CONTRIBUTION OF ACCREDITED SOCIAL HEALTH ACTIVIST (ASHA) WORKERS FOR RURAL WOMEN AND CHILDREN

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BY

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CERTIFICATE

This is to certify that the thesis entitled "CONTRIBUTION OF ACCREDITED SOCIAL HEALTH ACTIVIST (ASHA) WORKERS FOR RURAL WOMEN AND CHILDREN" submitted by Ms. ASHWINI R. for the degree of MASTER OF HOME SCIENCE in EXTENSION AND COMMUNICATION MANAGEMENT to the University of Agricultural Sciences, Dharwad is a record of research work done by her during the period of her study in this university under my guidance and the thesis has not previously formed the basis for the award of any degree, diploma, associateship, fellowship or other similar titles.

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JUNE, 2016

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DHARWAD
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1. INTRODUCTION

Women constitute about half of the human resource potential. The overall development of a country is incomplete without them and accordingly the involvement of women in every sphere of economic, social, political is urgently felt for the development of a country. Mother and child constitute a priority group in a community. They comprise of 57.5 per cent of the total population and constitute a vulnerable group. Maternal mortality and infant mortality are the main health indicators of any civilized society. However, each year, approximately eight million women suffer pregnancy related complications and over half a million die as well as 99 per cent of all maternal deaths occur in developing countries (Yangchen Dolma, 2013). Every five minutes, one women in India dies due to pregnancy related complications amounting to one lakh maternal deaths and ten lakh new born deaths every year.

Since the role of the community health worker was reemphasized during the Alma Ata conference in 1978, there have been several variations and definitions of this term. Globally, they are called by a variety of names including health auxiliaries, barefoot doctors, health agents, health promoters, family welfare educators, health volunteers, village health workers, community health volunteers and community health workers (CHWs). According to world health organization (WHO), " 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".

In India nearly 70 per cent of the population are coming from rural areas and are suffering and dying from preventable diseases due to unavailability and inaccessibility of health care services. Among the rural population women are the most sufferer. Hence, providing sound health care to these rural women is the urgent need and accordingly the Government of India, Ministry of Health and family welfare launched National Rural Health Mission (NRHM) on April 12, 2005. It aimed to provide accessible, affordable and quality health care services to the rural population with special focus on 18 states with poor health achievements particularly to the poor and vulnerable section of the society. The Mission also adopts a synergistic approach by relating health to determinants of good health *viz.,* segments of nutrition, sanitation, hygiene and safe drinking water.

One of the key components of NRHM was to create a band of female health volunteers, appropriately named “Accredited Social Health Activist” (ASHA) in each village within the identified states to act as an interface between the community and the public health system. ASHAs are seen as be health activists in the community who will create awareness on health and its social determinants, counsel mothers on key health behaviors and mobilize the community towards local health planning and increased utilization and accountability of the existing health services and facilitate them in accessing health and health related services available at the village or sub center or primary health centers. The primary health center is the cornerstone of rural health services, which is a first port of call to a qualified doctor of the public sector in rural areas for the sick and those who

directly report or referred from sub-centers for curative, preventive and promote health care. Each PHC has 5 to 6 sub centers and serves 25,000-30,000 population. Each village falls under one of them. The PHC's main activity is for preventing diseases, promoting health and treatment of illnesses. ASHA is also expected to provide primary medical care with her kit, control of diseases by information, education, sanitation and surveillance, antenatal, natal and postnatal services to women, counselling on family planning, safe abortion, child immunization and vitamin A supplementations, change in behavior in breast feeding, birth spacing, sex discrimination, child marriage, girls education, care of the child especially new born, household survey, collaborating with health functionaries, working with community for 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. However, she also represents the cornerstone of NRHM's strategy to address the millennium development goals (MDG) on health related indicators.

Apart from being the health activist at grass root level worker, the success of NRHM in India depends on how efficiently is ASHA able to perform. Therefore, in India, NRHM is accepted as an example of comprehensive primary health care with community health workers (ASHAs) as one of its main components. In addition, ASHA can also play an important role in identifying child morbidity at the earliest and helps in improving their health status. Therefore, it is important to assess the level of knowledge regarding health and health aspects in these workers. So, here the knowledge is defined as the "information and skills gained through experience or education" and practice is the "action of doing something" (Oxford English Dictionary, 2005). Therefore, in this study, both were obtained by the responses of ASHA workers for the knowledge questions in relation to mother and child health practices including personnel hygiene, family planning, infant care, breastfeeding, and immunization, which will be measured using a structured questionnaire.

The Janani Suraksha Yojana (JSY) is a programme under NRHM to promote institutional deliveries among women below poverty line (BPL) relies on the ASHA as a key functionary to act as a link between pregnant women and accredited health facility. She has also a role in counseling women on issues such as birth preparedness and importance of safe delivery, arranging escort services to accompany pregnant women, arranging transport and blood donor to ensure better outcomes of pregnancy and child birth. (National Rural Health Mission, 2005-2012). Although, her main role is to facilitate pregnant women to avail services of maternal care and arrange for referral transport.

Roles and responsibilities of ASHA

The roles and responsibilities of ASHA are as follows.

- ASHA will take steps to create awareness and provide information to the community on determinants of health.
- She will work with the village health, sanitation and nutrition committee of the gram panchayat to develop a comprehensive village health plan.
- ASHA will provide primary medical care for minor ailments such as diarrhoea, fevers, and first aid for minor injuries.

- She will also promote construction of household toilets under total sanitation campaign.

Criteria for selection of ASHA

The criteria for selection of ASHA is as follows (Dinesh *et al*., 2011).

- ASHA must be primarily a woman resident of the village which includes married or widow or divorced and preferably in the age group of 25 to 45 yrs.
- She should have effective communication skills, leadership qualities and be able to reach out to the community as well as should be a literate woman with formal education up to 8^{th} standard. This may be relaxed only if there is no suitable person with this qualification is available.
- For every thousand population one ASHA worker will be appointed.
- After selection she is given training by the health department.
- While selecting ASHA worker, her interest towards work is considered.

Selection process of ASHA

As per the guidelines of ASHA, the district health society envisaged under NRHM is expected to oversee the process. The society would designate a district nodal officer, preferably a senior health person, who is able to ensure that the health department is fully involved and she would act as a link between the NGOs and other departments. However, the society would designate block nodal officers, preferably block medical officers, to facilitate the selection process and organising training for trainers.

The place of delivery is an important aspect of reproductive health care and quality of care received by the mother and baby depend upon the place of delivery. If proper care is not taken during this child bearing process, it affects the overall health, especially the reproductive health of the women as well as the health of the new born child. Since the ASHAs play a vital role in delivery of reproductive and child health (RCH) services. Hence, it is imperative to assess their knowledge regarding various aspects of reproductive and child health, as well as to identify the lacunae in their knowledge and accordingly give them the appropriate training.

Training of ASHA

ASHA forms the backbone of the NRHM and are meant to be selected by and be accountable to the village. They need to provide preventive, promotive and curative health facilities in the rural community. Hence, the ministry of health and family welfare (MOHFW) has developed a twenty three days basic training schedule to provide the necessary knowledge and skills to women to identified as ASHA and there are also regular reorientation trainings organized at the district level. However, the capacity building of ASHA is critical in enhancing her effectiveness. After the induction training of twenty three days, the periodic retraining is to be held for about two days, once in every alternate month at appropriate level for all ASHAs. During this training, interactive sessions are held to help refresh and upgrade their knowledge and skills, trouble shoot problems they are facing, monitor their work and also for keeping up motivation and interest. The list of competencies to be developed in ASHA after the training is at Annexure-I (Dinesh *et al*., 2011).

ASHA has been instituted as honorary volunteer and do not receive any salary or honorarium. Her work is so tailored that it does not interfere with her normal livelihood. However, ASHAs are compensated for the duration of her training both in terms of TA and DA, for participating in the monthly or bi monthly training. As the many cases be under different national programmes for undertaking specific health or other social sector programmes with measurable outputs and for the key health related activities, for example, all the eligible children immunized, all new-born's weighed, all pregnant women attended an antenatal clinic, *etc.* They can also play an important role in identifying problems at the earliest and help in improving community health status. Therefore, there is need to assess the knowledge and skills of accredited social health activists (ASHA) on issues relating to maternal and child health as well as perception of their role with respect to ICDS related activities. Hence, with this background, this study was performed with the following objectives.

1. To study the awareness of ASHA workers regarding health care provision
2. To study the opinion of ASHA workers about trainings on various topics
3. To study the knowledge of ASHA workers about programmes in relation to mother and child health practices
4. To find the relation of selected factors on awareness, opinion and knowledge
5. To study the problems faced by ASHA workers

Scope of the study

In the present study, an attempt has been made to understand the study of contribution of accredited social health activist (ASHA) in rural areas and also to assess the knowledge in relation to mother and child, and awareness regarding health care provisions. Based on the awareness, opinion, knowledge and socio-economic changes of beneficiaries, it would be possible to illustrate the fundamental problems at grass root level and to suggest and measure, which in turn help in developing strategies for effective implementation of schemes.

Limitations of the study

As the study was conducted by a student researcher who had limited time and other resources at the disposal, the study was confined only to Dharwad district. Therefore, the findings of the present investigation have the limitation of wider generalization. In spite of these limitations effort was made by the researcher to keep this study as objective as possible. Hence the findings of the study would be applicable only to the regions where similar conditions exist.

2. REVIEW OF LITERATURE

Review of relevant literature is an essential part of research, which helps to know the previous research work done in that area and acts as a torch before for the new researcher. According to Fleishman (1967) better ways are needed to generalize the research findings from laboratory studies to operational settings, from one experimental study to another and from one operational setting to another.

The proposed study is new in its subject treatment. However, an attempt is made here to put together some of the related research findings on the area. The literature survey on different dimensions is presented in the following heads.

2.1 Awareness of ASHA workers regarding health care provisions

2.2 Opinion of ASHA workers on training conducted for them

2.3 Knowledge of ASHA workers about mother and child health practices

2.4 Problems of ASHA workers as activist

2.5 Socio personal characteristics of ASHA workers

2.1 Awareness of ASHA workers regarding health care provisions

Gosavi *et al.* (2001) studied about awareness and perceptions of ASHA regarding their role in health care revealed that, most of the ASHA were aware about their responsibility regarding ANC (ante natal checkup), immunization, tuberculosis, leprosy, malaria, high risk pregnancy but none of the ASHA was having specific information on schedule of immunization, how to detect TB and leprosy cases. They also reported that challenges faced by most of the ASHA were lack of support from public health centers (PHC) staff, the lack of good training, unclear reimbursement policy and poor clarity in how to collaborate work with the ANM and Anganwadi workers.

Mohapatra *et al.* (2008) in their study on assessment of the functioning and impact of JSY in Orissa revealed that at the district, block and sub-centre level there was a shortage of medical and paramedical staff and inadequate facility for institutional delivery, but the available staff were well trained, whereas IEC activities were implemented efficiently. The study also reported that ASHA and health workers (HW) were playing a major role in generating awareness regarding JSY.

Haidar *et al.* (2008) conducted study on a rapid appraisal of SAHIYA (ASHA) to recognize their role and results found that 92.20 per cent of women were aware that SAHIYA helps pregnant women for early registration with ANM, promotes community people to receive facility from health center and advises on health matters as well as promotes community to receive ICDS services from Anganwari Centre whereas, 50.60 per cent of women informed that SAHIYA visited during pregnancy, getting medicines, immunizations, assistance in procuring as well as 24.10 per cent of women were aware about SAHIYA and 16.80 per cent of women were not aware about SAHIYA had institutional delivery.

Shobana *et al.* (2008) reported study on rapid appraisal of functioning of Janani Suraksha Yojna in south Orissa revealed that there was lack of orientation of the health staff other than ASHA on JSY. In addition, ASHA also played a major role in motivation for institutional delivery in two-thirds of cases.

The observational cross sectional study was conducted by Singh, *et al.* (2011) to assess performance based incentives and practices for 167 ASHAs in the Doiwala block of district Dehradun. The study revealed that, 97.00 per cent ASHA had awareness regarding rural health scheme. In addition, most of ASHA had health information through local or village group meeting as well as 87.00 per cent of ASHA had knowledge about performance based incentive and most of them were got incentive from medical officer.

Saxena *et al.* (2012) studies the biosocial profile of ASHA and services provided by them. Results found that the majority of ASHAs services for care of pregnant women, vaccination and family planning as their prime services.

Garg *et al.* (2013) in their study assessed the socio-demographic profile of 105 ASHA workers. The knowledge, awareness and practice of their responsibilities revealed that only 17.00 to 19.00 per cent of ASHAs were knew about registration of births and deaths. They also involved in assisting auxiliary nurse midwife (ANM) in village health planning and creating awareness on basic sanitation and personal hygiene. In addition, majority of ASHA workers were aware about helping in immunization, accompanying clients for delivery, providing ANC and family planning services as a part of responsibility.

Vikram *et al.* (2013) conducted study on beneficiary level factors influencing Janani Suraksha Yojana utilization in urban slum population of trans Yamuna area of Delhi reported that women who utilized the antenatal health care services were more than six times were evidently in a better position than others to make use of these facilities to avail the services of ASHA and health care institutions during the delivery. Similarly, better interaction with the ASHA found that increased awareness about the various benefits of a safe child birth in institutions and reduced fear of hospitals whereas knowledge of cash benefits of JSY could have helped in producing a positive inclination towards institutional delivery.

A cross sectional study was conducted by Waskel *et al.* (2014) to assess the socio-demographic profile of ASHA workers at Obedullaganj and Sanchi in the Bhopal district of Madhya Pradesh revealed that majority of ASHA workers were aware about helping in immunization, accompanying clients for delivery, providing ANC (Antenatal care) and family planning services as a part of responsibility, whereas about 99 per cent of ASHAs knew registration of births and deaths as well as assisting auxiliary nurse midwife (ANM) in village health planning and creating awareness on basic sanitation and personal hygiene.

Kohli *et al.* (2014) revealed a descriptive cross sectional study in north east district of Delhi among 55 ASHA workers to assess the awareness and their practices regarding child health reported that 98.20 per cent of ASHAs were aware of their role of mobilizing children for immunization and

78.20 per cent knew about their role in counseling mothers about child nutrition whereas in thirty seven (67.3 %) ASHA workers reported that they used to visit the new born in their area within a week of birth but none of the ASHA workers were provided with drug kits.

The results on utility of 40 trained ASHA workers at Ranpurtaluk with population 87,914, Ahmedabad district of Gujarat state for detecting patient with low vision showed that about 434 patients had vision less than 6/60 with a prevalence of blindness to 05.38 per cent (Pina, *et al.*, 2014).

Saxena *et al.* (2014) studied awareness on complementary feeding practices in rural community revealed that, 87.30 per cent mothers were giving complementary feeding (CF) to the children above six months of age, while 12.70 per cent mothers were still on exclusive breast feeding.

Lipekho *et al.* (2015) analyzed the opportunities and challenges of accredited social health activists (ASHAs) face in realizing their multiple roles in rural India reported that most of them were understood as link workers and their ability to address the immediate needs of rural and marginalized communities. In addition, they were also valued as service providers.

2.2 Opinion of ASHA workers on training conducted for them

Ram *et al.* (2012) conducted study on factors influencing overall performance of ASHAs in child health care services under NRHM in rural Lucknow reported that they had received only induction training for 7 days and majority (75.80 %) of them percept the training methods and material to be good and very useful.

