

**An Evaluation Study of 'ASHA' in Providing Access to
Health Services and Community Awareness Under National
Rural Health Mission: With Reference to The State of
Maharashtra**

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BY

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**UNDER THE GUIDANCE OF
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JANUARY 2020**

DEDICATION

I dedicate my PhD thesis to my research guide, the late Dr. Chandrakant Puri. His sudden departure from the world is an irreparable loss to society, the social work fraternity as well as students like me. Without his encouragement, motivation and support, I would not have reached this point. I wish he could have been present to see my achievement.

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Form 'B'
DECLARATION

I hereby declare that the thesis entitled **“An Evaluation Study of ‘ASHA’ in Providing Access to Health Services and Community Awareness Under National Rural Health Mission: With Reference to the State of Maharashtra”**, completed and written by me for the degree of Doctor of Philosophy in the Department of Social Work, Tilak Maharashtra Vidyapeeth, Pune, is the record of work carried out by me during the period of February 2013 to December 2019, under the guidance of late Dr. Chandrakant Puri, and it has not previously formed the basis for the award of any degree or other similar title upon me of this or any other Vidyapeeth or examining body.

I further declare that the material obtained from other sources has been duly acknowledged in this thesis.

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CERTIFICATE

This is to certify that the thesis entitled **“An Evaluation Study of ‘ASHA’ in Providing Access to Health Services and Community Awareness Under the National Rural Health Mission: With Reference to State of Maharashtra”**, which is being submitted herewith for the award of the degree of Vidyavachspati (PhD) in social work, is the result of original research work completed by Mr. Akram Khan Mohammad Khan under my supervision and guidance. To the best of my knowledge and belief, the work incorporated in this thesis has not formed for the award of any other degree or similar title of any other university or examining body upon him.

Place: Pune

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Late Dr. Chandrakant Puri

Research Guide

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LIST OF ABBREVIATIONS

ASHA:	Accredited Health Activist
ANM:	Auxiliary Midwifery Nurse
MO:	Medical Officer
NRHM:	National Rural Health Mission
ORS:	Oral Rehydration Salt
TB:	Tuberculosis
DOTS:	Directly Observed Treatment Short Course
SC:	Sub Centre
PHC:	Primary Health Centre
CHC:	Community Health Centre
SC:	Scheduled Cast
ST:	Scheduled Tribe
OBC:	Other Backward Class
SBC:	Special Backward Class
PRI:	Panchayat Raj Institutions
PRI:	Members- Panchayat Raj Institutions Members
DPMU:	District Project Monitoring Unit
HMIS:	Hospital Management Information System
MMU:	Mobile Medical Unit
NCD:	Non Communicable Disease

HIV:	Human Immuno Virus
VHSNC:	Village Health and Sanitation Committee
PPIUCD:	Post-Partum Intra Uterine Contraceptive Device
MAA:	Mother's Absolute Affection
NRC:	Nutritional Rehabilitation Centre
SNCU:	Sick New Born Care Unit
LBW:	Low Birth Weight
HBNC:	Home Based New Born Care
BPL:	Below Poverty Line

CHAPTER I

INTRODUCTION

1.1 INTRODUCTION

The latest World Health Report focuses on human resources as an important component for the successful functioning of health systems and spotlights the increasing human resource crisis, especially in low-income countries. The foreword by the late Director-General of the World Health Organization (WHO) points out the chronic shortage of well-trained health workers around the world, but most severely felt in countries that most need trained health workforce. For numerous reasons, including migration, illness or death of health workers, nations are not able to train and sustain the health workforce to improve people's chances of survival and their well-being (WHO, 2006). The World Health Report is the result of steps acknowledging the importance of human resources which had begun with the Joint Learning Initiative (JLI, 2004) on human health resources in 2003.

The WHO defines community health workers (CHWs) as “members of the communities where they work, selected by the communities... supported by the health system.... and have shorter training than professional workers”¹

CHWs are a critical and necessary link with health systems and a powerful force for promotion of healthy behaviours in settings with scarce resources. Over the last decade, there is plenty of evidence and interest regarding CHWs and their potential for improving people's health in regions where resources of health workforce are limited. As there is significant shortage of health workers (around 4.25 million workers¹) in Africa and Asia, unequal distribution of health workforce within countries, and the need to speed up steps to achieve health-related Millenium Development Goals (MDGs), there is a need to evaluate the available evidence. This document is both an update and a supplement to the exhaustive review done by Bhutta and colleagues under the auspices of the WHO and the Global Health Workforce Alliance in 2010. From the global viewpoint, CHWs are a diverse group of health workers assigned different specific names unique to the place and context they work in (such as ASHAs or Angwanwadi workers in India, Promoters in Latin America, Lady Health Workers in Pakistan, and Health Extension Workers in Ethiopia). These

