The Role of Accredited Social Health Activist (ASHA) in India

Jaya Mishra

Department of Political Science Indraprastha College for Women University of Delhi E-mail: mailto:jayanarayanmishra@gmail.com

Abstract—The Accredited Social Health Activist (ASHA) programme was launched by the Government of India under the National Rural Health Mission (NRHM) with the objective to strengthen the healthcare delivery system with a focus to address the needs of the poor and vulnerable sections among the rural population. The national guidelines prescribes that ASHAs be women residents of the community they serve and receive 23 days of training in the first year and 12 days of training every subsequent year thereafter. The objectives of training curriculum are to impart the knowledge, skills and attitudes required of an ASHA to effectively perform their roles and responsibilities.

The primary goal of the ASHA programme is to promote delivery at health facility, universal immunization, counseling women about benefits of starting early Brest feeding, provide ORS and some basic drugs to women and children. They work in collaboration with midwife, and ANM. Each ASHA is expected to cover a population of 1000, receive performance- and service-based incentives for facilitating immunization, referral and escort services for institutional deliveries. Promoting institutional delivery under the national scheme Janani Suraksha Yojana (JSY) is the most important ASHA task which comes with an incentive. ASHAs receive Rs. 600 for every woman who is successfully referred for institutional delivery, and the post-partum mother is also entitled to receive Rs. 6,000 as per the Government's recent order). While performing their duty, ASHAs face several problems -- which may affect their health adversely,, threaten their security and, may result in neglecting their family.

India is the land of socio-economic and political diversity, and there is a need to better understand

ASHAs' multiple roles within the many diverse Indian contexts they operate. The first part of this paper focuses on the selection and remuneration of ASHAs; the second part examines the role of ASHAs in different parts of India. and last part seeks to explore their problems and their plausible solutions.

1. INTRODUCTION

The Ministry of Health and Family Welfare (MoHFW) of the Government of India launched National Rural Health Mission (NRHM) in 2005 to provide accessible health services to rural population. For this, a new band of community based functionaries, named as ASHA have been instituted. The ASHAs represent the cornerstone of NRHM's strategy to address the Millennium Development Goals (MDG) on health related indicators. ASHAs are selected from the village, they

reside and trained to act as interface between the rural population and the public health system. ASHAs are the first port of call for any health related demands of marginal sections of the population, especially women, children, old aged, sick and disabled people. She is the link between the community and the health care provider.

2. SELECTION

Initially, ASHAs were recruited in villages gradually they have been recruited for the urban areas and are expected to work in slums. ASHAs are selected by the community, are supervised by the local Facilitator and are accountable to the community. They must be resident woman of the village that they have been selected to serve. Married, widowed or divorced women are preferred over unmarried women since Indian cultural traditions require that upon marriage women my grate to their husbands village. ASHAs preferably should be a literate woman with formal education up to 8 class. In case of hilly areas, desert and tribal areas, this qualification could be relaxed. States have flexibility to decide educational qualification of ASHA, in UP, ASHA should have passed tenth class. ASHAs are expected to have effective communication skills and leadership quality, be able to convince the people. They are selected between the age group of 25-45. However, the state may decrease lower age limit. e.g. in Rajasthan, the lower age limit is 21 years. While in UP minimum age limit of ASHA 20 years.

Selection of ASHA is not bereft of corruption, as corruption has seeped into the vitals of our system; selection of ASHA is no exception. We pat our back for rising level of education, Unfortunately, rising level of education has not solved the problem of unemployment. in many villages there are more than one candidate for the post of ASHA since the criteria of selection of ASHA is very flexible, given-take of money is becoming rampant. Author interviewed more than a dozen of ASHAs of Gonda district of UP they all tacitly accepted payment of bribe for the selection.

3. REMUNERATION

Although ASHAs are considered volunteers, and are supposed to work 2-3 hours per day. Even though the ASHAs are volunteers, there are national guidelines for reimbursement. They receive outcome based remuneration and financial compensation for training days. The state ASHA program must pay them an average daily wage (200 Rs). The national level also defines some guidelines for additional added stipends or performance rewards for those activities that are either advancing specific health priorities or that require extra time or training. Some of the current activities for which there are guidelines for performance incentives are activities in family planning, DOTS, and immunizations. The national level sets a minimum stipend level, but the states may adjust these stipends and add additional incentives. The incentives are budgeted in the state budgets, which are approved at national level and funded through Global Fund support.