Shrivastava (2012) evaluated trained ASHA workers regarding their knowledge, attitude and practices about child health reported that, 29 ASHAs (19.90 %) did not feel the need to refer a child with diarrhoea who is unable to drink or breast feed. Similarly, in acute respiratory tract infections, 35 ASHAs (23.9 %) did not know to refer a child with fast breathing whereas, a total of 59 ASHAs (40.4 %) considered a baby crying for more than 3 hours following immunization not worth referring to a first referral unit.

Sushama *et al.* (2012) studied on effectiveness of the training course for ASHA supervisors and workers on infant feeding practices at a rural teaching hospital. The comparative scores of the participants before the training showed very good 3 (3.03 %), good 65 (65.66 %), average 28 (28.28 %) and below average 03 (3.03 %) and immediately after the special training, the scores were 64 (64.45 %) very good scores, 31 (31.31 %) good scores and 4 (4.04 %) average scores. concluded that the ASHA workers and their supervisors gained the knowledge and skills on breastfeeding and complementary feeding after the training.

Garg *et al.* (2013) conducted study on evaluation of ASHA worker's awareness and practice of their responsibilities in rural Haryana revealed that 102 (97.14 %) of ASHA workers completed their training before working as ASHA and ASHA's training is a continuous one and that develops the necessary skills and expertise through continuous on the job training.

Parthasarathi *et al.* (2014) reported an intervention study among ASHAs on knowledge regarding reproductive and child health in a block of West Bengal. The study recommended high quality refresher training at periodic intervals will strengthen the current training programs for ASHAs, so that they can serve the society more effectively and efficiently.

Kohli (2015) conducted a cross sectional study on awareness and practices of accredited social health activist (ASHA) workers about child health. The results with regard to understand the training module on child health revealed that, 85.5 per cent, 9.1 per cent and 5.5 per cent responded as always understand, sometimes understand and never understand the module respectively. The results for perception with regard to training on newborn care revealed that, 65.5 per cent, 9.1 per cent and 7.3 per cent perceived the training to be complete, incomplete and training needs to be repeated respectively whereas, 18.2 per cent perceived that too much information was being given in training sessions.

2.3 Knowledge of ASHA workers in mother and child health practices

Saraswathi *et al.* (2008) observed rapid appraisal functioning of ASHA under NRHM in Orissa showed that the knowledge of ASHAs workers were accompanying the 92.5 % pregnant women to the hospital (92.5 %), counseling the mothers on AWC (Anganwadi Centres), PNC and safe delivery (84 %), distribution of Iron folic acid (IFA) and oral pills (87.5 %), registration of pregnant mother (68.8 %), mobilizing the mothers and children for immunization and providing help to ANM on immunization day (80 %) while the activities like informing day (80 %) and informing AWW/ANM on birth and death motivating community to construct household toilets whereas motivating the couple for family planning had assumed least priority among the ASHAs.

Kumudha *et al.* (2010) studied on increasing appropriate complementary feeding in rural Uttar Pradesh revealed that about 80 per cent of frontline health workers (ASHAs, AWWs and ANMs) have correct knowledge regarding the type of complementary food to be given to a child. However, only 11-25 per cent frontline health workers were correctly aware of the recommended frequency of feeds.

Deepthi *et al.* (2010) reported study on increasing postnatal care of mothers and newborns including follow-up cord care and thermal care revealed that, 60 per cent of ASHAs and about 81 per cent of ANMs mentioned that they advised women not to apply anything on the cord stump as a follow up care. Rest of ASHAs had advised to apply substances such as oil (13 %), talcum powder (13 %), and antiseptic cream (9 %), whereas the solutions provided by ANM are at the facility (10 %) and other miscellaneous substances (10.00 %) as follow up care.

A cross sectional study was conducted by Darshan *et al.* (2011) to find out the knowledge, attitude and practice of 130 ASHA workers regarding child health under five years of age. The study reported that about 70 per cent of them had received secondary level of education and almost 86.20 per cent of ASHA workers had improper knowledge regarding new born care whereas, nearly 70 per cent knew the causes of diarrhoea but 91.50 per cent of them had no idea about signs of the dehydration. However, about 68.46 per cent and 68.47 per cent had lack of knowledge about measles and pneumonia respectively. In addition, approximately 80.77 per cent knew about signs or symptoms of malaria but 59.23 per cent among them did not know what to do if the child was having it.

Shrivastava and Shrivastava (2012) studied evaluation of knowledge, attitudes and practices of ASHA workers in relation to child health revealed that, 67.1 per cent of ASHA workers were not aware of the correct preventive measures for vitamin A deficiency. About Twenty-nine (29.90 %) of the ASHAs did not feel the need for referral for a child with diarrhoea who is unable to drink or breast feed.

Sushama *et al.* (2012) conducted a community based, cross sectional study on ASHA supervisors and ASHA workers to assess the comparative score of the participants before and after the training on the breast feeding knowledge, attitude and practices. The results before training had scored as very good 3 (3.03 %), good 65 (65.66 %), average 28 (28.28 %) and below average 3 (3.03 %) whereas, immediately after the special training, 64 (64.45 %) participants got very good scores, 31 (31.31 %) got good scores and 4 (4.04 %) got average scores.

Anusha *et al.* (2013) reported study on knowledge regarding RCH services among health workers, pregnant mothers and adolescents in rural field practice area revealed that the knowledge of health workers with regards to antenatal checkups was good being 81 per cent, 100 per cent of them had correct knowledge regarding TT injections and 64.80 per cent of them knew about Medical Termination of Pregnancy (MTP). The overall knowledge scores found that the health workers had good knowledge (78 %) as compared to the pregnant women (54.8 %) and adolescents (53.2 %) whereas with regard to questions that were asked to health workers and the pregnant women found that only the health workers were better.

Padda *et al.* (2013) studied role of ASHA in improvement of maternal health status with urban rural comparison in northern India revealed that 92.60 per cent of pregnant women living in urban area had an institutional delivery and 07.40 per cent delivered at home whereas 14.03 per cent of women residing in rural area delivered their babies at home and 85.70 per cent delivered at an institute and concluded that the maternal and child health services delivery definitely improves after inception of ASHA worker in rural community.

A cross sectional study was conducted among 50 primary health centers for evaluation of different immunization variables and the logistic support to Mamta Diwas. The study reported that in 11 (22 %) PHCs the dropout rate was found to be more than 10.00 per cent whereas in 20 (40 %) and 25 (50 %) PHCs, reported adverse events following immunization (AEFI) and vaccine preventable diseases (VPD) respectively. However, the information education and communication (IEC) materials were displayed in 38 (76 %) PHCs and also reported that, the site of vaccination and correct dosage and technique of vaccination was known to every interviewed female health worker (FHW) at all the session sites (Sharma *et al*., 2013).

Ghan *et al.* (2014) conducted a study on assessment of knowledge and motivation of reproductive and child health care over 200 ASHA workers in two districts of Rajasthan (Tonk and Jaipur) scored that 90.5, 86.7, and 86.62 per cent in general reproductive awareness, maternal health care and child health care respectively. However, their knowledge score in family planning and HIV/AIDS is low (64.16 %) as compared to maternal and child health care whereas for adopted ANC (antenatal care), conducted deliveries in health institutions, received PNC (postnatal care), availed child immunization facilities and number of eligible couples adopting various family planning methods in ASHA's operational area were 67.33, 72.28, 74.97, 80.78 and 30.49 per cent of cases respectively and they have been motivated by the ASHAs.

Saxena (2014) reported study to assess the complementary feeding (CF) practices among mothers of children below two years of age. The study showed that, 87.30 per cent children of above six months of the age were on CF, while timely CF was initiated only in 70.10 per cent, whereas, 36.40 per cent of children were given complementary food in liquid consistency and only 17.2 per cent children were given green leafy vegetables.

Kohli *et al.* (2015) studied awareness and practices of accredited social health activist (ASHA) workers about child health reported that fifty two (94.5 %) ASHA workers knew that exclusive breastfeeding should be continued till 6 months of age while 54 (98.2 %) knew that breast feeding should be continued in case of diarrhea. ASHA workers asked about the indications of referral for a child with diarrhea to health facility. Found difficulties in breastfeeding (34.5 %), presence of blood in stools (60 %), drowsiness (43.6 %) and non-passage of urine in past 6 hours (30.9 %).

Mahesh *et al.* (2015) observed study on evaluation of knowledge of ASHA workers regarding various health services in Saurashtra region of Gujarat found that majority of ASHA (92.26 %) correctly knew about minimum antenatal visits required for pregnant women and time for 1st TT injection (77 %) but only two third of ASHA (65.98 %) knew about correct dose and duration of iron folic acid tablets.

2.4 Problems of ASHA workers as activist

Centre for operation research and training (CORT) (2008) conducted an assessment of JSY to understand the process of implementation of the program, involvement of ASHA and experience of JSY beneficiaries in three district of Basti, Raibareli and Saharanpur ofUttar Pradesh showed that 33 per cent of ASHA's did not receive any payment until the date of survey

Saraswathi *et al.* (2008) reported study on rapid appraisal of functioning of ASHA under NRHM in Orissa revealed that the non-availability of transportation to the pregnant mothers was a major problem and lack of communication or unwillingness of the beneficiaries to inform her leads to losing her incentives. Besides, she also loses the incentive if the client opted for the delivery in private hospital or nursing home and majority of the ASHAs were not getting incentives in time with even nearly a quarter of ASHAs had not received incentives for more than six months.

Gosavi *et al.* (2009) observed study on awareness and perceptions of ASHA regarding their role in health care revealed that challenges faced by most of the ASHA were lack of support from PHC staff, no compensation for services other than institutional delivery, unclear reimbursement policy with delayed payments also they have lack of support from public health centers (PHC) staff, the lack of good training, unclear reimbursement policy and poor clarity in how to collaborate work with the ANM and Anganwadi workers.

The study on biosocial profile of ASHA and their services revealed that major problems encountered in ASHA workers were related to transport to (32 %) health centers except for few of them who have problem in getting honorarium (13.3 %) and nearly one third (32.7 %) have no problem in their working (Saxena *et al.*, 2012).

Ram *et al.* (2012) conducted study on factors influencing overall performance of ASHAs in child health care services under NRHM in rural Lucknow reported that most (84.2 %) of ASHAs were unsatisfied with job due to not getting their cash incentive with total and timely.

Garg *et al.* (2013) evaluated ASHA worker's awareness and practice of their responsibilities in rural Haryana revealed that about one fifth of ASHAs were earning more than Rs.800 per month whereas one-fifth were earning less than Rs.200 per month and showing the varying capability of ASHAs. In addition, majority of the ASHAs (71.66 %) were not satisfied with their incentives also there was a general demand from all stakeholders for a regular monthly payment to each ASHA besides the job related incentives for betterment of work around 84.76 per cent expect better pay.

Parthasarathi *et al.* (2014) studied knowledge regarding reproductive and child health care among ASHAs in a block of West Bengal revealed that their children were taken care by their in-laws (46 %), spouse (17 %) and sometimes by parents of ASHA and neighbors while nearly two third of the ASHAs reported problems in their family primarily because of job and about 30 per cent were carrying out part time jobs like taking tuition class for children (21 %), sewing clothes (5 %) and insurance agent (4 %).

Aniruddha *et al.* (2015) reported study on problems faced by ASHA workers for malarial service under national vector borne disease control programme (NVBDCP). Most of the ASHA workers served the population above the standard level and half of them belonged to low performing sub-center villages. However, main identified problems were some areas were so far to reach by them and getting incentive for work and population catered by ASHA workers were too high (standard 1 ASHA per 1000 population). Hence, most of the ASHA workers faced many problems belongs to low performing sub center villages.

2.5 Socio personal characteristics of ASHA workers

Age

Ram *et al.* (2012) studied on factors influencing overall performance of ASHAs in MCH (Maternal Child Health) care services under NRHM in Rural Lucknow observed that majority (75.3 %) of them were less than 35 years of age while rest were within the age of 35years.

Evaluation of trained accredited social health activist (ASHA) workers regarding their knowledge, attitude and practices about child health revealed that70 (47.9 %) ASHA workers were below the age of 25 years while the minimum age of ASHA workers was 17 years and the maximum age was 34 years (Shrivastava and Shrivastava, 2012).

The study on biosocial profile of ASHA and their services revealed that maximum (42 %) ASHA were in 26-30 years of age group and 23 per cent of ASHA were in less than 25 years of age which is below than the stipulated selection criteria. Whereas, about 6.30 per cent of ASHAs were not fulfilling the educational criteria of selection (education up to 8^{th} class). They also reported that majority of ASHA consider care of pregnant women, vaccination and family planning as their prime services (Saxena *et al.*, 2012).

Garg *et al.* (2013) evaluated ASHA worker's awareness and practices of their responsibilities in rural Haryana revealed that majority of (39.05 %) the ASHA workers were in the age group of 20-29 years while, mean age of ASHA workers was 31.36 years.

Waskel *et al.* (2014) evaluated ASHA programme in selected block of Raisen district of Madhya Pradesh and reported that majority of (67.69 %) the ASHA workers were in the age group of 20-29 years while mean age of ASHA workers was 27 years.

Parthasarathi *et al.* (2014) conducted an intervention study among ASHAs on knowledge regarding reproductive and child health in a block of West Bengal revealed that mean age of the sample population was 34.42 years and about two-third of the ASHAs were in the age group of 31-35 years.

Renukha *et al.* (2014) studied on impact of educational intervention on knowledge of ASHA workers about their job responsibilities in rural and tribal areas of Kurnool division in Andhra Pradesh results that majority of the ASHAs belong to age group of 30-34 years (28.5 %) followed by 25-29 years (24.6 %).

Mahesh *et al.* (2015) evaluated knowledge of ASHA workers regarding various health services in Saurashtra region of Gujarat reported that majority of (32.47 %) were in the age group of 31-35 years followed by 26-30 years (31.44 %).

Caste

Ram *et al.* (2012) studied on factors influencing overall performance of ASHAs in child health care services under NRHM in rural Lucknow observed that most (97.20 %) of ASHA were Hindus and nearly half of them (42.70 %) were belonged to scheduled caste.

Renukha *et al.* (2014) reported study on impact of educational intervention on knowledge of ASHA workers about their job responsibilities in rural and tribal areas of Kurnool division in, Andhra Pradesh revealed that majority of the ASHAs belonged to scheduled caste (49.2 %) followed by backward caste (29.3 %).

Waskel *et al.* (2014) evaluated ASHA programme in selected block of Raisen district of Madhya Pradesh under the national rural health mission revealed that most 194 (94.17 %) of the ASHA workers were belonged to Hindus.

Kohli *et al.* (2015) conducted cross sectional study on awareness and practices of accredited social health activist (ASHA) workers about child health reported that 47 (85.5 %), 8 (14.5 %), 16 (29.1 %), 16 (29.1 %) and 21 (38.2 %) ASHAs were belonged to Hindu, Muslim community, scheduled caste (SC), other backward classes and other castes and religions respectively.

Mahesh *et al.* (2015) evaluated knowledge of ASHA workers regarding various health services under NRHM in Saurashtra region of Gujarat reported that 30.14 per cent were belonged to other backward class and 26.80 per cent were of general category, 26.29 per cent were of schedule caste and 16.49 per cent were of schedule tribe.

Marital status

Darshan *et al.* (2011) conducted cross sectional study for knowledge, attitude and practice of ASHA workers regarding child health (under five years of age) in Surendranagar district revealed that nearly 90 per cent of ASHAs were married.

Kohli *et al.* (2015) reported study on awareness and practices of accredited social health activist (ASHA) workers about child health reported that 3.6 per cent of ASHA workers were unmarried.

