Original Research Article

A study on the work profile of ASHA workers in a district of Odisha in eastern India

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ABSTRACT

Background: Our aim was to study the socio demographic determinants of ASHA workers, to study the work profile of the ASHA workers, to assess the knowledge, awareness and practice of their roles and responsibilities in the delivery of health care services and to suggest specific recommendations on the ASHA scheme based on the study findings.

Methods: The type of study was a cross sectional study, placed at Khordha district in Odisha. Time Period of this study was March to June 2018. 1218 ASHAs were finally included in the study. On the days of the monthly sector / block level meetings with ASHA workers they were appraised and accordingly a predesigned, pretested questionnaire was implemented to them.

Results: Nearly 93% of ASHA workers were trained with module 1 to 5, first AID and DOTs training. Refresher training was given to 34% of ASHA workers, FTD/Malaria training was given to 88.4% of ASHA workers. 1218 (100%) ASHA’s helped in immunization. Majority of them 1199 (98.4%) accompanied delivery cases and 1198 (98.3%) were aware about family planning activities.

Conclusions: Activities of ASHA’s should be increased with a corresponding increase in incentives, so that she can get up to Rs. 10000-15000 per month. IEC/BCC skills to ASHA may be built by short course certification. Other services like strengthening the role of ASHA on promotive and preventive health care particularly age at marriage, nutrition, home based care delay in first child birth and spacing between 1st and 2nd birth.

Keywords: Work profile, ASHA, Workers

INTRODUCTION

National Rural Health Mission (NRHM) was launched on 12th April 2005 by the Govt. of India to provide primary health care targeting the poor and vulnerable section of the community. The introduction of the Accredited Social Health Activist (ASHA) workers by the Ministry of Health and Family Welfare Department in 2005 was to improve the accessibility, availability and acceptability of the existing health facilities particularly in rural areas. ASHA workers were the female health volunteers, promoters of health services or a new group of community level health workers who were the key force of action at the grass root level. NRHM projects ASHA worker as a health activist, to whom the community accepts and she bridges the gap between the health system and the community.1

The SRS 2016 data reveals that MMR (infant mortality ratio) in India is 130 per 100000 live births and that of Odisha is 180 per 100000 live births and according to NFHS-IV (2015-16), the IMR (infant mortality rate) of India 41/1000 live births and that of Odisha is 40/1000 live birth. In order to reduce the IMR and MMR as a part of achievement of the MDG goal besides reduction in specific disease and improvement of the nutritional
status, the identified ASHA workers are trained along with regular reorientation for organized and adequate skill development.

Thirteen years down the line, with these existing linkage workers role, it is now time to assess their overall work profile. Therefore this study was conducted to get an overall information about the ASHA’s work profile and to identify gaps if existing, so that we can recommend the NRHM, now called NHM (National Health Mission) to improve change in their working pattern. ASHA’s work is not salary based, rather it is incentive based. Each ASHA worker is given 2000 as remuneration for the mandatory and ensured services which she provides to the community. Besides this, work based incentive is given based on their performance and that to never by cash. ASHAs are either daughter/daughter in laws of the same village.

Objectives

- To study the socio demographic determinants of ASHA worker.
- To study the work profile of the ASHA workers.
- To assess the knowledge, awareness and practice of their roles and responsibilities in the delivery of health care services.
- To suggest specific recommendations on the ASHA scheme based on the study findings.

METHODS

Type of study

Cross Sectional

Place of the study

Khordha district in Odisha.

Time period

January 2018 to June 2018.

The present study was conducted in Khordha district in the state of Odisha in India. The entire district caters to a population of 22,46,341 according to 2011 Census. (Present population of the district as per head count is 23,94,821). Out of which nearly about 52% of the total population reside in the rural areas of the village. There are a total of 10 blocks in the district, out of which 2 blocks having municipality areas, contain urban slums. The present study was carried out in all the 10 blocks of Khordha district. The total ASHAs working in every village/urban slums and the list of blocks, subcenters and sectors with details of every village was available from the chief district authority. Total number of ASHAs working in the 10 blocks including both rural villages & urban slums were 1228, out of which 23 were working in urban area and 1205 in rural villages. A total of 1205 ASHAs were positioned in 1775 villages, in the rural area. All the ASHA workers in the district were enrolled in the study. However, 1218 were finally included in the study because 10 could not be contacted.