In Meghalaya Across the seven Districts of the State, most ASHAs are receiving Rs. 150/- to Rs. 1000/- per month as incentive for performing different activities & providing various services spelt out under various programmes. In West Garo Hills District, ASHAs are reportedly earning from Rs.1000 to 1800 a month as incentive from Janani Suraksha Yojana (JSY) as institutional Deliveries escorted by ASHA are high. However, the incentive earned by the ASHA particularly depends a lot on the number of beneficiaries she could get in a month from her village. In UP, apart from performance based incentives, ASHA also get Rs. 1000 as honorarium.

Non-financial incentives are also part of the incentive/performance support system of the ASHA program. States, at their discretion, may use bicycles or mobile phones as rewards for meeting targets – the Government of UP provides mobiles to achieve its targets.

4. ASSESSMENT OF ROLES AND RESPONSIBILITY

ASHAs are local women trained to act as health educators and promoters in their communities. The Indian MoHFW describes them as health activists in the community who will create awareness on health and its social determinants and mobilized the people towards the local health planning and increased utilization and accountability of existing health services.

ASHAs perform four main roles in delivering primary health services:

- 1. They provide minimal level of maternal child care;
- 2. They educate and promote health behaviors, especially encouraging pregnant women and new mothers to keep regular appointments at the health center;
- They refer patients to the health center; they mobilize communities by calling meetings with women of the villages; and

4. They document and maintain records on the families for which they are responsible.

ASHAs are responsible to create awareness about maternal and child health and family planning, TB, malaria, diarrhea, and HIV/AIDS, as well as prevention through education in sanitation, nutrition. As per the guidelines provided by the Haryana Government, ASHAs are expected to perform following functions:

- ASHA have to take steps to create awareness and provide information to the community on determinants of health such as proper diet and nutrition, basic sanitation and hygienic practices, healthy living and working conditions, information on existing health services and the need for timely utilization of health and family welfare services at doorsteps.
- ASHA have to conduct home visits of the pregnant women/mother/newborn under Home Based PostNatal Care (HBPNC), and they are supposed to counsel pregnant women on birth preparedness, importance of safe delivery, breastfeeding and complementary feeding, immunization, contraception and prevention of common infections including Reproductive Tract Infection/Sexually Transmitted Infection (RTIs/STIs) and care of the young child.
- ASHA have to mobilize the community and facilitate them in accessing health and health related services available at the village/sub-center and other public health facilities, such as Routine Immunization (RI), Ante Natal Check-ups (ANCs), Post Natal Check-ups (PNCs), sanitation and other services being provided by the Government.
- ASHA have to work with the Village Health Sanitation Nutrition Committee/Village Level Committee (VHSNC/VLC) of the Gram Panchayat to facilitate a comprehensive village health plan with ANM, AWWs and PRI members.
- ASHA have to arrange escort/accompany pregnant women & children requiring treatment/ admission to the nearest pre- identified health facility i.e. Primary Health Centre/Community Health Centre/ First Referral Unit (PHC/CHC/FRU).
- ASHA have to provide primary medical care for minor ailments such as diarrhea, fevers, and first aid for minor injuries. ASHA are also acting as Dot Providers of Directly Observed Treatment Short-course (DOTS) under Revised National Tuberculosis Control Programme (RNTCP).
- ASHA are also acting as a Depot Holder for essential provisions being made available to every habitation like Oral Rehydration Therapy (ORS), Iron Folic Acid Tablet (IFA), chloroquine, Disposable Delivery Kits (DDK),

44 Jaya Mishra

Contraceptives (Condoms, Oral Pills, and Emergency Pills), etc.

- ASHAs are expected to provide first information about the births and deaths in her village and any unusual health problems/disease outbreaks in the community to the Service Centre (SC/PHC/CHC or directly to the District Authorities or even to the State HQ at the NRHM Help Line.
- Fulfillment of all these roles by ASHA are envisaged through continuous training and up- gradation of their skills over the years.

ASHAs are also meant to serve as a key communication mechanism between the health care system and rural population. In most part of the country, ASHAs are playing very positive role in providing basic health services to rural population. In a survey conducted in the state of Karnataka, "ASHAs were very functional with regard to antenatal and intranatal care service provision, such as counseling support and escort service. At least 60% (689/1,141) of women who had reported an institutional delivery attributed it to being a result of the motivation by the ASHA in their community". There was significant variability in the type of postnatal care services offered by the ASHA, "some activities, such as advice on breastfeeding (83.6%) and home-visits to see the puerperal mother (72.4%), were reasonably high while, on the other hand, service provision on others, such as advice on danger sign management (14.9%), contraceptive-use (21.2%), and maternal nutrition (58.4%), remained low."