Mahesh *et al.* (2015) evaluated knowledge of ASHA workers regarding various health services under NRHM in Saurashtra region of Gujarat observed that majority (89.69 %) of ASHA were married in their study area.

Education

Ram *et al.* (2012) studied on factors influencing overall performance of ASHAs in child health care services under NRHM in Rural Lucknow reported that all of ASHAs were educated up to 8^{th} class while very few (7.5 %) of them educated up to graduate.

Shrivastava *et al.* (2012) evaluated trained accredited social health activist (ASHA) workers regarding their knowledge, attitude and practices about child health and revealed that 45.9 per cent of the ASHAs were educated below secondary school level.

The study on biosocial profile of ASHA and their services revealed that majority of them were educated above the selection criteria for education *i.e.* about half of them had got education junior high school (51 %), high school (20 %), intermediate graduate or equivalent (4.7 %) (Saxena *et al.*, 2012).

Sushama *et al.* (2012) conducted cross sectional study on effectiveness of the training course for ASHA supervisors and workers on infant feeding practices at a rural teaching hospital. The results observed that100 per cent of the ASHA workers were literate and the majority were only 10^{th} and 12^{th} standard passed whereas only 5 per cent were graduates.

Garg *et al.* (2013) evaluated ASHA workers' awareness and practices of their responsibilities in rural Haryana and revealed that most 101 (96.19 %) of ASHA workers completed 8^{th} standard or more of schooling.

Karol (2014) studied on community health workers for reproductive and child health care on knowledge and motivation of ASHA (accredited social health activist) workers in Rajasthan revealed that highest (42 %) of them were passed 10^{th} standard and even 34 per cent of them were qualified.

Parthasarathi *et al.* (2014) studied on knowledge regarding reproductive and child health care among ASHAs in a block of West Bengal revealed that about 27 per cent and 35 per cent were educated till secondary and higher secondary respectively, while the remaining were all graduates.

Renukha *et al.* (2014) conducted study on impact of educational intervention on knowledge of ASHA workers about their job responsibilities in rural and tribal areas of Kurnool division in Andhra Pradesh revealed that majority (58.4 %) of the ASHAs had educational status up to secondary level.

Waskel *et al.* (2014) conducted study on evaluation of ASHA programme in selected block of Raisen district of Madhya Pradesh under the national rural health mission revealed that most 86 (41.74 %) of ASHA workers had completed 8thstandard followed by 43 (20.9 %) were passed high school and only 13 (6.3 %) were educated up to post-graduation.

Aniruddha *et al.* (2015) conducted cross sectional study on problems faced by ASHA workers for malarial service under national vector borne disease control programme (NVBDCP) showed that eighteen (62.07 %) ASHA workers were passed primary whereas eleven (37.93 %) were studied up to secondary.

Kohli *et al.* (2015), studied on awareness and practices of accredited social health activist (ASHA) workers about child health reported that majority (61.8 %) of ASHAs were educated up to or above senior secondary school level

Mahesh *et al.* (2015) evaluated knowledge of ASHA workers regarding various health services under national rural health mission (NRHM) in Saurashtra region of Gujarat reported that majority having primary (49.49 %) and secondary (34.02 %) level of education.

Income of the family

Darshan *et al.* (2011) conducted cross sectional study of the knowledge, attitude and practice of ASHA workers regarding child health (under five years of age) in Surendranagar District reported that around 95 per cent of ASHA workers were from social class IV (upper lower).

Saxena *et al.* (2012) studied on biosocial profile of ASHA and their services revealed that most of them belonged to upper middle class (41.3 %) followed by lower middle class (27.3 %) and upper class (18 %).

Renukha *et al.* (2014) studied impact of educational intervention on knowledge of ASHA workers about their job responsibilities in rural and tribal areas of Kurnool division in Kurnool District, Andhra Pradesh revealed that 60 % of ASHAs belonged to lower socio-economic status.

Mahesh *et al.* (2015) evaluated knowledge of ASHA workers regarding various health services under NRHM in Saurashtra region of Gujarath observed that 67.00 per cent belonged to lower socio-economic status in their study area.

Years of services

Sushama *et al.* (2012) conducted cross sectional study on effectiveness of the training course for ASHA supervisors and workers on infant feeding practices at a rural teaching hospital reported that almost all had one year of experience in health and social services.

Aniruddha *et al.* (2015) studied problems faced by ASHA workers for malarial service under national vector borne disease control programme (NVBDCP) showed that total eleven (37.93 %) ASHA workers had experience less than equals to one year and eighteen (62.07 %) had experience of more than one year.

Mass media participation

Sundararaman (2005) explained the training modules using interactive techniques such as pictorial material, storytelling, skits, role plays, folk media such as Kalajathas, mass media such as local radio programmes to impart in-depth understanding about social issues and technical health knowledge to the ASHAs.

Goel *et al.* (2007) evaluated status of routine immunization in Chandigarh reported that, for 218 (56.0 %) mothers, television was the major source of information about the immunization, closely followed by ANM/Health workers *i.e.* 206 (53.0 %).

Yangchen. (2013) reported that, the major source of information came from ASHA (77.5 %) followed by other sources like TV, radio, friends and relatives (12.4 %) and ANM (8 %)

Extension participation

The study revealed that the PSP's (Private Service Provider) who adopted multiple motivational strategies e.g., meetings with ASHA's and AWW's, free out-patient services for below poverty line (BPL), publicity through media *etc.* were successful in getting more number of cases as compared to those who did not adopt such strategies, whereas, motivational charges for institutional deliveries was very effective in increasing the institutional deliveries in private hospitals. (Pal *et al.*, 2008)

In a study of assessment of most effective mode of social mobilization in Japanese Encephalitis (JE) mass vaccination campaign on 328 adults, the results observed that, majority of the respondents (80 %) learnt about the campaign through ASHA or link worker followed by poster or banner (10 %) which signifies that ASHA/Link workers had an important role in success of the campaign (Das *et al.*, 2014).

Renukha *et al.* (2014) studied impact of educational intervention on knowledge of ASHA workers about their job responsibilities in rural and tribal areas of Kurnool division in Kurnool district, Andhra Pradesh observed that the mean pre-test score of the ASHAs was found to be understandable low at 24.96 per cent. The post test score of the ASHAs improved to 42.18. The mean test score improved significantly after educational intervention.

The above study clearly revealed the awareness and knowledge among ASHA workers is sufficient in women and child health services by helping in immunization, accompanying clients for delivery, providing ANC (Antenatal care) and family planning services as a part of responsibility. Most of them were understood as link workers and their ability to address the immediate needs of rural and marginalized communities. In addition, they were also valued as service providers.

3. MATERIAL AND METHODS

Research methodology is the blue print of the research architect. This chapter deals with research methods and techniques used in the study. It mainly describes the procedure followed in the selection of the districts, taluks, villages and respondents, besides, description of locale, the variables studied and their measurement procedure, data collection method and use of statistical tools have also been outlined. A detailed description of the methods and procedures followed in carrying out the research is furnished under the following heads.

3.1 Research design

Research design as designed by Kerlinger (1995) is the plan and structure of investigation, so conceived as to obtain answer to research questions. Expost facto research design was followed for conducting the study. Robinson (1976) defined expost facto research design as any systematic empirical enquiry in to which the independent variables has not been directly manipulated because they have already occurred or they are inherently not manipulable. Keeping this in view, the adaptability of the proposed design with respect to the type of study, variables under consideration, size of respondents and phenomenon to be studied, the expost facto design was selected.

3.2 Locale of the study

3.2.1 Selection of the district

The study was conducted in Dharwad taluk of Dharwad district of Karnataka state during the year 2015-2016. Dharwad block has been purposively selected for the study because of nearness and familiarity of the researcher with the study area.

Profile of Dharwad district

Sl. No	Particulars	Dharwad district
1	Total no. of blocks	6
	Total no. of villages	372
	Total no. of cities/ town	5
	Hoblies	14
2	Total population in number (2011 census)	18,46,993
	Rural population	7,97,430
	Urban population	10,49,563
	Male population	9,36,127
	Female population	9,07,866
3	Percentage of literacy (2011 census)	
	Male	86.12
	Female	72.09
	Overall	80.30

Source: District at glance, Dharwad

3.2.2. Description of study area

3.2.2.1 Historical Background

This district was ruled by various dynasties from the 5th century onwards. Important among them are Badami and Kalyan Chalukyas, Rastrakutas, Vijayanagar, Adilshahi, Mysore kingdom and Peshawas of Pune. Due to the rule of Peshwas, influence of Marathi is seen in the early decades of the 19th century. During the British rule, Dharwad became the divisional headquarter of educational administration and Kannada is the vernacular language of the people gained prominence.

The major religions in the district are Hinduism, Islam, Jainism and Christianity. Majority of Hindus were found in both urban and rural areas. The population of the district is divided mainly into three categories, *viz.,* main workers, marginal workers and non-workers. In the district, dry farming is the backbone of the Agricultural economy and even Agriculture is now labour-intensive enterprise. Hence, the district has an above average proportion of workers in its population and offer opportunities to seasonal workers.

3.2.3 Selection of Primary Health Centers (PHCs)

List of the villages and primary health centers were selected in consultation with the district health officer (DHO) and other departments of health. Five primary health centers were selected by purposive sampling method from the taluks of Dharwad *viz.,* Mugad, Byahatti, Morab, Gudageri and Mishrikoti.

3.3 Selection of the respondents

A cross-sectional study was carried out amongst ASHA workers in five PHCs of five taluks of Dharwad district. Totally 150 ASHA workers were selected randomly as 30 members at their respective PHCs and they were interviewed using a self-designed with semi structured oral questionnaire. Data was analyzed using SPSS and valid conclusions were drawn. The details of the ASHA workers selected for the study were enlisted in flow chart (Fig. 2).

3.4 Instrument for data collection

Considering the objectives and variables under study, an interview schedule was prepared and pre-tested in a non-study area. After pre-testing, certain modifications were made in schedule by consulting experts and health department. The finalized schedule was used for data collection.

3.5 Selection of variables for the study

A variable means some characteristics of each member of the unit that is to be studied such as age, income, education *etc.* A variable can be regarded as some kind of yardstick that gives us a basis for the evaluation of the single unit of analysis like dimension of health and task orientation and also “a variable is a set of values that turn a classification. A value is anything which can be predicted of a unit”.

3.6 Operationalization and measurement of variables

Sl. No	Variables	Empirical measurement
	Dependent variables	
1	Awareness	Procedure followed by Biradar(1997)
2	Opinion	Procedure followed by Nirmala (2000)
3	Knowledge	According to Gayatridevi (2000)
	Independent variables	
1	Age	According to Joshi (1992)
2	Caste	According to Govt. of Karnataka.
3	Education	Procedure followed by Usha Rani (1999)
4	Marital status	According to Annapurna(2004)
5	Type of family	According to Sulthana (2001)
6	Family size	Procedure followed by Venkataramaiah (1983)
7	Annual family income	Procedure followed by Deepak (2003)
8	Year of services	-
9	Extension participation	According to Hardikar (1998)
10	Mass media participation	Procedure followed by Satyanarayana (2002)
11	Urban contact	Procedure followed by Ravikumar(1979)

3.6.1 Methods used for measurement of dependent variable

1. Awareness Index

It is referred as the awareness of respondents regarding health care provisions. Quantification of this was done as per the procedure followed by Biradar (1997).

Based on the score obtained by all the beneficiaries, awareness index was calculated by using the following formula.

Items	Score
Yes	2
No	1

$$\text{Awareness index} = \frac{\text{Scores obtained}}{\text{Obtainable scores}} \times 100$$

2. Opinion

According to common usage “opinion is a judgment or belief based on grounds short of proof and provisional conviction founded on probable evidence”. (Bhatia, 1965)

Statements based on the opinion of ASHA workers on training were formulated by consulting the concerned taluk, primary health centers, health officers and subject experts in health department at district level. After discussion finally a list of opinion statements were selected covering training conducted for ASHA workers. They were presented to the respondents with three point continuum *viz.,* most favorable, favorable, and unfavorable with a score of 3, 2 and 1 for the statements were assigned respectively. The respondents were classified into low, medium and high categories. The procedure was followed by Gayatridevi (2000).

Categorization of opinion

The total scores for the variable opinion obtained by each respondent were summated. Based on mean and standard deviation were grouped into low, medium and high categories.

Category	Range
Low	Less than (mean-0.425 SD)
Medium	Between (mean ± 0.425 SD)
High	Greater than (mean + 0.425 SD)

Opinion index

Based on the total scores obtained by all the respondents opinion index was worked out by using the following formula.

$$\text{Opinion Index} = \frac{\text{Scores obtained}}{\text{Obtainable scores}} \times 100$$

3. Knowledge

Knowledge level of health programme was considered as dependent variable. English and English (1958) defined the knowledge as a body of information possessed by an individual which is in accordance with established fact.

Statements based on the knowledge about health programmes were formulated by consulting the concerned taluk, primary health centers, health officers and subject experts in health department at district level. It was explained to the respondents with multiple choice answers. The score as two was given to the right answer and one to the wrong answer. Based on the total scores, all the respondents were classified into low, medium and high categories with following the procedure given by Nirmala (2000).

Category	Range
Low	Less than (mean-0.425 SD)
Medium	Between (mean ± 0.425 SD)
High	Greater than (mean + 0.425 SD)

3.6.2 Methods used for measurement of independent variables

1. Age

The age was measured as the number of calendar years reported to have completed by the respondents at the time of interview. Based on their age, the respondents were categorized as follows. The procedure was followed by Joshi (1992).

Category	Range
Young age (18-35 yrs)	Less than (mean-0.425 SD)
Middle age (36-50 yrs)	Between (mean ± 0.425 SD)
Old age (51 & above)	Greater than (mean + 0.425 SD)

2. Caste

The caste of the ASHA workers was recorded and later classified by following the norms prescribed by the Department of Social Welfare, Government of Karnataka as mentioned below.

Categories:

Forward caste: Brahmin, Lingayat, Jain and Muslim.

Backward caste: Ambiga, Maratha, Gouli, Vakkaliga, Pattar, Kambar and weaver.

Scheduled Caste: Bovi, Jenn kuruba, Harijan, Madar.

Scheduled Tribe: Valmiki, Talwar and Koraga.

3. Marital status

Marital status of respondents was recorded by asking and the respondents were classified into married, unmarried, widow and divorced. The scores were enlisted as follows with the procedure followed by Annapurna (2004)

Category	Score
Married	1
Unmarried	2
Widow	3
Divorced	4

4. Education

Education was operationally defined as the number of years for formal education acquired by the ASHA workers and was grouped into the following categories. The scores were referred as the procedure followed by Usha Rani (1999).

Category	Score
No schooling (illiterates)	1
Primary school(1-4)	2
Middle school (5-7)	3
High school (8-10)	4
College	5
Degree	6

5. Family size

Family size was operationally defined as the total number of members residing together in a family at the time of interview. The scale developed by Venkataramaiah (1983) was adopted.

Category	Score
Small (1-4 members)	1
Medium (5-8members)	2
Large (9+ members)	3

6. Type of family

Type of family is classified into two main classes as nuclear and joint. The basic grouping of mates and their children is called nuclear family whereas collection of more than one nuclear family on the basis of close blood ties and common residence is called joint family. The scores as one and two were given for nuclear and joint family respectively. The procedure was followed by Sulthana (2001).

Category	Score
Nuclear family	1
Joint family	2

7. Family income (per month)

It was measured by considering the income of the family. This was done as per the procedure suggested by Ministry of Rural Development; a similar procedure as followed by Deepak (2003) was used.