The sector medical officer in-charge of the respective sectors were appraised about our and on the days of the monthly sector/block level meeting with ASHA workers were ascertained. (ASHA sector meeting was scheduled in each sector from 20th to 25th of every month as per the guideline) and accordingly a predesigned, pretested questionnaire was implemented to the ASHA worker after an informed written consent. The questions were given by different field level investigators who were trained. The questions was designed in English initially & and later translated to Odia and back retranslated to English to check the validity of the translated questions. The collected data was entered in Microsoft Excel, coding of the variables was done and SPSS version 21 was used for data analysis and thereby interpretation of the collected data was done by using appropriate statistical methods like percentage, proportion, chi square test and Fischer’s Exact test.

RESULTS

Table 1 depicts that out of a total 1218 ASHA’s working in Khordha district, majority of ASHA’s i.e. 1195 (98.84%) were working in rural areas and only 23 (1.9%) were working in urban area.

Table 2 shows the distribution of population & duties of ASHA workers. 529 (44.27%) of ASHA workers covered a population of <1000 in rural area. 744 (61%) of ASHA workers were assigned to work in 1 village followed by 474 in 2 or more villages.

Table 3 shows the relationship between educational status and place of residence. Out of a total of 1195 ASHA’s in rural area, 920 (76.98%) were educated to less than 10th class and 275 (23.01%) were educated to more than equal to 10th class. In urban area, out of 23 ASHA’s 15 (65.21%) were educated to more than equal to 10th standard. This difference in place of residence with educational status was found to be statistically significant.

Table 4 reveals the relationship between monthly family income & place of residence which was found to be statistically significant. Out of 1195 rural ASHA’s, 904 (75.7%) ASHAs had a monthly family income (5000-10000) and 291 (24.3%) had monthly family ranging from 10,000-15,000. However among ASHA’s whose residence was in urban area, 16 (69.6%) out of 23, ASHA’s had a monthly family income of 10,000 to 15,000 and 7 (30.4%) ASHA’s had a monthly family income of 5000-10000. So, the ASHA workers whose place of residence was in urban area had more income than ASHAs where place of residence was in rural areas, this was due to the fact that majority of urban ASHAs were involved in other vocational jobs & tuition.
Table 1: Distribution of ASHA workers according to socio economic profile.

| Variables | Urban (n=23) | Rural (n=1195) | Total (1218) |
|-----------|-------------|----------------|--------------|
|           | No. | %   | No. | %   | No. | %   |          |
| 1. Age of participants in yrs. |     |     |     |     |     |     |          |
| <30       | 2   | 8.7 | 28  | 2.34 | 30  | 2.46 |          |
| 31-40     | 12  | 52.17 | 342 | 28.62 | 354 | 29.06 |          |
| 41-50     | 9   | 39.13 | 621 | 51.97 | 630 | 51.72 |          |
| 51-60     | 0   | 0   | 192 | 16.07 | 192 | 16.07 |          |
| >60       | 0   | 0   | 12  | 1    | 12  | 1    |          |
| 2. Marital status |     |     |     |     |     |     |          |
| Married   | 14  | 60.9 | 923 | 77.24 | 937 | 76.92 |          |
| Unmarried | 7   | 30.4 | 69  | 5.77  | 76  | 6.23  |          |
| Widow     | 2   | 8.7  | 195 | 16.32 | 197 | 16.17 |          |
| Divorced  | 0   | 0    | 8   | 0.67  | 8   | 0.67  |          |
| 3. Type of family |     |     |     |     |     |     |          |
| Nuclear   | 8   | 34.8 | 195 | 16.32 | 197 | 16.17 |          |
| 3-generation | 7  | 30.4 | 370 | 30.9 | 377 | 30.95 |          |
| Joint     | 8   | 34.8 | 630 | 52.71 | 638 | 52.38 |          |
| 4. Education |     |     |     |     |     |     |          |
| Just Literate | 0  | 0   | 49  | 4.1  | 49  | 4.1    |          |
| Neo-literate | 0  | 0   | 58  | 4.86 | 58  | 4.86   |          |
| Primary   | 0   | 0   | 323 | 27.03 | 323 | 27.03 |          |
| Middle    | 8   | 34.78 | 490 | 41    | 490 | 41    |          |
| Secondary | 8   | 34.78 | 220 | 18.41 | 228 | 18.71 |          |
| Higher Sec | 2   | 8.69 | 39  | 3.26  | 41  | 3.36   |          |
| Graduation | 5   | 21.74 | 16  | 1.34  | 21  | 1.72   |          |
| 5. Having child <5 yrs of age |     |     |     |     |     |     |          |
| Yes       | 7   | 30.43 | 112 | 7.37  | 119 | 9.77  |          |
| No        | 16  | 69.56 | 1083 | 90.63 | 1099 | 90.22 |          |
| 6. House hold income in Rupees |     |     |     |     |     |     |          |
| 5,000-10,000 | 7  | 30.43 | 904 | 75.64 | 911 | 74.99 |          |
| 10,000-20,000 | 16 | 69.56 | 291 | 24.3 | 307 | 25.2  |          |
| 7. Working in the same village/area of residence |     |     |     |     |     |     |          |
| Yes       | 9   | 39.13 | 919 | 76.9  | 928 | 76.19 |          |
| No        | 14  | 60.86 | 276 | 23.09 | 290 | 23.8  |          |
| 8. ASHA workers working in assigned village/slum |     |     |     |     |     |     |          |
| ≥2 village/slum | 17 | 74   | 457 | 38.2 | 474 | 39    |          |
| 1 village/slum | 6  | 26   | 738 | 61.8 | 744 | 61    |          |