ASHAs are effectively engaged in Counseling on early initiation of breastfeeding, immunization of children at birth and completion of all vaccines under "indradhanush" programme. A study conducted in four districts of Uttar Pradesh namely, Varanasi, Moradabad, Lakhimpur-Kheri, and Jalaun (Orai), it was found that ASHAs support in ANC services and immunization was significantly high in comparison to other services. They also facilitated institutional delivery. More than three-fourth beneficiaries were found satisfied with the services provided by the ASHA. The role and responsibility of ASHA indicate that she has an important role in the achievement of the objectives set by the NRHM.

ASHAs are working tirelessly in almost all parts of India – from South to North and East to west for the success of NRHM. Another study was carried out in Bagli block (primarily a tribal block) of Dewas district of Madhya Pradesh (state with highest Infant Mortality Rate= 56 in India. In this block "100% ASHA had good rapport with ANM (basic health worker posted at Sub Health Center & Primary Health Center) & AWW (Anganwadi worker – basic nutrition worker posted at Anganwadi Center which is the basic nutrition centre located in a population of 1000 in both rural & urban areas.) 100% ASHAs mobilizes the community and facilitates them in accessing health and health related services available at the village such as the Sub Health Center & Primary Health

Center. All the ASHAs (100%) coordinate with 108 Emergency Ambulance and Janani Express obstetric care Ambulance for referral of cases from villages to healthcare facility. In 93% of the villages the Village Health Sanitation and Nutrition Committee is operational to deal with health & Nutrition issues" (for details see: Satish Saroshe, 2014).

To assess the current status of the ASHA intervention in JSY in three districts of Rajasthan, namely: Bhilwara, Jailsalmer, and Udaipur, it was ascertained that out of 165 ASHAs interviewed 59 per cent had good knowledge of Antenatal and child care services. Majority of ASHAs knew that swelling of hands and feet, excessive bleeding, followed by paleness, convulsions, and visual disturbance, feeling uneasy and vomiting were pregnancy related complications. On recognizing such symptoms, they would refer the patients to the nearest public/private facility or accompany the pregnant woman to facility. Forty-five percent of the ASHAs would ask the pregnant woman to consult the ANM the next day. Promoting institutional delivery is one of the most important functions of the ASHAs, however, in 2007, only 18 percent women were escorted by ASHAs to health institutions for delivery. Most (90 percent) beneficiaries of JSY appreciated the role of ASHA in obtaining services at the place of delivery. Besides, their presence provided psychological and moral support.

Evaluation of ASHA was conducted by the National ASHA Mentoring Group and coordinated by National Health System Resource Centre (NHSRC) in 16 States. This evaluation was done in 3 rounds:

Round one	Assam, Bihar, Odisha, Rajasthan, Jharkhand,
(2010-11)	Andhra Pradesh, Kerala and West Bengal
Round two	Madhya Pradesh, Uttar Pradesh and Uttarakhand
(2011-2012)	-
Round three	Delhi, Gujarat, Haryana, Punjab and Maharashtra
(2013-14)	

(Source National ASHA Mentoring Group)

In the first round, evaluation commissioned by the National ASHA Mentoring Group, in two districts each in eight states, which included five high focus states (Assam, Bihar, Orissa, Rajasthan, and Jharkhand) and three Non High Focus states (Andhra Pradesh, West Bengal, and Kerala), found that the vast majority of ASHAs are active, irrespective of context and other limitations, although there is a wide variation in the exact set of tasks and services that an ASHA carries out. In terms of coverage, the access to ASHA services was highest in Kerala with 85% and lowest in AP with 50%, while Orissa, Assam, Rajasthan and Jharkhand followed with 73-76%. Of the high focus states institutional deliveries rates were highest in Orissa and Rajasthan (93%) followed by Bihar at 82%.