Category	Score
Low	Rs. 500/- to Rs 1000/-
Semi-medium	Rs. 1,000/- to Rs. 2,000/-
Medium	Above Rs. 2,000/-

8. Years of services

Service was operationalized as the number of years completed. A score of 1 was assigned for each completed year. Further, the ASHA workers were classified into three groups based on mean and standard deviation.

Category	Score
Low	Below (mean - 0.4256* SD)
Semi-medium	Between (mean $\pm$ 0.4256* SD)
Medium	Above (mean + 0.4256* SD)

9. Mass media participation

This variable was operationalized as the extent to which the respondents were used different mass media as a source of information. The data was quantified by assigning the score as detailed below and were presented in frequencies and percentages. This scale was developed by Satyanarayana (2002).

Items	Score
Not owned/ not subscribed	0
Owned/ subscribed	1
Listened/ viewed/read regularly	2
Listened/ viewed/read occasionally	3
Never viewed/listened	4

The respondents were categorized into following three groups using mean and standard deviation as a measure of check.

Category	Range
Low	Less than (mean-0.425 SD)
Medium	Between (mean ± 0.425 SD)
High	Greater than (mean + 0.425 SD)

10. Extension participation

The participation was conceptualized as the degree of involvement of an individual in various social organizations as a member or as an office bearer. It was empirically measured using the procedure followed by Hardikar (1998). Recording of the scores as two was given for regular participation and one for occasional participation whereas zero for non-participation in the activities of each organization. The respondents were categorized into following three groups using mean and standard deviation as a measure of check.

Category	Range
Low	Less than (mean-0.425 SD)
Medium	Between (mean ± 0.425 SD)
High	High (mean + 0.425 SD)

11. Urban contact

It is the degree to which an individual has developed the contact outside the community. The respondents were asked to indicate their frequency of number of visits made to town and taluk district headquarters during the last one year. The procedure was suggested by Ravikumar (1979) and applied in current study by assigning the scores with slight modifications.

a. Frequency of visits to nearest town during the last year

No. of visits made	Score
Never	1
Once in month	2
Twice in month	3
Once in week	4
Two or more times a week	5

b. Considering the purpose of the visits

Category	Score
Hospitals for delivery	1
Villagers for check-up	2
Pregnant women for check-up	3
ANC check-up	4
Operation	5
Personal	6

Problems and suggestion of ASHA workers

ASHA workers were asked to mention their problems and suggestions. The frequency and percentage were used to calculate for analyzing the problems and suggestions.

3.7 Statistical tools used in the study

The collected data from the respondents were edited, scored, tabulated and analyzed using following statistical tools.

1. Frequency and percentage

Frequency and percentage were used to interpret the categories of socio-personal characteristics, awareness, opinion and knowledge. They were also used to elicit the problems faced and suggestions given by the respondents.

2. Mean and Standard Deviation

Mean and standard deviation were used for classification of respondents into various categories.

3. Chi-square

Chi-square-non-parametric test was employed to find out the association between dependent and independent variables using following formula,

$$\chi^2 = \Sigma_i \Sigma_j \frac{(O_{ij} - E_{ij})^2}{E_{ij}}$$

χ^2 Values are compared with table values for (r-1) (c-1) degrees of freedom.

Where,

E_{ij} =Expected frequency of (i, j) th cell

O_{ij} =Observed frequency of (i, j) th cell

r= number of rows

c= number of columns

χ^2 values are compared with table values for (r-1)(c-1) degrees of freedom (df) 'r' denoting the number of rows, 'c' denoting number of columns in the contingency table.

4. Modified Chi-square

Modified Chi-square-non parametric test of independence was applied to determine the association between dependent and independent variables, wherever the frequencies were less than five, the test of independence was applied to determine the association between dependent and independent variables using the formula,

$$\left[1 - \frac{1}{n}(1 - d^{-1/2})\right] x^2$$

Where,

χ^2_d (0.05) = Table χ^2 value at 'd' degrees of freedom for 5 per cent level of significance.

n= Sample size

5. Correlation – coefficient

$$r = \frac{n\Sigma XY - \Sigma X\Sigma Y}{\sqrt{[n\Sigma X^2) - (\Sigma X)^2][\Sigma Y^2 - (\Sigma Y)^2]}}$$

Where,

r = Simple correlation coefficient

X = Independent variable

Y = Dependent variable

X^2 = Sum of square of X

Y^2 = Sum of square of Y

ΣXY = Sum of cross products of X and Y values

n = Number of pairs observed

Test of significance of correlation coefficient

$$t = \left(\frac{r}{\sqrt{\frac{1 - r2}{n - 2}}} \right)$$

Where,

r = Correlation coefficient

n = Sample size

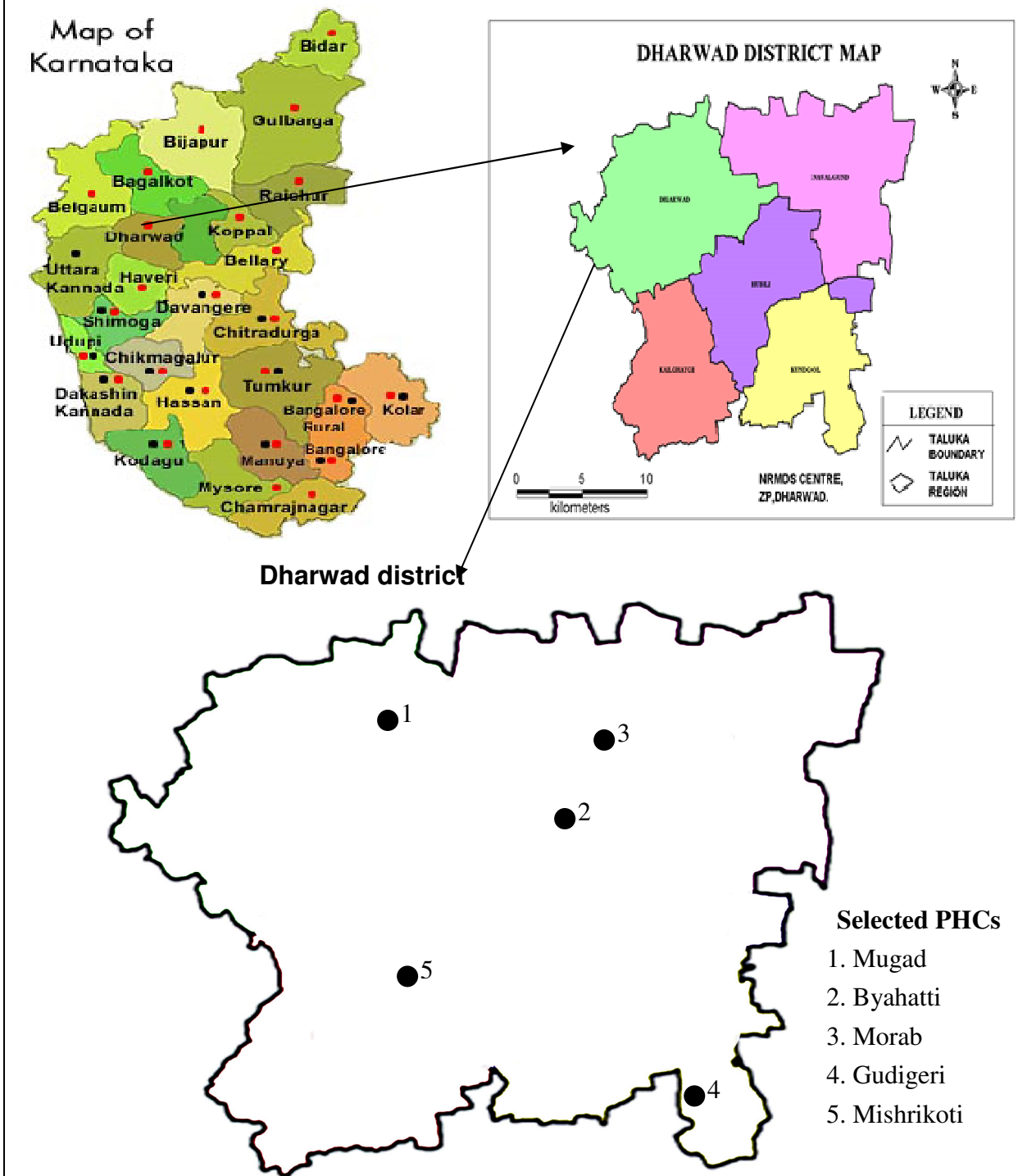

Fig. 1: Map of the study area

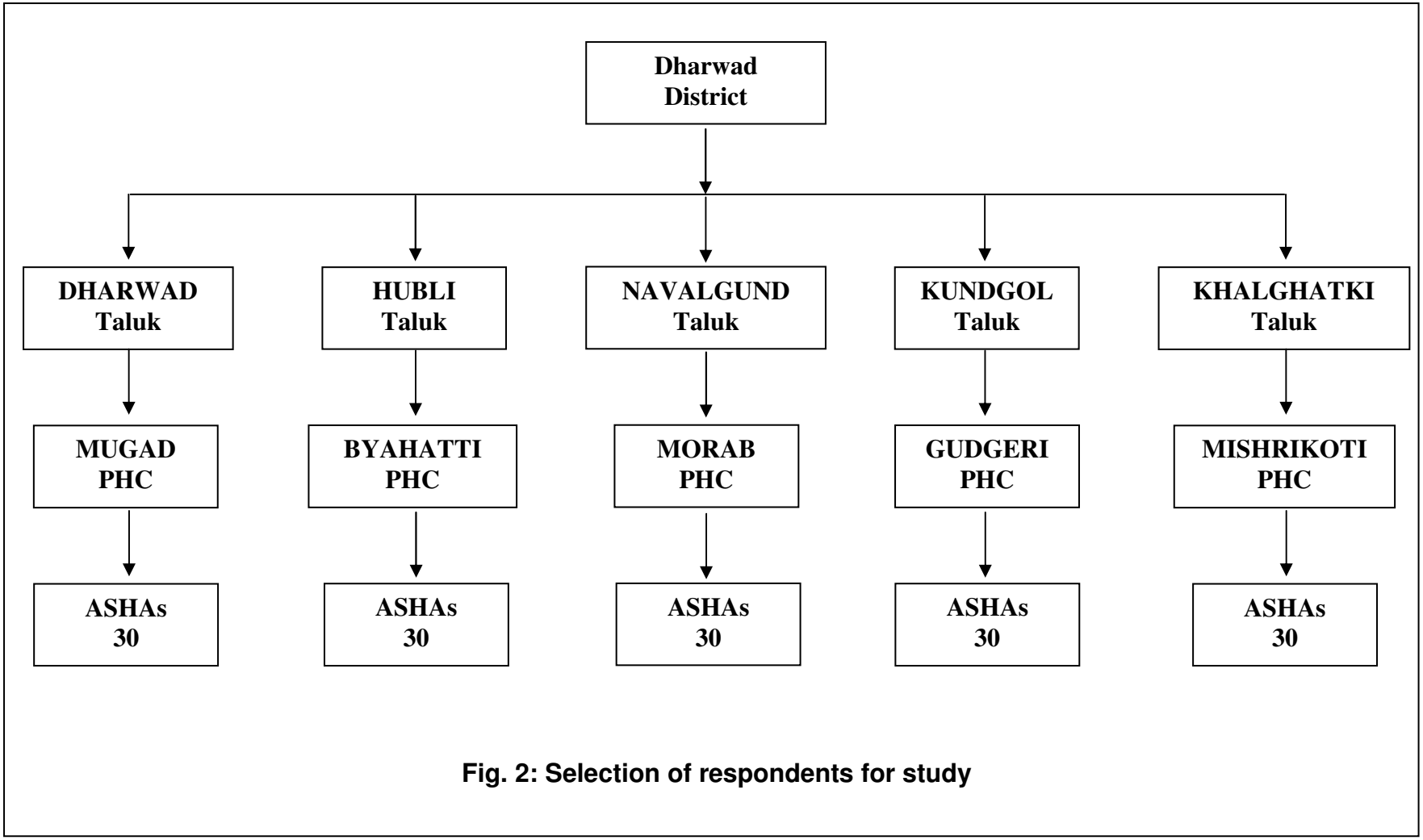

Fig. 2: Selection of respondents for study

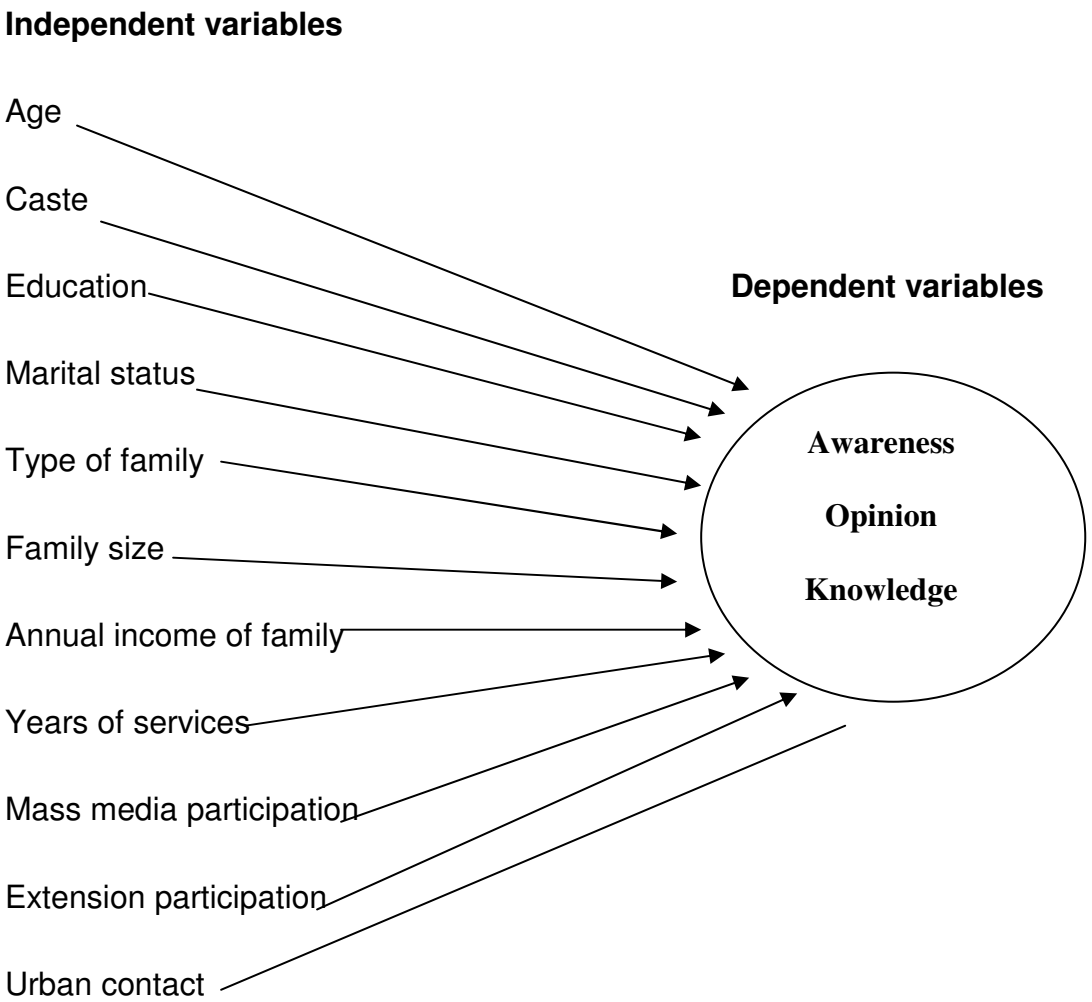

Fig. 3. Conceptual framework

A conceptual frame work or schematic model is a diagrammatic representation outline for the dominate element of a system, and their inter relationship with respective criterion variable. In the light of the inference derived from the evidence in the literature and conceptual frame work has thus established which represents the important dimensions and postulated relationship among the variables. Therefore, eleven independent variables representing personal, social, economic, extension, media and urban participation were related to the dependent variables *viz.,* awareness, opinion, and knowledge of selected ASHA workers.