Table 2: Distribution of duties of ASHA workers (n=1218).

| Populations covered | Urban | Rural | Significance |
|---------------------|-------|-------|--------------|
|                     | No. of ASHA | %   | No. of ASHA | %   | Fischer exact |
| <1000               | 3      | 13.04 | 529         | 44.27 | df=3          |
| 1000 to 1499        | 7      | 30.43 | 458         | 38.33 | df=3          |
| 1500 to 1999        | 9      | 39.13 | 167         | 13.97 | df=3          |
| 2000 to ≥2500       | 4      | 17.4  | 41          | 3.43  | df=3          |
| Total               | 23     | 100   | 1195        | 100   |              |

| No. of households visited/month | Urban | Rural | Significance |
|----------------------------------|-------|-------|--------------|
| <100                             | 10    | 43.5  | 1008        | 84.35 | Fischer exact |
| 100 to 200                       | 8     | 34.8  | 165         | 13.81 | df=2          |
| >200                             | 5     | 21.7  | 22          | 1.84  | p=0.000       |
| Total                            | 23    | 100   | 1195        | 100   |              |

| No. of hours of field visit/day  | Urban | Rural | Significance |
|----------------------------------|-------|-------|--------------|
| <4 hrs                           | 15    | 65.2  | 486         | 40.7  | Chi square=5.616 |
| >4 hrs                           | 8     | 34.8  | 709         | 59.3  | df =1          |
| Total                            | 23    | 100   | 1195        | 100   | p=0.018        |
Table 3: Relationship between educational status and place of residence of ASHA workers.

| Place of residence | Urban | Rural | Significance |
|--------------------|-------|-------|--------------|
|                    | No. of ASHA | %     | No. of ASHA | %     |          |
| Educational level ≥10th | 15 | 65.2 | 275 | 23 | $\chi^2=22.158$, df=1, P=0.000 |
| Educational level <10th | 8 | 34.8 | 920 | 77 |         |
| Total               | 23 | 100  | 1195 | 100 |          |

Table 4: Relationship between monthly family income of ASHA workers and place of residence.

| Monthly income       | Urban | Rural | Significance |
|----------------------|-------|-------|--------------|
|                      | No. of ASHA | %     | No. of ASHA | %     |          |
| 5,000 – 10,000       | 7 | 30.4 | 904 | 75.7 | $\chi^2=24.47$, df=1, P=0.000 |
| 10,000 – 15,000      | 16 | 69.6 | 291 | 24.3 |           |
| Total                | 23 | 100  | 1195 | 100 |          |

Table 5: Relationship between years of experience and monthly income amongst ASHA’s working in rural area.

| Monthly income (n=1195, Rural) | <10,000/- | >10,000/- | Significance |
|--------------------------------|------------|------------|--------------|
|                                | No. of ASHA | %     | No. of ASHA | %     | Chi square=8.038, df=1, P=0.005 |
| <10 yr                         | 167 | 18.5 | 33 | 11.3 | |
| >10 yr                         | 737 | 81.5 | 258 | 88.7 | |

Table 5 shows the relationship between years of experience and monthly income. Amongst the total 1195 ASHA’s working in rural areas, 904 had monthly income less than 10,000/- and 291 had income >Rs. 10,000/-. Out of 904 ASHA’s having income <Rs.10,000/-, 737 (81.5%) had >10 years experience. Similarly, out of total 291 ASHA’s having >Rs.10,000/- monthly income 258 (88.7%) had >10 years of experience. Hence it was found that ASHA’s having more years of work experience had more income and which was found to be significant.
The awareness level of the responsibilities of ASHA worker is represented in Figure 1, wherein all 1218 (100%) ASHA’s helped in immunization. Majority of them 1199 (99.17%) accompanied delivery cases and 1198 (98.3%) were aware about family planning activities. 1021 (83.8%) were aware about accompanying pregnant women for ANC care, but only 24.65% gave advice to mothers about breast feeding and 361 (29.86%) registered births and deaths.