73 per cent women of all states except Assam and Bihar reported that they have been advised to start early breast feeding. At least 65 percent ASHAs are consulted during

illness of a child. However despite the efforts made by the ASHA, her effectiveness is lower. She could not provide proper assistance due to a variety of reasons -- lack of skills, supplies, or limited support. For example the number of cases of diarrhea, for whom the ASHA was able to supply ORS from her kit, was 27% in Bihar, 37% in Jharkhand, 56% in Rajasthan, and 54% in Assam except in Odisha.

In the second round, performance of ASHA was assessed in the three High Focus states of Madhya Pradesh (MP), Uttar Pradesh (UP) and Uttarakhand (UK). Two districts were selected from each state.

Majority of ASHAs promoted institutional delivery and immunization. About 82-95% ASHAs across the three states escorted women at the time of delivery, 72-82% provided counseling to pregnant women and 87-92% promoted and coordinated the immunization days. 68% of ASHAs in UP, 53% in Bhind District of MP and fewer than 40% in UK and MP, made home visits. This does not mean that ASHAs were very effective because they could provide ORS to only 46-56% of cases. This reflects problems with supply and replenishment. The ASHAs had little knowledge of identifying chest in drawing as a danger sign for ARI and about making ORS. in UP and MP.

In the third round, evaluation of ASHA Were carried out in relatively developed states in terms of economy and education. The performance of ASHA in Delhi, Maharashtra, Gujarat, Haryana and Punjab reflected variation. The majority of ASHAs visited the service users during antenatal period as compared to visits within three days of birth in the post natal period across all states. Lowest figures in these respective categories are 70% in Gujarat for ANC visits and of 49% from Delhi for PNC visits. In Haryana, Punjab, Maharashtra and Gujarat, high proportion of service users reported that ASHAs visited them at least three times during ANC period and within three days of delivery (except for Delhi with 48%), less than 45% of women who had any maternal complication sought ASHA's advice for care in Delhi, Gujarat and Punjab while this figure was slightly better in Haryana and Maharashtra with 67% and 64% respectively. This may be a reflection of the ASHAs skill levels. And availability of more less health services in these states. Over 50 per cent of ASHA's have knowledge to classify a newborn as low birth weight with less than two Kg of weight at birth (highest being 73% in Haryana) and 48% and 43% in states of Gujarat and Delhi respectively (for detail see pib.nic.in/newsite/PrintRelease.aspx?relid27 Feb, 2015).

ASHAS performance is not satisfactory everywhere. In another study conducted in Wardha district of Maharashttra, reflected the fact that most of the ASHAs had information regarding their responsibility regarding ANC, immunization, tuberculosis, leprosy, malaria, high risk pregnancy but lacked the specific information on schedule of immunization, how to detect TB & leprosy cases. Almost all were knew that they would get performance based incentive but none of them were

aware about how much incentives they would exactly get while doing that particular work.

5. CONCLUSION AND SUGGESTIONS

A negative trend is taking place amongst ASHAs, since the incentives they get is not sufficient to lead a good life, in order to earn more money they charge fee from the poor patients in the name of speedy work. the Government hospitals provide free treatment to patients, yet Doctors will not see a woman in labour pain unless she pays some money, here ASHA has emerged as a mediator between the patients ant the doctors, this money is shared between the ASHA, nurses and doctors. In a performance-based remuneration system, ASHAs have to promote the use of health facilities in order to receive incentives. But negative experiences of the community with primary health care may discourage use of health services, which in turn, constrains ASHAs to earn their incentives.

ASHA workers create awareness on health and its determinants, mobilize the community towards local health planning, hygiene and increase utilization of the existing health services. for this noble service they get paltry incentives, what is worst, that it does not reach them on time and can be very demoralizing. "There are several key issues regarding incentives and compensation for ASHAs, which, if mitigated, would greatly contribute to an improvement in ASHAs' motivation and performance. At least 25% of ASHAs feel that the monetary compensation they receive isn't sufficient for the effort that they put in." Increasing incentives or adding additional incentives to activities should be contemplated. (Nirupam Bajpai and Ravindra H. Dholakia: 2011)

While dealing with patients of TB they stake their own health because no protective gear reaches them. ASHA's job profile is based on incentives. If a TB patient successfully completes their six-month course, she gets Rs 1,000 as honorarium, in case, they fail to complete the said course, her entire hard work becomes in vain. Moreover, many times, they spend whole day or whole night with pregnant women waiting for delivery at health institutions, leaving their young children behind. The Government should take some steps to ensure the welfare of their children. ASHA attends patients in their hour of need without caring for her own safety and security. This is why, perhaps the most important achievement of ASHA programme is that most of the deliveries are taking place in hospitals and most of the children are vaccinated.