Name of vaccine	When to give	Dose	Route	Site
For pregnant women				
TT-1 or Booster	Early in pregnancy	0.5 ml	Intramuscular	upper arm
TT-2	4 weeks after TT-1	0.5 ml	Intramuscular	upper arm
For Infants				
BCG	At birth or any time up to one year	1.1 ml 0.05ml (up to 1 month)	Intradermal	left upper arm
OPV-0	At birth if delivery is in institution, but can be given up to 2 weeks.	2 drops	Oral	oral
OPV 1,2 and 3	At 6 weeks, 10 weeks & 14 weeks but can be given up to 5 years	2 drops	Oral	oral
DPT 1,2 and 3	At 6 weeks, 10 weeks & 14 weeks but can be given up to 2 years	0.5 ml	Intramuscular	Mid-outer thigh
Measles	9 Months (9-12 months); should be given up to 5 years	0.5 ml	Subcutaneous	Right upper Arm
Vitamin-A	At 9 months with measles	1 ml	Oral	Oral
	For Children			
DPT booster	16-24 months	0.5 ml	I/M	Mid-outer thigh
OPV Booster	16-24 months	2 drops	Oral	Oral
Vitamin-A	• 16 months with DPT/OPV booster, •24 months, 30 months & 36 months. (Minimum interval between two doses is 6 months)	2 ml	Oral	Oral
DT	5 years	0.5 ml.	Intramuscular	Upper Arm
TT	10 years & 16 years	0.5 ml	Intramuscular	Upper Arm

Fig. 4. National immunization schedule for children and pregnant women

Plate 1: PHC at Mugad, Dharwad

Plate 2: PHC at Mishrikoti, Kalaghatgi

Plate 3: PHC at Byahatti, Hubli

Plate 4: PHC at Gudageri, Kundagol

4. EXPERIMENTAL RESULTS

Mother and child constitute a priority group in a community. They comprise of approximately 57.5 per cent of the total population and constitute a vulnerable group. Every year, about 5.4 million children around the world die before the age of one and about 7.5 million die before the age of five, two thirds of these deaths are preventable. Nearly 350,000 women die of complications related to pregnancy and childbirth. However, in rural India, where the number of primary health care centers (PHCs) is limited, 80 per cent of the centers do not have doctors or medical staff, 39 per cent do not have lab technicians and 18 per cent PHCs do not even have a pharmacist. Therefore, India also accounts for the largest number of maternity deaths.

Recognizing the importance of health in the process of economic and social development and improving the quality of life of our citizen, during 1952, India launched the world first national program emphasizing family planning to the extent necessary for reducing birth rates to stabilize the population at a level consistent with the requirement of national economy but also to promote reproductive health and reduce maternal, infant & child mortality and morbidity.

One of the key components and an exemplary model is the network of trained accredited social health activists (ASHA), created under the National Rural Health Mission (NRHM) in each village within the identified states to act as an interface between the community and public health system, who have played a crucial role in improving the health of women and children across India. In addition, they can play an important role in identifying problems at the earliest and help in improving community health status. With this great background, an attempt was made to assess the knowledge and skills of accredited social health activists (ASHA) on issues relating to maternal and child health in rural areas, considering the objectives of the study. The necessary data were collected, analyzed, interpreted and the results are presented under the following headings.

4.1 Background characteristics including socio-economic status of ASHA workers

4.2 Awareness of ASHA workers regarding health care provisions

4.3 Opinion of ASHA workers in trainings on various topics

4.4 Knowledge of ASHA workers about programmes in relation to mother and child health practices

4.5 Activities performed by ASHA workers in relation to mother and child health

4.6 Relationship between selected variables and awareness, opinion, knowledge of ASHA workers.

4.7 Problems of ASHA workers

4.8 Suggestion given by ASHA workers

4.1 Background characteristics including socio-economic status of ASHA workers

Age

As observed from Table 1, majority of the ASHAs belonged to young age group (64.67 %) followed by the middle age (35.33 %).

Caste

The data in Table 1 showed that 78.00 per cent of ASHA workers belonged to forward caste followed by other backward caste (16.67 %), and Schedule tribe (3.33 %).

Marital status

As far as marital status was considered, 94.67 per cent were married followed by unmarried (4.0 %) and widows (1.33 %).

Education

With regard to education, majority (71.33 %) of the ASHA workers were at high school level, followed by PUC (14.67 %), primary school (7.33 %) and middle school (04.67 %) with negligible at illiterate level (00.67 %).

Family size

With respect to the family size, it was found that 61.33 per cent of them having Small family size (1-4 members) followed by 29.33 per cent of medium family (5-8 members) and 9.33 per cent were very large family size of more than 9 members.

Type of family

A glance at Table 1 elucidate that majority of the ASHA workers were living in nuclear family (78.67 %) followed by joint family (21.33 %).

Income of the family

From the observation of family income of ASHA workers per month, it was inferred that, 92.00 per cent had semi – medium income with a range of Rs.1,001- Rs. 2,000/- followed by low income (06.70 per cent) and medium income (14.07 %).

Years of Service

Further with respect to the years of service of ASHAs revealed that, 53.33 per cent were completed services more than 6 years, followed by less than 3 years (30.00 %) and between 3-6 years (16.67 %).

Mass media Participation

With respect to mass media participation of ASHA workers, it was observed that 50.00 per cent had medium level of participation, followed by low participation (32.00 %) and high level of participation (18.00 %).

Extension Participation

A cursory look at Table1, extension participation of ASHA workers, it was seen that 46.67 per cent had medium level of participation followed by low level of participation (36.00 %) and high level of participation (17.33 %).

Table 1. Socio-economic characteristics of ASHA workers selected for the study

n=150

Variables	Category	Total	
		F	%
Age(years)	Young(18-35)	97	64.66
	Middle(36-50)	53	35.34
	Old(>51)	00	00.00
Caste	Forward caste	117	78.00
	Other Backward caste	25	16.70
	SC	03	02.00
	ST	05	03.30
Marital status	Married	142	94.70
	Unmarried	02	01.30
	Widow	06	04.00
Education	Illiterate	01	00.70
	Primary school	11	07.30
	Middle school	07	04.70
	High school	107	71.30
	PUC	22	14.70
	Degree	02	01.30
Family size	Small(1-4)	92	61.30
	Medium(5-8)	44	29.30
	Large>9	14	09.30
Type of family	Nuclear	118	78.70
	Joint	32	21.30
Income of the family(per month)	Low(500-1000)	10	06.70
	Semi- medium(1001-2000)	123	82.00
	Medium(>2000)	17	11.33
Years of Service	Low(<3)	45	30.00
	Between 3-6	25	16.70
	More than 6	80	53.30
Mass media Participation	Low	48	32.00
	Medium	75	50.00
	High	27	18.00
Extension Participation	Low	54	36.00
	Medium	70	46.70
	High	26	17.30
Urban contact	Low	02	01.30
	Medium	144	96.00
	High	04	02.70

Urban contact

Table also indicated that, 96.00 per cent of ASHA workers had medium level of urban contact followed by high level contact (02.67 %) and low level (01.30 %).

4.2 Awareness of ASHA workers regarding health care provisions

Table 2 depicts 14 statements to measure the awareness of ASHA workers about selected health programmes. For each statement 'Yes' and 'No' answer were obtained and has been expressed in frequency and per cent. Higher awareness observed about registration of the pregnant women after confirmation of pregnancy, examining urine and blood of pregnant women, hospital delivery, TT injection according to schedule (97.03 %), distribution of medicines for common diseases like cough, cold and fever organizing monthly check-ups, immunization and health services in time (96.00 %).

The ASHA workers were aware of the following facts,

- Registering the pregnant women name after confirmation of pregnancy
- Examining the urine and blood of pregnant women before taking to delivery
- Giving suggestion for the Hospital delivery to all pregnant women
- Informing beneficiaries about government programme that are related to pregnant and lactating mothers
- Giving medicine for common disease like cold, cough, diarrhoea and fever
- Giving TT injection according to the schedule they had
- After the delivery, caring of mother and child health
- In organizing immunization for mother and child, health checkup and health related services to the community. Giving folic acid tablets to the women beneficiaries in the village.

The ASHA (Accredited Social Health Actives) were aware of registering the name of pregnant women after her pregnancy was confirmed (98.67 %) followed by suggesting the pregnant women to hospital delivery (98.67 %).

ASHA were aware of providing folic acid tablets (red tablets) to the beneficiary (92.67 %) followed by blood and urine examination of pregnant women before the delivery (98.67 %).

After delivery, ASHAs were visiting rural mother family and she also taking care the health of the mother and child (97.33 %) followed by providing medicines for simple cough, cold, diarrhoea and fever (98.67 %).

The ASHA workers were aware of various programmes like health check-up, immunization and other services to the beneficiaries (96.00 %).

ASHA were aware of giving TT injection to the beneficiaries according to the schedule (97.33).

Table 2. Awareness of ASHA workers about health care provisions

n=150

Sl. No.	Awareness statements	Yes		No	
		F	%	F	%
1	Registration of the pregnant women after confirmation of pregnancy	148	98.70	02.00	01.30
2	Examining blood and urine of pregnant women before delivery	148	98.70	02.00	01.30
3	Provides folic acid tablets to the beneficiaries	139.00	92.70	11.00	07.30
4	Giving TT injection according to schedule	146.00	97.30	04.00	02.70
5	Supervising hospital delivery to the pregnant women	148.00	98.70	02.00	01.30
6	ASHA supervises the deliveries which are conducted at the home	90.00	60.00	60.00	40.00
7	Care taken after delivery on mother and child health	146.00	97.30	04.00	02.70
8	Informing beneficiaries about government programme related to the pregnant and lactating mothers	148.00	98.70	02.00	01.30
9	Getting money from government for supervising the delivery in hospital	94.00	62.70	56.00	37.30
10	Organizing every month immunization, health check-up and health services in time	144.00	96.00	06.00	04.00
11	Giving suitable medicines for cold, cough, diarrhoea and fever	148.00	98.70	02.00	01.30
	Total awareness index	**81.48%**			

ASHA informing beneficiaries about government programme that were related to the pregnant and lactating mother (98.07 %).

The rude behavior and improper response of the beneficiaries were there while providing government programmes to the beneficiary (80.67 %). The overall awareness index was very high that was 81.84 per cent.

4.3 Opinion of ASHA workers in trainings on various topics

Table 3 revealed that opinion of ASHAs towards selected training programmes. The scale used to measure opinion is three point continuums *viz.* favorable, undecided and unfavorable which carried the scores of 3, 2 and 1 respectively.

The training motivated ASHAs workers for prenatal care of women by regular prenatal and postnatal checkups for women done by health officials has sufficiently reduced complication in delivery (98.70 %). ASHA's were having favorable opinion about family planning (98.00 %), child health, personal health and hygiene for pregnant and lactating mother's (96.00) which influence good health followed by Nutrition and water sanitation (96.67 %). ASHAs opinion was good about the medicines commonly used (English medicine) for common diseases like cough, cold, diarrhea, fever (94.67 %), home remedies and job responsibilities of ASHA workers (86.00 %). The overall opinion index of ASHAs on training was 48.38 per cent.

4.4 Knowledge of ASHA workers about programmes in relation to mother and child health practices

Table 4 indicated that knowledge of ASHA workers about programmes in relation to mother and child health practices. It was clear that the deliveries in the Government hospital as it are safe (90.00 %). The number of items in madilu kit (96.00 %), FPAI aims at controlling the population (96.00 %), polio vaccine develops immunity against polio (85.33 %), functions of ASHA workers is to care for both pregnant, lactating mothers and also child (84.00 %), Immunization for children starts at one and half months and continuous up to five years (99.33) Janani Suraksha Yojana which aims at helping poor pregnant women after delivery was well known to the ASHA workers (98.00 %) and was implemented in the years 2005 (81.33). Vitamin 'A' is to avoid night blindness (99.34 %) and PHCs belongs to Government organization (98.67 %). The knowledge on importance of training was for better performance (33.03 %) in job was 33.03 per cent. The overall knowledge index of ASHA was high in relation to mother and child health practices that is 83.81 per cent.

4.5 Activities performed by ASHA workers in relation to mother and child health

Table 5 depicted 12 statements to know the activities performed by ASHAs related to mother and child health. The activities performed by ASHA workers on cleanliness to community, health and nutrition (97.33 %), care of new born (96.00 %), teaching about personal health and hygiene to the pregnant and lactating mothers including all family members (98.00 %).

Table 3. Opinion of ASHA workers on the training given to them

n=150

Sl. No.	Opinion Level	Favourable		Undecided		Unfavourable	
		F	%	F	%	F	%
1	Antenatal care	148.00	98.70	0.0	0.0	02.0	1.3
2	New born care	147.00	98.00	1.0	0.7	02.0	1.3
3	Child health	148.00	98.70	1.0	0.7	01.0	0.7
4	Family planning	147.00	98.00	0.0	0.0	03.0	2.0
5	Nutrition	142.00	94.70	2.0	1.3	06.0	4.0
6	Water, sanitation	145.00	96.70	0.0	0.0	05.0	3.3
7	Personal hygiene	144.00	96.00	0.0	0.0	06.0	4.0
8	Home remedies	129.00	86.00	3.0	2.0	18.0	12.0
9	Medicines commonly used (English medicine)	142.00	94.70	2.0	1.3	06.0	4.0
10	Responsibilities	129.00	86.00	3.0	2.0	18.0	12.0
	Total opinion index	**48.38%**					

Table 4. Knowledge of ASHA workers about programmes in relation to mother and child health practices

n=150

Sl. No.	Knowledge statement	Yes		No	
		F	%	F	%
1	Number of items included in madilu kit	144.0	96.0	6.0	4.0
2	Motto of family planning programme	144.0	96.0	6.0	4.0
3	Motto of Vitamin A programme	150.0	100.0	0.0	0.0
4	Motto of polio immunization to children	128.0	85.3	22.0	14.7
5	Introducing immunization for children	149.0	99.3	1.0	0.7
6	Importance to government hospital delivery	135.0	90.0	15.0	10.0
7	Care taken to the women during pregnancy	96.0	64.0	54.0	36.0
8	Functions of ASHA workers	126.0	84.0	24.0	16.0
9	Wrapping baby after birth	100.0	66.7	50.0	33.3
10	Immunization for a child should be continuous up to five years	121.0	80.7	29.0	19.3
11	PHC belongs to government	148.0	98.7	2.0	1.3
12	Importance of training to the ASHA worker	50.0	33.3	100.0	66.7
13	Implementation of Janani Suraksha Yojane programme	122.0	81.3	28.0	18.7
14	Motto of Janani Suraksha Yojane programme	147.0	98.0	3.0	2.0
	Total knowledge index	**83.81%**			

Table 5. Activities performed by ASHA workers in relation to mother and child health

n= 150

Sl. No.	Practice statements	Yes		No	
		F	%	F	%
1	In the community, ASHA workers explain about cleanliness	150	100.00	0	0.00
2	In the community, ASHA provide information on health, cleanliness and Nutrition	146	97.33	4	2.67
3	In the community, ASHA worker takes care of the new born as well as before birth	144	96.00	6	4.00
4	For mothers and children ASHA workers give immunization	91	60.67	59	39.33
5	Convincing mothers about the breast milk and its importance and benefits of feeding the new born baby	148	98.67	2	1.33
6	Informing mothers about the children immunization programme	146	97.33	4	2.67
7	Giving information to the mothers on small family norms	145	96.67	5	3.33
8	Giving tips to the mother and child health and hygiene	150	100.00	0	0.00
9	Taking pregnant women and sick children to the nearest primary health centre	147	98.00	3	2.00
10	Birth and death in the village is provided to PHC regularly by ASHA	146	97.33	4	2.67
11	Advising to construct toilet in the home	146	97.33	4	2.67
12	Teaching personal health and hygiene teach to family members	147	98.00	3	2.00
	Total activity index	**94.70%**			

In village, ASHAs have the practice on explaining about cleanliness, health and nutrition followed by giving tips related to health of mother and children and advising them to construct toilets (97.33 %).

