47marks (with average mean score 1.5 to 2.4); No skill = if respondent scored less than 24 marks, (with average mean score < 1.5). The mean scores of analyzed data regarding skills of ASHA workers reveal that, they had a complete mastery in communication skill (3.50), and coordination skill (3.56). They had no mastery in organization skill (3.02), interpersonal skill (3.44) and teaching skill (2.85). ASHA workers had very little skills in advocacy (2.01) their community.

Skills	Category	Mean Score
Communication skill	complete mastery	3.50
Interpersonal skill	complete mastery	3.44
Organizational skill	complete mastery	3.02
Coordination skill	some skilled	3.56
Advocacy skill	little skilled	2.01
Teaching skill	little skilled	2.85

Overall skills of ASHAs in performing their task: Regarding overall skills of ASHAs fig 2, shows that majority (49.9%) had some skill followed by 46.1% of respondents had complete mastery in their work. Mean scores of ASHAs in skills is 3.09, which depicts that majority of ASHA worker had some skill. Findings shows that 100% ASHAs are not mastery in performing their work it is may be due to the incomplete training. The level of mastery will be gained by ASHAs not only after getting induction training but after getting additional training and hand on experience it helps them to reach to a level that can be certified as competent.

Figure 2: Score obtained for their skills



Attitude of ASHA workers towards their work: Attitude is a tendency to respond positively or negatively towards a certain idea, object, person or situation. Attitude influences individual's choice of action. So it is important to study attitude because positive attitude is very crucial to bring effective outcomes on ASHAs work. To interpret the quality of attitude, 11 statement were framed in the schedule and was given a score of 5 for strongly agree, 4 for agree, 3 for neutral, 2 for disagree and 1 for strongly disagree. The scores were distributed as follows. (Similar scale was followed by USHA S. 2012) Maximum score for attitude test

= 55; Positive attitude = if respondent scored >33 marks (with average mean score >3.5); Neutral = if respondent scored in between 23- 33 marks (with average mean score 2.5-3.5); Negative attitude = if respondent scored <22 marks (with average mean score <2.5); Table 2, shows that the majority of the respondents 78.6% had positive attitude towards their work, and only 1.4% of the respondent had negative attitude towards their work. Mean scores of attitude is 4.01 which depicts that majority of ASHA workers had positive attitude.

Table 2: Attitude of ASHA workers towards ASHAs work

Variable	Positive		Neutral		Negative		Mean of attitude
	No.	%	No.	%	No.	%	
Attitude	119	78.6	23	20.0	2	1.4	4.01

Differences between attitudes across the knowledge of ASHA workers: A one way ANOVA at a significant level of 5% ($\alpha = 0.05$) is carried out to examine whether the average attitude score of ASHA workers towards their work differ across their knowledge in various health issues. Therefore respondent's attitude towards their work is treated as the dependent variable while their knowledge in various health issues is treated as independent variable.

H_0 : There is no significant difference in the average attitude score across the knowledge level of ASHAs.

Symbolically, $H_0: \mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$

- Where, μ_1 = average knowledge score of ASHAs for their community
- μ_2 = average knowledge score of ASHAs for maternal health
- μ_3 = average knowledge score of ASHAs for children health
- μ_4 = average knowledge score of ASHAs for sanitation and hygiene
- μ_5 = average knowledge score of ASHAs for food and nutrition

Table 3: Mean scores of Attitude with mean scores of knowledge of ASHAs.

Category	Sum of Squares	df	Mean Square	F	Sig. level (ANOVA)
Between Groups	10.563	26	.406	.746	.804
Within Groups	63.697	117	.544		
Total	74.260	143			

Results of one way ANOVA reveals that p value =0.804 and it is higher than $\alpha = 0.05$, hence it not statistically significant and we cannot reject the formulated null hypothesis "there is no significant difference among average attitude score of ASHAs towards their work across their level of knowledge in various aspects of health. Hence, attitude is not dependent on having knowledge in the different aspects of health issues.

Difference between Skills and knowledge of ASHAs in aspects of health issues: For this the hypothesis that (H_0) there is no significant difference in the average skill score across the knowledge level of ASHAs is formulated.

Symbolically, $H_0: \mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$

- Where, μ_1 = average knowledge score of ASHAs for their community
- μ_2 = average knowledge score of ASHAs for maternal health
- μ_3 = average knowledge score of ASHAs for children health
- μ_4 = average knowledge score of ASHAs for sanitation and hygiene
- μ_5 = average knowledge score of ASHAs for food and nutrition

Table 4: Mean scores of skills with the mean score of Knowledge of ASHAs

Category	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.560	14	.111	1.856	.037
Within Groups	7.745	129	.060		
Total	9.306	143			

ANOVA results reveals that p value =0.037 which is less than 0.05, these implies that there is a significant difference among average skill score of ASHAs towards their work across their level of knowledge regarding their roles and responsibility in various aspects of health. Therefore formulated hypothesis is rejected. It implies that skills may dependent on the knowledge level of ASHAs.

CONCLUSION

Findings of the study reveal that ASHAs have good knowledge about their roles and responsibilities in the area of maternal health, children health and about their community but they lack in knowledge regarding sanitation and hygiene, food and nutrition. They are not mastery in regards to skills to carry out their work. It indicates that still there is a gap in ASHAs knowledge and skills than the desired in the areas which ASHAs are dealing. Majority of respondent have positive attitude towards their work and self motivated. Further study reveals that there is a significant difference between the mean scores of knowledge and skills of ASHA workers, hence ASHAs should be updated with all the relevant information and should be clear about their roles and responsibilities in all the areas that they are dealing. It enhances their knowledge, which might helps ASHAs to feel more confident to carry out their work and improving their working skills. Study concluded that ASHA worker's knowledge, skills and attitude are important aspects of health system to improve the coverage of community based new health programmes at the household level. Therefore ASHAs should be carefully selected and should be provided adequate and on the job training to build their capacity by improving their knowledge, skills and attitude to enhance their effectiveness in work. At the same time ASHAs are needed to be empowered by providing sufficient drugs and medical kits so that they can give to client or community at the need.

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