Delay in payment to ASHA is a barrier in the effective working of schemes. Lack of awareness on the part of service providers and the community is acting as an obstacle in the proper implementation of schemes. To avoid delay in payments of ASHA incentives MoHFW has introduced the publicly financed management systems. This would help in eliminating delays in ASHA payments and ensure regular monitoring of funds flow at all levels. Above all, ASHA workers across India have for a long time been demanding that

46 Jaya Mishra

the government give them a fixed salary and there are sufficient reasons for considering this demand because this will go long way to improve their economic conditions and add a prestige to their work.

MoHFW has developed a 23-day training schedule to provide the necessary knowledge & skills to ASHAs. However, the low levels of skill set across all states highlight the need that the quantity and quality of the training in practice must be improved in order to improve the performance of ASHAs. Pictorial job aids and frequent refresher trainings are crucial to ensure that the ASHA retains her skills.

ASHAs are largely concerned with institutional delivery, immunization, ANC, PNC and advising women on initiation of early breast feeding, perhaps, they get more incentives for these works. Their capacity to deal with tuberculoses, HIV, malaria and other communicable diseases or construction of sanitary toilets is largely unutilized due to lack of adequate training and refresher courses. In the High focus states, the ASHA programme was promoted with zeal and vigor. While it received less attention of the programme managers in the Non High Focus states till recently. Consequently, ensuring quality in trainings, setting up and building capacities of support structures for effective mentoring was limited. States need to strengthen the support structures to ensure regular and high quality of training along with effective field level mentoring support for ASHAs. More importantly, The Governments should focus more on reorienting ASHAs on topics such as disposal of wastewater, nutrition, reproductive and sexual health, and management of diarrhea and pneumonia, helping develop village health plans, registration of vital events with the ANM/AWW, and community based new born care.

REFERENCES

- [1] Chaterjee, P. Tackling social factors to save lives in India. 2011. 89(10). http://www.who.int/bulletin/volumes/89/10/11-031011/en/ (2017-05-09).
- [2] Lakshmanan S. IKP Centre for Technologies in Public Health (ICTPH); Chennai, India. Selection Tool for Health Extension Workers in Rural India. Available online: http://ictph.org.in/downloads/ICTPH%20Guide%20Selection%20Tool%20Final.pdf(Accessed on 2017-05-09).
- [3] MANN, Vera. et al. Bull World Health Organ [online]. Retrospective comparative evaluation of the lasting impact of a community-based primary health care programme on under-5 mortality in villages around Jamkhed, India. 2010, vol.88, n.1:, pp. 727-736. Available online: http://www.scielosp.org/pdf/bwho/v88n10/v88n10a09.pdf(Acce ssed on 2017-05-09).
- [4] Singh, Sunita. et al. National Ministry of Health and Social Welfare, Population Foundation of India, Center for Health and Social Justice. Reviving Hopes and Realizing Rights: A Report on the First Phase of Community Monitoring under NHRM. June 2010. Available online: http://www.internationalbudget.org/wp-content/uploads/Reviving-Hopes.-Realizing-Rights.-A-Report-on-the-First-Phase-of-Community-Monitoring-under-NRHM.pdf (Accessed on 2017-05-05).