The ASHA workers taking care of the new born as well as prenatal (96.00 %) followed by convincing mother about the breast milk and its importance and benefits of feeding to the new born baby (98.67 %).

The ASHA workers giving information and benefits of immunization and other programme to the beneficiaries (97.33 %).

The ASHA taking pregnant women and sick children to the nearest primary health center and teaching personal health and hygiene to all family members (98.00 %). the overall practices index was high that is 94.77 per cent.

4.5.1 Tips of ASHA workers to the mothers and child health practices

Table 6 and Fig. 5 revealed that tips from ASHA workers to mother and child. The tips from ASHA workers were about personal health and hygiene to the mothers and to all community members (83.33 %), importance of breast feeding and its benefits (80.00 %), use of cotton clothes for baby to keep warm and clean (84.67 %), regular and proper intake of nutritional food (36.67 %), giving proper immunization to the pregnant women and child according to schedule (30.67 %), suggesting the women about gap between two children (11.33 %), regular health check-up for pregnant women in village (07.33 %) and use of mosquito net while sleeping to her community members (01.33 %).

4.6 Relationship between selected variables and awareness, opinion, knowledge of ASHA workers

This part include the relationship between selected variables and awareness level (Table 7), opinion level (Table 8) and knowledge level (Table 9) of the ASHA workers.

4.6.1 Relationship between selected variables and awareness of ASHA workers regarding health care provisions

The results presented in Table 7 revealed that, majority of the variables *viz.,* education, family size, years of services, mass media participation, extension participation and urban contact were found positively significant relationship at 5 per cent level and none of the other independent variables had not significant relationship with awareness of ASHA workers regarding health care provisions which relates to mother and child health practices.

4.6.2 Relation between selected variables and opinion of ASHA workers in trainings on various topics

The Table 12 showed that caste, mass media participation and extension participation was positively significant relationship at 5 per cent level whereas other independent variables like age, education, family size, type of family, income, years of services and urban contact were found to be non-significant for the opinion of ASHA workers towards trainings on various topics.

Table 6. Tips given by ASHA workers regarding mother and child health

n=150

Sl. No.	Tips from ASHA	F	%
1	Nutritional food for pregnant women	55.0	36.7
2	Breast feeding and its importance to the mother	120.0	80.0
3	Giving tips on personal health and hygiene for mother and child	125.0	83.3
4	Gap between two children to women	17.0	11.3
5	Using mosquito net to the people	2.0	1.3
6	Using cotton clothes for baby to keep warm	73.0	48.7
7	Immunization for child and mother	46.0	30.7
8	Regular health check-up for pregnant women	11.0	7.3

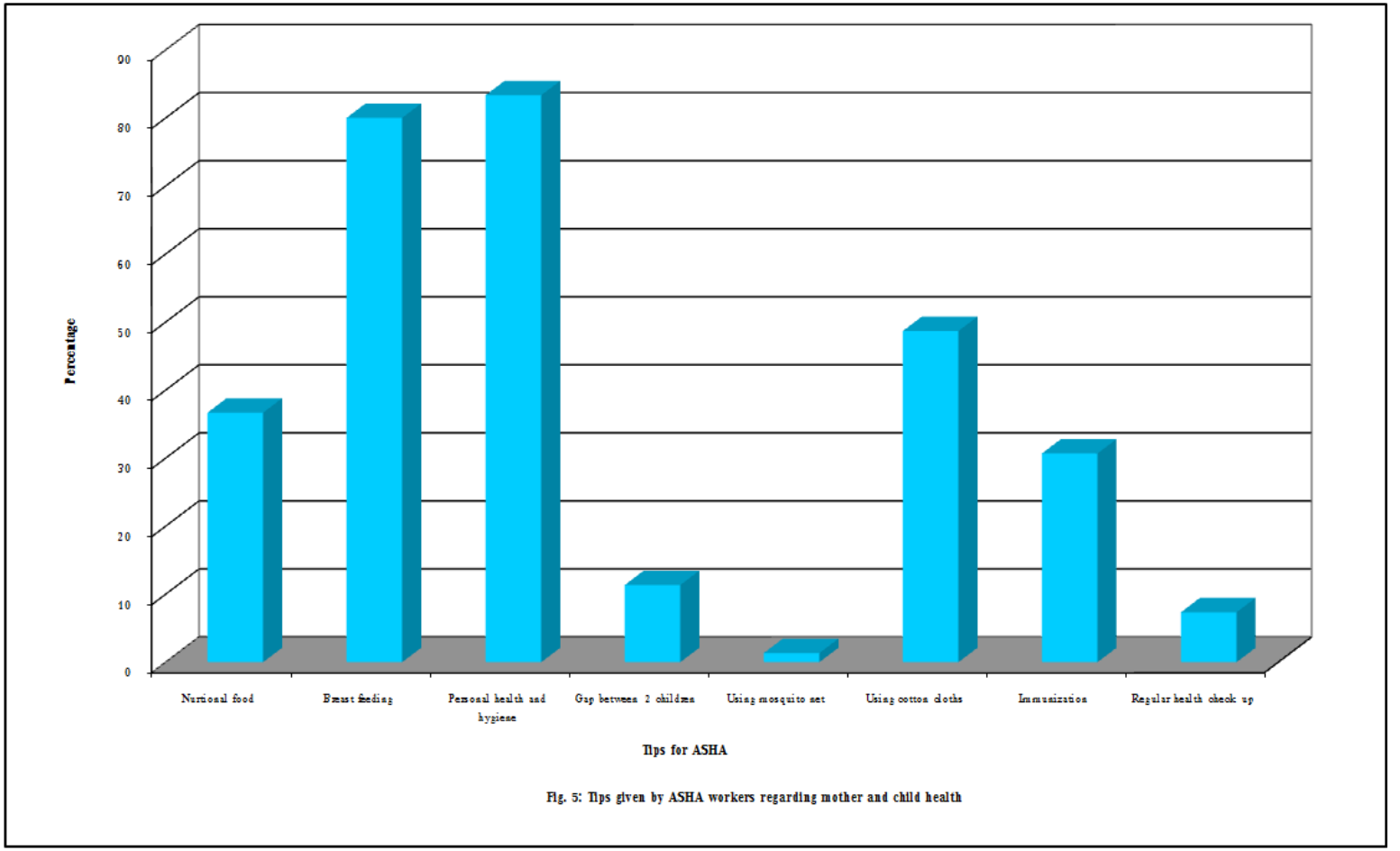

Fig. 5: Tips given by ASHA workers regarding mother and child health

Fig. 5: Tips given by ASHA workers regarding mother and child health

4.6.3 Relation between selected variables and Knowledge of ASHA workers about programmes in relation to mother and child health Practices

The Table 9 showed that urban contact had positive significant relationship at 5 per cent level with knowledge of ASHA workers. whereas rest of the variables like age, caste, Education, family size, type of the family, income, years of services, mass media participation and extension participation were found to be non-significant to the knowledge of ASHA workers about programmes in relation to mother and child health practices.

4.7 Problems of ASHA workers

Table 10 and Fig. 6 indicated problems faced by ASHA workers as health activist. Majority of the ASHA workers not getting honorarium in time (72.00 %), negligence in hospitals while visiting for check-ups with patients (20.00 %), no regular salary for their work (17.30 %), no proper response from the beneficiaries (16 70 %), no safety during travel from one place to another (06.70 %) and lack of physical amenities in hospitals (02.70 %).

4.8 Suggestion given by ASHA workers

Table 11 and Fig 7 showed the details about suggestions for the effective execution of health practice related to rural mothers and children given by ASHA workers. Majority of them suggested fixed salary for them (62.70 %), regular and increase in honorarium (53.30 %), regular check-up should follow for pregnant women in the rural areas (24.00 %), free bus pass facilities for traveling (11.30 %), facilities to visiting patients during emergencies (08.70 %) and need of physical amenities (05.30 %).

Table 7. Relationship between selected variables and awareness of ASHA workers regarding child health care provision

n=150

Sl. No.	Variables	'r' value
1	Age	-0.021 NS
2	Caste	0.026 NS
3	Education	0.33*
4	Family size	0.26*
5	Type of family	-0.01 NS
6	Income	0.027 NS
7	Years of services	0.33*
8	Mass media participation	0.37*
9	Extension participation	0.39*
10	Urban contact	0.29*

NS- non significant,
* Significant at 5 % level

Table 8. Relationship between selected variables and opinion of ASHA workers regarding training

n=150

Sl. No.	Variables	'r' value
1	Age	-0.10 NS
2	Caste	0.39*
3	Education	0.055 NS
4	Family size	0.0096 NS
5	Type of family	0.0032 NS
6	Income	-0.080 NS
7	Years of services	0.11 NS
8	Mass participation	0.29*
9	Extension participation	0.43*
10	Urban contact	0.0013 NS

NS- non significant,
* Significant at 5 % level

Table 9. Relationship between selected variables and knowledge of ASHA workers about programmes in relation to mother and child health practices

n=150

Sl. No.	Variables	'r' value
1	Age	0.0222 NS
2	Caste	0.1051 NS
3	Education	0.0941 NS
4	Family size	0.0291 NS
5	Type of family	0.0319 NS
6	Income	-0.1218 NS
7	Years of services	-0.0237 NS
8	Mass participation	-0.1172 NS
9	Extension participation	-0.0956 NS
10	Urban contact	0.5385**

NS- non significant,
** Significant at 5 % level

Table 10. Problems of ASHA workers

n=150

Sl. No.	Problems of ASHA	F	%
1	Late providing of honorarium	108.0	72.0
2	No fixed salary	26.0	17.3
3	Irregularity in check-up of pregnant women	30.0	20.0
4	No proper response from beneficiaries	25.0	16.7
5	Transportation problems to travel one place to another	19.0	12.7
6	No safety during travel	10.0	6.7
7	Lack of physical amenities in hospitals	4.0	2.7
8	Negligence in hospitals while taking patients for check-ups	81.0	54.0

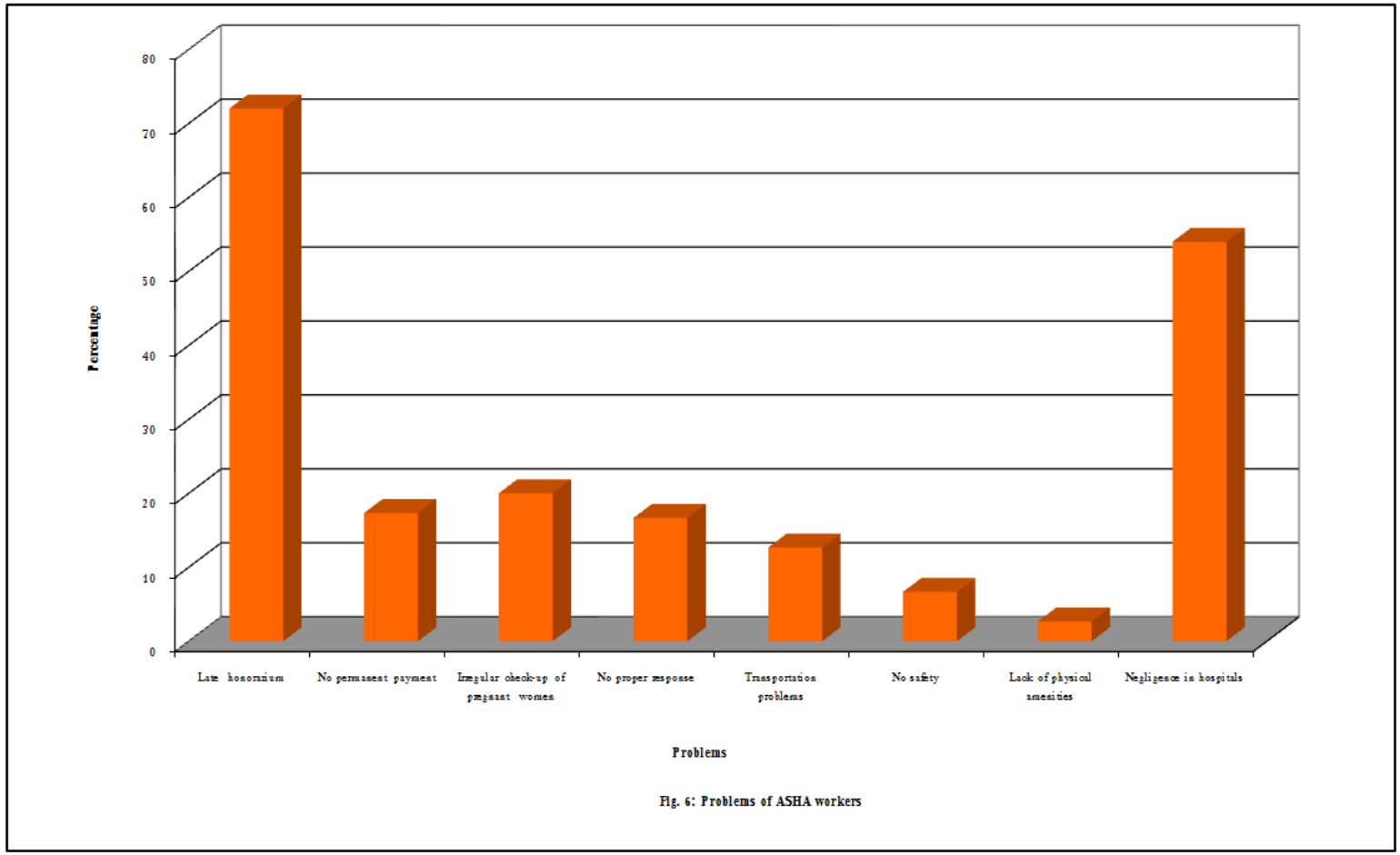

Fig. 6: Problems of ASHA workers

Table 11. Suggestion from ASHA workers

n=150

Sl. No.	Suggestions from ASHA	F	%
1	Fix and increase in honorarium	80.0	53.3
2	Fixed salary	94.0	62.7
3	Regular health check-ups for pregnant women	36.0	24.0
4	Free bus pass to travel	17.0	11.3
5	Facilities to visit patients in emergency	13.0	8.7
6	Need of physical amenities	8.0	5.3