Table 6 depicts the provision of accessories and remuneration to ASHA workers. Payment to ASHAs was done in time according to 100% of the respondents and that to by e-transfer both in urban and rural areas

The different motivational factors & expectations of ASHA workers are reflected in Table 7. Regarding reasons for an ASHA worker to perform and take this job as a profession about 878 (72%) reported that earning money was the main reason.

Table 6: Provision of accessories and remuneration given to ASHA workers.

| Sl. No. | Characteristics         | Urban (n=23) | Rural (n=1195) |
|--------|-------------------------|-------------|----------------|
| 1.     | Payment done in time    |             |                |
| Yes    | 23 100                  | 1195 100    |
| No     | 0 0                     | 0 0          |
| 2.     | Mode of payment         |             |                |
| E-transfer | 23 100         | 1195 100    |
| Cheque | 0 0                     | 0 0          |
| Cash   | 0 0                     | 0 0          |
| 3.     | Accessories given to ASHA|             |                |
| Umbrella | 0 0               | 1167 97.6   |
| Bicycle | 0 0                    | 1167 97.6   |
| Mobile  | 10 43.5                | 763 63.8    |
| Drug Kit | 12 52.2           | 1031 86.3   |
| Torch   | 0 0                    | 56 4.6      |
| Radio   | 0 0                    | 23 1.9      |
| HBNC Kit | 14 60.9            | 1163 97.3   |

*Multiple responses.

Table 7: Different motivational factors and expectations of ASHA workers (n=1218).

| Sl. No. | Responses                                         | No.  | %       |
|--------|---------------------------------------------------|------|---------|
| 1.     | Reasons for ASHA worker to do this job            |      |         |
| To earn money        | 878 72.1                                      |      |         |
| For satisfaction     | 461 37.8                                      |      |         |
| To serve the community | 311 25.5                                 |      |         |
| To provide health services | 559 45.9                                 |      |         |
| 2.     | Expectation by ASHA for their better performances|      |         |
| Better incentives     | 651 53.4                                      |      |         |
| Increased mode of transportation to patients | 913 74.9                                      |      |         |
| Place based incentives (more in remote/outreach areas) | 612 50.2                                      |      |         |
| More work more incentives       | 751 61.6                                      |      |         |
| Inclusion of more medicines in kit | 418 34.3                                 |      |         |
| 3.     | Inspirational force behind ASHA worker            |      |         |
| Family member       | 618 50.7                                      |      |         |
| ANM                | 302 24.8                                      |      |         |
| AW worker          | 187 15.3                                      |      |         |
| Gram Panchayat member | 102 8.3                                   |      |         |

*Multiple responses.

The practice of ASHA workers in regard to their record keeping is represented in Table 8 wherein nearly 602 (49.4%) of ASHA workers maintained the drugs register, 50.3% household survey register, ANC record in 34%, meeting register by 34% workers. The immunization and family planning record each was maintained by18% and 17.8% of ASHA workers respectively.

The different challenges faced by ASHA workers were revealed in Table 9. 617 (50.6%) of ASHA workers faced...
hurdles like overburden of work and 710 (58.3%) felt that there was no compensation or reward for their performances. 591 (48.5%) felt that the time spent in the field was the greatest obstacle for them. Besides this 612 (50.2%) ASHA’s felt that activity based incentive and 42% felt that involvement in each & every health programme was the greatest challenge for them for their performance.

Table 8: Practice of ASHA’s regarding their record keeping (n=1218).

| Sl. No. | Various record keeping by ASHA worker | No. | %  |
|-------|-------------------------------------|-----|----|
| 1.    | ANC records                         | 413 | 34.0 |
| 2.    | Immunization record                 | 219 | 18  |
| 3.    | Family planning record              | 218 | 17.8 |
| 4.    | Household survey register           | 613 | 50.3 |
| 5.    | Birth & death register record       | 328 | 27.0 |
| 6.    | Delivery record                     | 331 | 27.2 |
| 7.    | Meeting register                    | 415 | 34  |
| 8.    | Drug register                       | 602 | 49.4 |
| 9.    | Patient register                    | 101 | 8.3 |

*Multiple responses.