- [5] Shrivastava S, et al. Community based monitoring: Reviving hopes realizing rights. Prog Health Sci Vol 3, No.1, 2013. Available online: xhttp://progress.umb.edu.pl/sites/progress.umb.edu.pl/files/159 %20-161%20Shrivastava.pdf (Accessed on 2017-05-05).
- [6] India's Ministry of Health and Family Welfare's NHRM. Update on the ASHA programme: July 2012. Available online: http://nhsrcindia.org/pdf_files/resources_thematic/Community_ Participation/NHSRC_Contribution/ASHA_Update_July_2012. pdf(Accessed on 2017-05-06).
- [7] Guidelines-Government of India-National Rural Health Mission nrhm.gov.in/nrhm-components/rmnch-a/child-health.../guidelines.html (Accessed on 2017-05-14).
- [8]India's ASHA Programme. https://www.k4health.org/toolkits/decision.../ (Accessed on 2017-05-06).
- [9] Concept of NRHM. nrhmmeghalaya.nic.in/asha.html (Accessed on 2017-05-08).
- [10] UNFPA.Assessment of ASHA and Janani Suraksha Yojana in Orisa. www.cortindia.in/RP%5CRP-2007-0303.pdf(Accessed on (2017-05-14).
- [11] Concept of NRHM- National Rural Health Mission.Rajasthan nrhmrajasthan.nic.in/ashaResourcecenter.htm (Accessed on (2017-05-08).
- [12] ASHA benefits scheme Meghalaya. http://nrhmmeghalaya.nic.in/ASHA%20Benefit%20Scheme.pdf (Accessed on 2017-05-09).
- [13] Asha Job Notification Application form for 6600 Posts 2016. www.upjob.in/2016/01/up-asha-job-notification-application.html (Accessed on 2017-05-08).
- [14] Assessment of 'Accredited Social Health Activist' -- a national C(Accessed on 2017-05-11).ommunity Health Volunteer Scheme. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4438657 (Accessed on 2017-05-06).
- [15] Assessment of ASHA and Janani Suraksha yojana in Rajasthan www.cortindia.in/RP%5CRP-2007-0302.pdf (Accessed on 2017-05-11).
- [16] UP NRHM.National Rural Health Mission- State Action Plan Uttar Pradesh 2012-13. 16 May 2012.upnrhm.gov.in/site-files/UP_PIP-_2012-13-_Approved_-_For_Print.pdf 2017-05-11
- [17] Saroshe, Satish. Evaluation of Accredited Social Health Activist in Tribal Blocks of India. 25 Feb 2014. ghf.g2hp.net/.../evaluation-of-accredited-social-health-activistsin-tribal-blocks-of-india/ (Accessed on 2017-05-06).
- [18] Evaluation of Accredited Social Health Activist (ASHA). 27 Feb 2015, pib.nic.in/newsite/PrintRelease.aspx?relid=116029 (Accessed on 2017-05-06).
- [19] Bajpai, Nirupam. and Dholakia, Ravindra H. IMPROVING THE PERFORMANCE OF ACCREDITED SOCIAL HEALTH ACTIVISTS IN INDIA. 1 May, 2011. globalcenters.columbia.edu/southasia/ (Accessed on2017-05-06).
- [20] Saprii et al. Community health workers in India: analysing opportunities and Challenges. 9 Dec 2015. https://humanresources-health.biomedcentral.com/.../s12960-015-0094-3 (Accessed on 2017-05-12).
- [21] Sethi Disha. (Foot Soldiers of India's Health Programme. 16 Dec 2016. www.dnaindia.com/.../report-dedicated-to-a-noble-cause-2283957 (Accessed on 2017-05-12).
- [22] Gosavi, SV., Raut, AV., Deshmukh, PR., Mehendale, AM., Garg ASHAS' AWARENESS & PERCEPTIONS ABOUT THEIR

- ROLES & RESPONSIBILITIES: A STUDY FROM RURAL WARDHA MedINDmedind.nic.in/jaw/t11/i1/jawt11i1p33.pdf (Accessed on 2017-05-13).
- [23] Soni, Pina., Bhatt, Shilpa. and Gupta Priyanka. Role of ASHA Accredited Social Health Activists. International Journal of Recent Trends in Science And Technology Volume 9, Issue 3 (2014: 358-360).
- [24] Garg, PK., Bhardwaj, A., Singh A., Ahluwalia SK. AN EVALUATION OF ASHA WORKER'S AWARENESS And PRACTICE OF THEIR RESPONSIBILITIES IN RURAL HARYANA. 31 Mar 2013. njcmindia.org/uploads/4-1_76-80.pdf(Accessed on 2017-05-13).
- [25] Mony, Prem., Raju, Mohan. Evaluation of ASHA programme in Karnataka under the National Rural Health Mission. 28 sep. 2012.
 - https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3467467/(Accessed on 2017-05-13).
- [26] Fathima, Farah N., Raju, Mohan., Varadharajan, Kiruba S., Krishnamurthy, Aditi., Ananthkumar S.R. and Mony, Prem K. Assessment of Accredited Social Health Activists—A National Community Health Volunteer Scheme in Karnataka State, India
- [27] Assessment of the Functioning of ASHAs under NRHM in Uttar Pradesh2007-8. www.nihfw.org/doc/RAHI-I%20Reports/Lucknow/LUKNOW.pdf (Accessed on 2017-05-05).
- [28]https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4438657 (accessed on 2017-05-14).