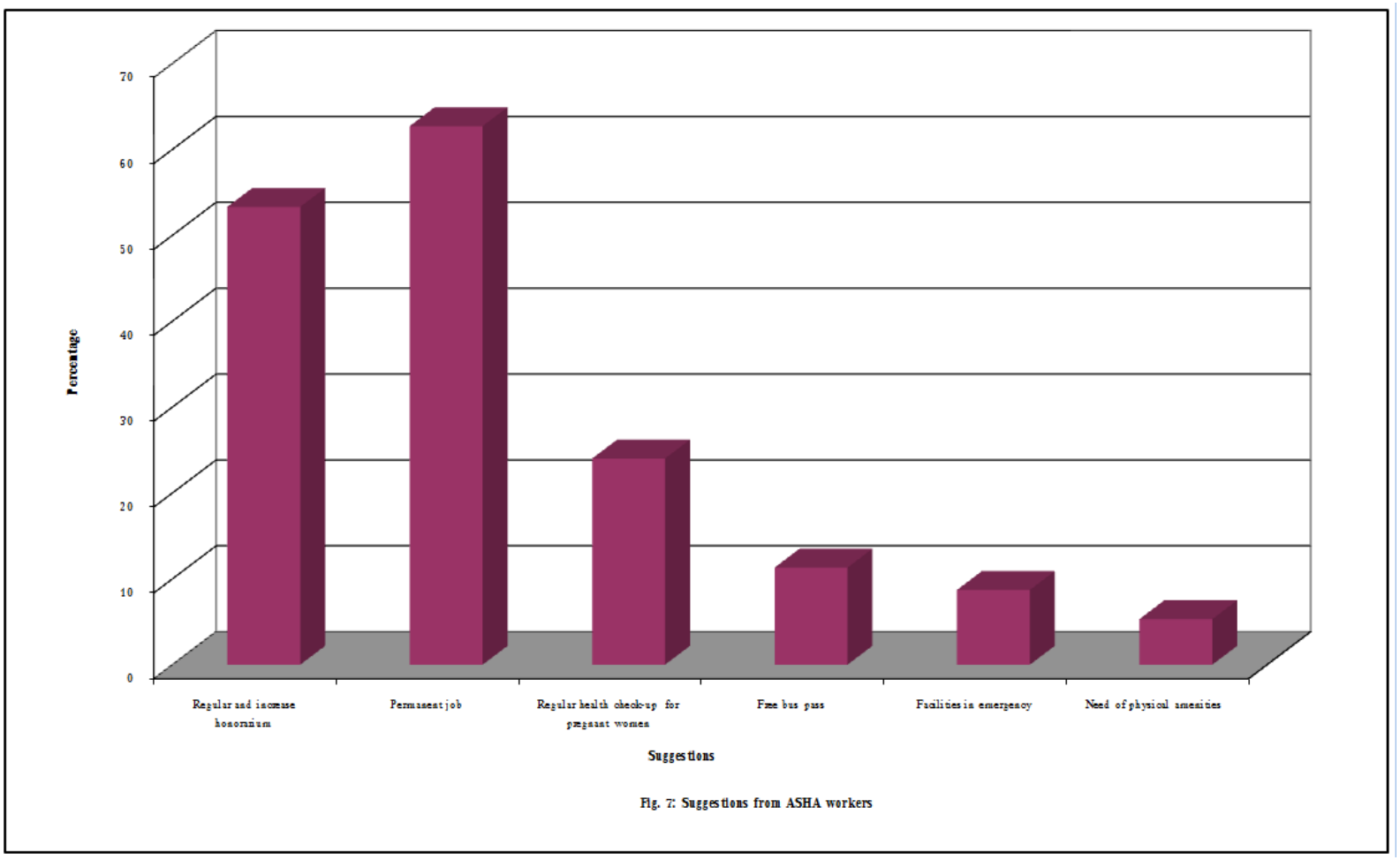

Fig. 7: Suggestions from ASHA workers

5. DISCUSSION

The discussion of the results and findings regarding present study is explained under the following headings.

5.1 Background characteristics including socio-economic status of ASHA workers

5.2 Awareness of ASHA workers regarding health care provisions

5.3 Opinion of ASHA workers in trainings on various topics

5.4 Knowledge of ASHA workers about programmes in relation to mother and child health services

5.5 Activities performed by ASHA workers in relation to mother and child health

5.6 Relation between selected variables and awareness, opinion, knowledge of ASHA workers.

5.7 Problems of ASHA workers

5.8 Suggestion given by ASHA workers

5.1 Socio-economic status of ASHA workers

The result of Table 1 showed that most of ASHA workers belonged to young age group (64.70 %) followed by the middle age and old age group. The possible reasons might be due to age criteria for the selection, interest, highly energetic, free from familial compulsion *etc.* The results are in line with Saxena *et al.* (2012).

The data in Table 1 depicted that 78.00 per cent of the ASHA workers were from forward caste followed by scheduled caste and other backward caste this might be due to predominant forward caste in the study area.

With regard to marital status, large number of ASHA *i.e.* 94.70 per cent were married which might be due to the system of early marriage followed in rural areas. The result is in confirmation with the study conducted by Mahesh Kumar *et al.* (2015).

With respect to education, more per cent (71.30 %) of ASHA's were high school completed followed by primary school (07.03 %), middle school (04.70 %) PUC (14.70 %) and degree (01.30 %). The probable reasons for sending girls to school might be government facilities like mid-day meal planning, free uniform, free books, free bicycles, scholarships, motivation, parental awareness, interest and mass media exposure *etc.*

With regard to family size, it was found that 61.03 per cent of them were had small family size. This might be due to their awareness regarding advantages of small family norms and the increased cost of living and problems (or) difficulties in maintenance of big family. Further, as the cost of living is increasing day by day, they might have found it beneficial to have small family to lead comfortable life.

Plate 5: Interviewing ASHA worker

Plate 6: ASHA worker checking body temperature

Plate 7: Meeting of ASHA workers in the PHC

Plate 8: ASHA worker doing survey

A glance at Table 1 elucidated that more number of ASHA workers were living in nuclear families (78.07 %). The reasons might be poor economic condition, non-co-operative living and sharing responsibility in the family, other reasons may be an encouragment to lead an independent life with personal assets, need for proper accommodation and education for their children would have led to the formation and changing over to nuclear families.

With respect to income of the family, more than 90 per cent of ASHA workers (92.00 %) were in the semi-medium income group between Rs.1,000-2,000. The probable reason is because of their poor economic status and they want to earn extra money through community health services.

With respect to the number and years of services majority of them were more than 6 years might be due to recent implementation of the National Rural Health Mission (NRHM) programme.

The data indicated that more of the ASHA workers had medium level of mass media participation (50.00 %). This might be because of their regular listening and viewing behavior through mass media like radio, television, mobiles and newspaper which play vital role in creation of awareness regarding any educational and rural development programme. The beneficiaries made full use of the advantages of mass media channel.

A cursory look at Table 1 indicated that extension participation of ASHA workers was seen that more than forty per cent (46.07 %) will go frequently to PHC for training, meetings and for checkups of vulnerable. Majority of the ASHA belonged to young age group this might have made them to participate actively in extension activities like meetings, field visits and trainings. Along with these, high level of literacy (71.3 %) might have taken interest to participate. These are the possible reasons for active participation in the extension activities.

Regarding urban contact, majority of the ASHAs was belonged to medium level (96.00 %), the reason might be taking pregnant women for check-ups, operations made them to visit near city quite often.

5.2 Awareness of ASHAs about the selected health programme

A glance at Table 2 elucidated that awareness about safe hospital delivery was 98.67 per cent, and ASHA assistances in the examination of urine and blood of pregnant women at hospitals. After confirmation of pregnancy, ASHA registers the pregnant women (98.67 %) followed by referring to community health center for delivery, arranging monthly immunization schedule to pregnant women and child, health check-up and health services in time (96.00 %) and informing beneficiaries about government programme related to the pregnant and lactating mothers, providing of medicines for common ailments like fever, cold and cough and she taken care of both mother and child health (97.33 %). ASHA distribute folic acid tablets (92.67 %) and gives TT injection according to the schedules (97.33 %). The possible reason might be NRHM plays an important role in implementing the health care provisions and ASHA have created awareness and counseled mothers and rural families about safe hospital delivery.

She supervises the mother and new born baby delivered at home (60.00 %), she distributes folic acid tablets to the pregnant women (36.00 %). This also might be due to their complete involvement in trainings and other extension activities like meeting, field visits, exhibition which increased their awareness level on health care facilities.

5.3 Opinion of ASHA about training programmes on various topics

The Table 3 revealed the opinion of ASHAs on training. The overall opinion index of ASHA workers was 48.38 per cent. This indicated that ASHAs had opinion on topics of training like care during antenatal period for women, malnourished children of BPL are given special attention, controlling population family planning is essential, safe drinking water, water sanitation and nutritional awareness for pregnant women and for children, personal Health and Hygiene, medicines commonly used for common ailments like cough, cold and fever which found most beneficial. Further they opined that about benefits of home remedies for quality of life were good, roles and responsibilities of ASHA in their service. The probable reasons might be trainings given them on nutritional food intake (iron, calcium, folic acid, vitamin A) during pregnancy, benefits of safe drinking water, water sanitation, personal health and hygiene, care during pregnancy and home remedies which will reduce the maternal mortality rate of women during pregnancy.

5.4 Knowledge of ASHAs about programmes in relation to mother and child health practices

The Table 4 revealed that a large majority (98.00 per cent) of the ASHA workers had high knowledge towards vitamin 'A' to control night blindness, 19 materials which included in Madilu kit, family planning programme is essential to control population, delivery in the Government hospital is safe, primary health centre belongs to Government, Janani Suraksha Yojana is for poor pregnant women followed by immunization for the child should be up to five years continuously and taking care of women and child during antenatal care respectively. Majority (85.30 %) of ASHA had knowledge about polio immunization (85.30 %). About 66.70 per cent of the ASHA had medium knowledge about wrapping of child after birth and importance of training programmes is for better job performance (33.30 %). The high knowledge of ASHA is due to acquisition of knowledge during the training programmes, interaction among themselves, group discussion, sharing of ideas and exposure to the urban contacts.

5.5 Activities performed by ASHA workers in relation to mother and child health

A close perusal of Table 5 indicated activities performed by ASHA workers. It was clear that majority 96.67 per cent of ASHA workers performed activities on cleanliness, giving tips on personal health and hygiene of pregnant and lactating mother, taking care of malnourished children and taking them to the nearest primary/community health centers, help in getting supplements, proper medicines and benefits of small family norms followed by informing mothers about the benefits of child

immunization programme from the government, nutrition for pregnant women and children (97.33 %) and taking care of new born and antenatal care, convincing mothers about the importance and benefits of breast milk feeding (96.00 %) respectively. The probable reason might be due to her more experience and job involvement, participation in training programmes, exposure to mass media, regular meetings *etc.*

5.5.1 Tips Given by ASHA workers

It was observed from the Table: 6 & Fig. (5) that majority 80.33 per cent of the ASHA workers expressed improvements in personal health and hygiene, encouraging breast feeding practices to the lactating mothers (80.00 %) followed by consumption of nutritional food (36.70 %). As high as 48.67 per cent of the ASHA workers given tips on immunization for children up to 5 years, gap between two children, using cotton cloth to keep baby warm, referring regular health check-ups and providing mosquito nets. Concept of healthy environment, clean home atmosphere and there by leading happy life might be the reasons for giving such tips to the beneficiaries.

5.6 Relationship between selected variables and awareness, knowledge, opinion of ASHA workers

5.6.1 Relationship between selected variables and awareness of ASHA workers regarding health care provisions

The data in the Table 7 revealed that correlation between education, family size, years of services, extension participation, mass media participation, urban contact and awareness of ASHA workers regarding health care provisions was found to be significant at 5 per cent probability level. Whereas, the remaining independent variable like age, caste, type of family, income were found to be non-significant with awareness of ASHA workers.

The probable reason for significant relationship between family size, education, years of services and awareness of ASHA workers were exposure to the community, interest, knowledge, motivation, self-confidence and courage in taking one step ahead regarding health care practices. Families had fewer burdens, less economic stress, more time to participate in community activities and as the service increases they got more experience and awareness of ASHA workers in relation to health care provisions.

There was significant relationship between mass media participation, extension participation, urban contact and awareness of ASHA workers regarding health care provisions where exposure to the new ideas, gaining knowledge and information, encouragement *etc.*

In case of mass media participation which were considered as important source of information. More number of ASHAs might have used television, radio to get information about health programmes and mobiles to contact the women beneficiaries.

In extension participation most of beneficiaries were actively participated. This might have helped them to acquire more knowledge regarding health care provisions.

Plate 9: Providing Madilu Kit of 19 itmes to the mother

Plate 10: Testing blood of pregnant women

Plate 11: Giving immunization to the child

Plate 12: Antenatal check up of pregnant women

In urban contact, about 90 per cent of the ASHAs showed high level of visits to nearby town, city and district to take pregnant women for checkups, operations, and antenatal checkups to overcome the maternal mortality rate and for better job performance.

5.6.2 Relationship between selected variables and opinion of ASHA workers in training on various topics

The results indicated significant relationship of caste, mass media participation extension participation and training on various topics at 5 per cent level of significance of ASHA workers. Whereas, other independent variables like age, education, family size, type of family, years of service, urban contact were found non-significant to the trainings of ASHAs on various topics where cultural barriers, incompatibility regarding training topics.

In case of mass media participation majority of them were highly participated, the probable reason might be that the variables contributed the beneficiaries to know about various topics of training programmes through meetings, demonstrations, radio listening, TV watching, *etc.* which have provided an opportunity to improve quality of training.

5.6.3 Relationship between selected variables and knowledge of ASHA workers about programmes in relation to mother and child health

Only urban contact showed significant relationship with knowledge at 5 per cent level of ASHA workers about programmes in relation to mother and child health. Other independent variable like age, caste, education, family size, type of family, income, years of services, mass media participation and extension participation was not significant relationship with knowledge of ASHAs workers about programmes in related to mother and child health.

Above 95.00 per cent of the ASHA workers visited to nearby town, city and districts for pregnant women checkups, operations, villagers for health checkups and attending regular meetings at taluk level, this might give significant relationship of ASHA workers about programmes in relation to mother and child health.

5.8 Problems of ASHA workers

Table 10 and Fig. 6 revealed problems of ASHA workers. Majority of ASHA workers facing problems in hospitals, irregular honorarium and irregular check-up of women during pregnancy followed by no fixed salary, lack of proper response from the respondents and transportation problems from one place to another. The possible reason might be recent implementation of the programme. Hence, health department has to take certain action to continue their job effectively.

As the study on community health workers (CHWs, called Swasthya Sebika) in Bangladesh by Nirupam *et al.* (2011) suggested that financial incentives are the primary motivating factor and that high drop-out rates are largely due to the dissatisfaction with the pay levels in proportion to the amount of time invested.

5.9 Suggestions given by ASHA workers

Table 11 and Fig. 7 showed the details about suggestions for the effective execution of health practice related to rural mothers and children given by ASHA workers. Majority of ASHA workers suggested about regular health check-up for pregnant women, free bus pass, need of regular and fixed salary and increased in their honorarium because she wants regular and higher honorarium so that she can keep herself happy and contented family life.

6. SUMMARY AND CONCLUSIONS

The present study was conducted during the year 2015-16 in Dharwad block of Karnataka state. Purposive random sampling techniques were used for selection of five taluks of Dharwad taluk *i.e.*, Hubli. Dharwad Kundgol, Khalghatgi and Navalgundh. In every taluk one PHC was selected *i.e.*, Mugad, Byahatti, Gudigeri, Morab and Mishrikoti, where the Primary Health Center are located. Random sampling procedures was used for selection of 150 ASHA workers, 30 ASHA's from each Primary Health Centre were considered.

Keeping in mind the objectives of study, an interview schedule was structured. Based on the experience gained in pre-testing, the schedule was modified and standardized. Using this interview schedule, required data were collected by personal interview method. Data was coded, tabulated, analyzed and interpreted using suitable statistical parameter the summary of the salient findings are presented below.