Table 9: Challenges faced by ASHA workers (n=1218)*.

| Sl. No. | Variables                               | No.  | %    |
|-------|-----------------------------------------|------|------|
| 1.    | Activity based incentives               | 612  | 50.24|
| 2.    | No compensation or reward for performances | 710  | 58.3 |
| 3.    | Overburden of work                     | 617  | 50.6 |
| 4.    | Training session                        | 410  | 33.6 |
| 5.    | Spending time on hot days in field      | 591  | 48.5 |
| 6.    | Involvement in each and every health programme | 513  | 42.1 |

*Multiple responses.

DISCUSSION

Out of 1218 ASHA’s only 119 (9.77%) had 1 or more children of <5 yrs of age. 911 (74.79%) of ASHA’s had household income between Rs. 5,000-10,000. Similarly majority of ASHA workers, i.e. 928 (76.19%) were working in the same village/area of residence. In this study majority of ASHA workers were in the age group of (41-50) yrs. However in two studies conducted by Washel et al and Srivastava et al revealed that (20-29) yrs was the age group for enrolment of ASHA workers. Interestingly the age distribution of ASHA workers was different in both the rural and urban slum areas which was also found to be statistically significant. Similarly, out of 1195 ASHA's in rural areas, 709 (59.3%) conducted >4 hours field visit/day whereas in urban areas out of 23 ASHA’s 15 (65.21%) conducted field visit <4 hrs a day and this difference was observed to be significant.

In the same study when ASHA’s were asked about knowledge on complications during pregnancy 85 (80.95%) could correctly mention vomiting, 73 (69.5%) swelling of hands and feet, 27 (25.71%) anemia and only 11 (10.47%) about visual disturbances. In the same study very few ASHA's mentioned assisting ANM in village health planning, creating awareness on basic sanitation, personal hygiene the results of which happens to be similar to our study.

In rural areas, 1008 (84.35%) of ASHA’s made <100 household visit followed by 165 (13.81%) made 100 to 200 visits per month. 10 (43.47%) urban ASHAs made <100 visits per month, more no. of ASHAs made <100 home visits in rural area than urban ASHAs comparatively and this difference was found to be significant. Similarly, out of 195 ASHA's in rural areas, 709 (59.3%) conducted >4 hours field visit/day whereas in urban areas out of 23 ASHA’s 15 (65.21%) conducted field visit <4 hrs a day and this difference was observed to be significant.

Involvement in every health programme was the greatest obstacle for ASHA’s. 591 (48.5%) felt that activity based incentive and 42% felt that involvement in each & every health programme was the greatest challenge for them for their performance.
visits, role plays in participation in village health and nutrition day, participation and individual roles on village health and sanitation committee.

Kumar et al in his study on work performance of ASHA’s under NRHM, reflected the knowledge, practices of ASHA’s and found that only 68 (81%) agreed on visiting the newborn. In the same study 130 (98.5%) actually accompanied the pregnant women to hospital, 85 (78%) gave DOT's therapy, 66 (73.3%) mobilized community to access health services at different facilities. Majority of them 92 (92.2%) counseled pregnant lady on safe delivery, ANC, breast feeding, contraception etc and 29 (61.7%) created community awareness on determinants of health.

Swain et al have reported that only 48% of ASHA’s were aware about various health determinants as a part of the job responsibility. Shet et al in her study reveals that the most important demand of the ASHA workers were their monthly salary in the place of activity based performance incentive. Activity based incentives was one of the de-motivating factors for them in the long run. In a study conducted by Sasina et al and Want et al, ASHA worker complained about delay in paying incentives.

Activities of ASHA’s should be increased with a corresponding increase in incentives, so that she can get up to Rs. 10000-15000 per month. IEC/BCC skills to ASHA may be built by short course certification. A small subject of ASHA like ASHA A/B can be created and provided training on higher skill set on home delivery, asphyxia management and home based care at home.

CONCLUSION

Services like strengthening the role of ASHA on promotive and preventive health care particularly age at marriage, nutrition, home based care delay in first child birth and spacing between 1st and 2nd birth. Joint training of ASHA and ICDS worker should be done as a part of all national programmes. Aspirant ASHA for higher learning should be given opportunity for career building i.e. ANM and GNM courses and with support of PIP (age relaxation). Training modules should be more on demonstration rather than theory, so that they get a deep insight on the motivation factors to improve ASHA’s performance.

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