Major findings of the study are as follows:

Background characteristics including socio-personal characteristics of ASHA workers:

1. Most of ASHA's was belonged to young age group (64.67 %) followed by the middle age (35.33 %).
2. As far as caste was considered 78.00 per cent of the ASHA's were forward caste, followed by other backward caste (16.67 %) scheduled tribe (03.33 %) and scheduled caste (02.00 %).
3. Regarding the marital status, majority of them were married (94.67 %), followed by unmarried (04.00 %) and widow (01.33 %).
4. With regard to education, 71.33 per cent of ASHA's was completed their high school, followed by pre-university (02.00 %), primary school (07.33 %), middle school (4.67 %), education up to college (01.33 %) and 00.67 per cent were illiterate.
5. With respect to the family size, it was found that 61.33 per cent of them having small family size (1 to 4 members) followed by 29.33 per cent of medium family (5-98 members), 9.35 per cent of them were from families.
6. Majority of ASHAs were living in nuclear family (78.67 %) followed by joint family (21.33 %).
7. More than 90 per cent of respondents (92.00 %) had semi-medium income followed by low income (6.7 %) and medium level (14.07 %) income.
8. More than 50 per cent of ASHAs (53.33 %) had service of more than six years followed by low service (30.00 %) and between three and six years, 16.67 per cent of ASHA were there.
9. Majority of the ASHAs. (50.00 %) had medium level of mass media participation followed by low (32.00 %) and high level (18.00 %) participation.
10. With respect to extension participation of ASHA workers, it was seen that most of ASHAs had medium level of extension participation (46.67 %) followed by low level of extension participation (36.00 %) and high level (17.33 %).
11. Most of ASHA had medium level of urban contact (96.00 %) followed by high level (2.67 %) and low level (1.33 %).

Awareness of ASHA workers regarding health care provisions

12. Cent per cent of the ASHA workers were aware of the facts that ASHAs preferred hospital delivery as it is very safe, without risk with low money normal deliveries are conducted in government hospital, examines blood and urine of pregnant women after confirmation of pregnancy, ASHA workers registered name of the women after confirmation of pregnancy followed by giving folic acid tables, TT injections and immunization to the mother and child. Health check-ups and other services according to schedule. The overall awareness index of ASHA in health care provisions was 81.84 per cent.

Opinion of ASHAs workers in training on various topics

13. The overall opinion index of ASHA workers towards training was high that was 98.67 per cent training motivated ASHA's on antenatal checkup of pregnant women done by health officials had sufficiently reduced complication in delivery and small family norms and also caring towards malnourished children of BPL families.
14. ASHA workers opined that water sanitation and personal hygiene for pregnant women and all people of villages influence good health (96.67 %).
15. ASHA workers opined that training on medicines commonly used (English medicines) which was used to control common disease like cough, cold, diarrhoea and fever (94.67 %) was beneficial.
16. They were agreed that the programmes on health schemes were very useful for all rural women of below poverty line (98.00 %)
17. ASHA workers agreed for nutritional food which will reduce maternal and infant mortality.
18. Opinion on home remedies and job responsibilities (86.00 %) was favorable to the ASHA workers by the programme conducted.
19. The overall opinion index on various trainings of ASHA workers was 48.38 per cent.

Knowledge of ASHAs about programmes in relation to mothers and child health practices

20. ASHAs had appreciable knowledge about safe delivery in the Government hospital, family planning programme, materials included in Madilu kit (96.00 %), vitamin 'A' to control the blindness, polio for children was to control polio disease, functions of ASHA workers (84.00 %), immunization for child should continue up to five years of age (80.70 %).
21. The ASHA workers had knowledge about Janani Suraksha Yojana for helping poor pregnant women after delivery (98.00 %), and year of implementation of Janani Suraksha Yojana scheme. PHC belonged to government organization (68.67 %).
22. The overall knowledge index of ASHAs about training in relation to mother and child health practices was 83.81 per cent.

Activities performed by ASHA workers in relation to mother and child health

23. Majority of ASHA workers did their activities on giving information on health, cleanliness and nutrition to the beneficiaries, convincing mothers about breast milk (98.00 %) and its importance and benefits to the child.

Plate 13: Distribution of medicines to the pregnant women

Plate 15: ASHA worker weighing baby

Plate 14: Giving tetanus injection to the Pregnant women

Plate 16: Putting polio Drops to the baby

24. Informing mothers about children immunization programme and providing regular information to primary health center on birth and death in the village (97.33 %).
25. Teaching personal health and hygiene to the community members and about small family norms (96.67 %).
26. The overall activity index of ASHA workers in relation to mother and child health was 94.77 per cent.

Relationship between selected variables with awareness, knowledge and opinion of ASHA workers

27. Regarding relationship between selected variables and awareness, opinion, knowledge of ASHA workers. The selected variables were age, caste, marital status, education, family size, type of family, income, and years of service. The dependent variables were awareness, opinion, and knowledge, amongst all independent variables education, family size, years of services, mass media participation, extension participation and urban contact were significant relationship with awareness at 5 per cent level.
28. Caste, mass media participation and extension participation were having significant relationship with opinion at 5 per cent level, other independent variables were not having any relationship with the opinion of ASHA workers about quality of training
29. Only urban contact was highly significant relationship with knowledge at 5 per cent level, other independent variables were not having any relationship with the knowledge of ASHA workers about training in relation to mother and child health practices.

Tips given from ASHA to Rural Women and children

30. ASHA workers gave tips on personal health and hygiene to women (83.33 %), importance and benefits of breast feeding to the women (80.00 %).
31. Using cotton cloths to keep baby warm, immunization and taking nutritional food (36.67 %), gap between two children (11.33 %) and also health checkup (7.33 %) to the women of their community.

Problems faced by ASHA workers

32. Majority of the ASHAs facing problems is not getting honorarium early (72.00 %) followed by problems in hospitals while visiting hospitals for check-ups of pregnant women and patients (54.00 %), no fixed salary for them(17.33 %), no proper response from the beneficiaries while visiting their homes (16.69 %), irregular check-ups of pregnant women, no safety during travelling and lack of physical facilities in hospitals and PHCs (2.67 %).

Suggestion given by ASHA workers

33. Majority of ASHAs suggested to regular and increase their honorarium, need of fixed salary (62.67 %) followed by providing facilities in emergency to travel, free bus pass, need of physical facilities in hospitals/PHCs (5.33 %) and regular health check-up for pregnant women in rural areas(24.00 %).

Implications of the study

The implications based on the findings of current investigation are as follows

1. ASHAs were not aware about some of the health care provisions from the government. Hence for creating awareness there is a need to conduct camps and workshops at village, taluks and district level.
2. ASHA workers need monthly and increased in their honorarium from health department which given for their work done for the community
3. Pregnant women in village should maintain regular health check-ups.
4. ASHA workers need permanent job in health department with free transportation facilities
5. In hospitals ASHAs are facing lack of physical facilities.
6. In district hospitals, there is no proper response to them and lack of information. To avoid their problems government and health department should take care of the proper management.

Suggestions for future line of work

1. Studies can be conducted on more applicable, perspective basis and covering wider geographical area.
2. The existing government health infrastructure at sub-center and PHCs are to be improved to meet the demand of the people or to provide health services to a satisfactory level.
3. Independent variable which is not covered in this study can be studied.
4. Contribution of other communities' health workers for rural women and children can be studied in future.
5. Contribution of ASHA workers to all village people can be taken.

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Annexure I: Compensation for Accredited Social Health Activists (ASHAs) workers

Sl. No.	Head of Compensation	Suggested compensation (inRs.)/per case
1	JSY-Institutional Delivery (rural)	350 for ASHA & 250 for ref. transport
	Urban	200
2	Motivation for Tubectomy/Motivation for Vasectomy/NSV	150/200
3	Immunization Session	150
4	Pulse Polio Day-if it is full day work it should be Rs. 75/-	75
5	Organizing Village Health Nutrition Day	150
6	Direct Observation Treatment (DOTS)	250
7	Household Toilet Promotion Fee	75
8	Detection, referral, confirmationand registration of Leprosy case/after complete treatment for Paucibacillary (PB) Leprosy cases/after complete treatment for Multibacillary(MB)Leprosy cases	100/200/400

Appendix II: Interview schedule

CONTRIBUTION OF ACCREDITED SOCIAL HEALTH ACTIVIST (ASHA) WORKERS FOR RURAL WOMEN AND CHILDREN

Part-A

I. General information

Name of the respondent: Respondent no:

Village:

Taluk:

District:

II. Specific Information:

1. Age of the respondents(in year):
2. Caste:
3. Religion
4. Marriage status:
    a. Married
    b. Unmarried
    c. Widow
5. Education:
    a. Illiterate
    b. Primary school
    c. Middle school
    d. High school
    e. PUC
    f. Degree
6. Size of the family:
7. Type of the family:
    a. Nuclear
    b. Joint
8. Monthly income(in rupees):
9. Years of services:

10. Mass media participation:

Sl. No.	Mass media	Subscriber/Owner	Listening/Viewing/Reading Behaviour		
			Regularly	Occasionally	Never
1	Radio				
2	Television				
3	Newspaper				
4	Magazine				
5	Journals				
6	Mobiles/messages				

11. Extension Participation (during last two years)

Sl. No.	Extension Workers	Subject	Frequency of participation		
			Regularly	Occasionally	Never
1	Trainings				
2	Demonstrations				
3	Meetings				
4	Competitions				
5	Film shows				
6	Field visits				
7	Tours				
8	Exhibitions				
9	Any other(Specify)				

12. Urban Contact:

1. Do you visit the town nearby? Yes/No

2. How many times do you visit the nearest town?

   a) Daily

   b) Weakly

   c) Fortnightly

   d) Monthly

   e) Never

3. The purpose of your visit?

a)

b)

c)

PART-B

I. Awareness of ASHA workers about selected health programmes:

1. Do you register pregnant women name after confirmation of pregnancy? Yes/No

2. Do you check up urine of women for pregnancy confirmation? Yes/No

3. Do you provide folic acid tablet to pregnant women? Yes/No

4 Do you suggest pregnant women to take T.T injection according to schedule? Yes/No

5. Do you suggest hospital delivery to the pregnant women? Yes/No

6. Do you supervise the deliveries which are conducted at the home? Yes/ No

7. After delivery do you take care of the health of mother and child? Yes/No

8. Do you inform beneficiaries about government programme related to the pregnant and lactating mothers? Yes/No

9. For supervising the delivery in the hospital do you get the money from government? Yes/No

10. Do you organize every month immunization, health check up and health services in time? Yes/No

11. For cold, cough, diarrhoea and fever do you give any medicine? Yes/No

II. Opinion of ASHA workers on training on various topics:

Sl. No.	Topic of training	Favourable	Undecided	Unfavourable
1	Antenatal care			
2	New born care			
3	Child health			
4	Family planning			
5	Nutrition			
6	Water, sanitation			
7	Personal hygiene			
8	Home remedies			
9	Medicines commonly used(English medicine)			
10	Responsibilities			

III. Knowledge of ASHA workers about programmes in relation to mother and child health

1. Number of items included in madilu kit

    a. 19 materials

    b. 18 materials

    c. 20 materials

    d. Do not know

2. Motto of family planning programme

    a. Population control

    b. H.I.V control

    c. Nutrition control

    d. Do not know

3. Motto of Vitamin A programme

    a. avoiding night blindness

    b. Increase in growth rate

    c. Reducing weight

    d. Do not know

4. Motto of polio immunization to children

    a. Avoid polio

    b. Good growth

    c. Nutrition control

    d. Do not know

5. When to start immunization for children

    a. After one and half year

    b. At the time of birth

    c. After three years

    d. Do not know

6. Why you give importance to government hospital delivery

    a. Safety

    b. Free

    c. All

    d. Do not know

7. What care do you give to pregnant women?

a. Giving the pills of vitamins

b. Giving iron tablets

c. Giving calcium tablets

d. All the above

8. What are the functions of ASHA workers?

a. Registering birth and death of children

b. Care of pregnant women

c. Care of lactating mother

d. All of the above

9. Wrapping baby after birth

a. keep warm

b. to avoid sunlight

c. new born

d. safety

10. Immunization for a child should be continuous up to

a. 5 years

b. 1years

c. All the above

d. Don’t know

11. PHC belongs to

a. Government

b. NGO

c. Private hospital

d. Dont know

12. Importance of training

a. Improving level of job performance

b. To attend the training

c. To know the importance of training

d. To know the strength

13. When was Janani Suraksha Yojane implemented

a. 2005

b. 2002

c. 2000

d. Do not know

14. Motto of Janani Suraksha Yojane

a. Helping poor pregnant women after delivery

b. Helping rich women after delivery

c. Providing free health check up to the children

d. Do not know

IV. Practices of ASHA workers in relation to mother and child health

1. In the community, do you explain about cleanliness? Yes/No

2. In the community, do you provide information on health, cleanliness and Nutrition Yes/No

3. In the community, ASHA worker takes care of the new born as well as before birth Yes/No

4. For mothers and children do you give immunization? Yes/No

5. Do you convince mothers about the breast milk and its importance and benefits of feeding the new born baby? Yes/No

6. Do you inform mothers about the children immunization programme? Yes/No

7. Do you give information to the mothers on small family norms? Yes/No

8. Do you give tips to the mother and child health and cleanliness? Yes/No

9. Do you take Pregnant women and sick children to the nearest primary health centre? Yes/No

10. Birth and death in the village is provided to PHC regularly? Yes/No

11. Do you advice to construct toilet in the home? Yes/No

12. Do you teach personal health and hygiene to women and their family members? Yes/No

V. Problems faced by ASHA workers:

A. What are the problems faced by you? Give Suggestions

Problems:

1.
2.
3.
4.
5.

Suggestions:

1.
2.
3.
4.
5.

CONTRIBUTION OF ACCREDITED SOCIAL HEALTH ACTIVIST (ASHA) WORKERS FOR RURAL WOMEN AND CHILDREN

ASHWINI R. **2016** **DR. CHHAYA BADIGER**
MAJOR ADVISOR

ABSTRACT

Accredited Social Health Activist (ASHA) is a female health volunteer who will create awareness on health and mobilize the community towards the utilization of existing local health services. She is a grass root level worker in the success of National Rural Health Mission (NRHM) which depends on her work efficiency. Therefore, there is a need to assess the knowledge and skills of these workers on issues relating to maternal and child health. The study was carried out in five PHCs (Primary Health Centres) of Dharwad taluk i.e., Mugad, Byahatti, Morab, Gudigeri, and Mishrikoti with a total sample size of 150. A structured interview schedule was used to elicit the information and collected data was analysed by using suitable statistical tools.

The study revealed that, majority (64.67 %) of the ASHAs belonged to young age, 78.67 per cent of themwere living in nuclear type of family and 78.00 per cent of them belonged to forward caste. Majority (94.67 %) of them was married and 71.33 per cent were educated up to high school. A large majority (92.00 %) of them had semi- medium income within a range of Rs.1,001- Rs.2,000/- and slightly more than half (53.33 %) had completed 6 years of services with medium level of urban contact (96.00 %). Less than half (46.67%) of respondents had medium level of extension participation. In addition, the overall awareness and opinion index was found 81.84 per cent and 48.38 per cent respectively. Overall knowledge observed was 83.81 per cent. This high overall knowledge was due to her more experience, job involvement, participation in training programmes, exposure to mass media, regular meetings on health. No fixed salary and getting late honorarium were the important problems expressed by 72.00 per cent of the respondents.