workers usually function among communities, mostly outside fixed health facilities, with some, yet limited, formal training for tasks they are expected to perform. The training is facilitated by the health system or health programme sponsoring them. However, no formal professional, paraprofessional certificate, or tertiary education degree is given. CHWs are necessary as facilities are often far away and populations are reluctant to avail them, or they are over-crowded. CHWs function in a range of environments and there are certain expectations from them. Some CHWs have only a few days of training, while others have six months, or even more. Some CHWs get salaries, while others serve as volunteers. Some of the are full-time CHWs and some others serve for a few hours a week. Some health workers have a range of tasks and responsibilities, while others have narrowly defined areas of work. While some CHWs maintain close interaction with health staff at the health centres, others work in an independent way. Community leaders, special community committees, and groups within the community, especially women's groups, play a key role in supporting CHW activities such as in selecting CHWs and in providing them support, guidance, and oversight. Health programmes' potential in engaging communities and establishing CHW programmes depends to some extent on government policies and the extent to which it fosters strong partnership between health ministry programmes and the communities. It also depends on the leadership quality of the programme at the district and above levels. The Global Health Workforce Alliance, hosted by the WHO, gives immediate priority to expanding education and training to boost the count of community- and mid-level health workers, as well as skilled staff, as a step to ensure that "all people, everywhere, shall have access to a skilled, motivated and facilitated health worker within a robust health system".

Support and learning from peers were effective ways to motivate, as well as support from community-based organisations (CBOs). Participation of local NGOs and CBOs should be encouraged to empower and promote CHWs².

Also, NGOs should support instruments and not undercut CHWs' capacities as health workers.³

1.2 HISTORICAL BACKGROUND

Every nation has its own history of CHWs and their origins. In almost all countries, CHWs are the result of the socio-cultural milieu, health system and government

policies. In the later half of the 19th century, in Russia, feldshers were given three-year paramedical training to assist doctors and to work in rural areas where physicians were not available. Many feldshers got training in midwifery. Feldshers had a key role in the CHW movement as they were locals with limited training, not formally trained medical doctors, and were authorised by the government to give primary health care services in rural areas.

The origins of large-scale CHW programmes can be traced to Ding Xian, China, in the 1920s. Unlike the trained feldshers, early CHWs in Ding Xian were illiterate and got only three months of training. They were trained to record births and deaths, provide vaccination for smallpox and other diseases, provide first aid, give health education talks, help communities keep wells clean, and provide basic health care. They were the precursors of the barefoot doctor programme that caught up parallel to and in coordination with the people's commune movement. The "barefoot doctors" were peasants, who divided their time between performing health-related duties and doing agricultural work. In the 1960s, the inability of modern Western medical model physicians to serve rural and poor populations in the developing world was visible. So, there was a need for new approaches. Thus, the barefoot doctor idea caught the world's attention as a way to address needs of people in rural areas. In this period, in many countries, CHW programmes came up, including in Indonesia, India, Tanzania, Venezuela, and the Honduras.

The WHO began exploring the implications of the new approaches to providing medical care and promoting health, based on principles of social justice, equity, community participation, disease prevention, multi-sector collaboration, decentralisation of services to the periphery as close as possible to the people, use of technology, and providing services through a team of workers, including community-based workers.

The International Conference on Primary Health Care in 1978 led to the Declaration of Alma-Ata, which called for achieving Health for All by year 2000 through primary health care. The Declaration defined a role for CHWs. Article 7 of the Declaration says:

"Primary health care ... relies, at local and referral levels, on health workers, including physicians, nurses, midwives, auxiliaries and community workers as

applicable, as well as traditional practitioners as needed, suitably trained socially and technically to work as a health team and to respond to the expressed health needs of the community”. The Declaration defined CHWs as one of the key facilitators of primary health care.

In the 1980s, large-scale programmes faced serious challenges owing to insufficient training and remuneration/incentives. Programmes were affected by lack of continuing education, supervisory support, integration with the health system, logistical support for supplies and medicines, and acceptance by health care providers at the higher levels. Political favoritism in many programmes also led to selection and training of people who were not motivated or suited to be CHWs. Besides these problems with large-scale CHW programmes, in the 1980s, other global factors played a role. Factors like the global oil crises and recession made governments, under pressure from international organisations including the World Bank, to adopt free market reforms and cut public-sector spending, including for health services. These two factors and selective approaches that did not require CHWs killed many large-scale CHW programmes. This the primary health care movement, which was in its early stages, lost momentum. Investment priority shifted to secondary and tertiary level health care, which benefitted mostly urban and elite populations who could influence government decision-making for health services. Also, there were weak monitoring and evaluation systems for primary health care programmes and large-scale CHW programmes, whose effectiveness and cost-effectiveness was seen to be limited. Consequently, governments of many countries cut down or discontinued their CHW programmes in the late 1980s and early 1990s. Selected primary health care and vertical programmes with international donor and technical support gained currency.

As policy-makers moved away from CHWs, there were also those who wanted to save the concept and suggested subtle shifts, as explained in a WHO publication on CHWs, which says that CHW programmes have a role to play that cannot be fulfilled by formal health services or communities alone. It states that, ideally, the CHW brings together service functions and developmental/promotional functions which are not only in the field of health. It says the most important developmental or promotional role of CHWs is in acting as a bridge between the community and the formal health services in all areas of health development. CHWs' bridging activities could facilitate increasing effectiveness of curative and preventive services and community

ownership and management of health programmes. It presents CHWs as the only feasible link between the health sector and the community that could be developed to improve health in the short term (Kahssay, Taylor & Berman, 1998). The above concept of CHWs continues to stress on their role in community development and bridging the gap between communities and the formal health sector. However, the CHWs' role as agents of social change is seen replaced by technical and community management function. Over the years and in the existing political circumstances, this pragmatic approach to CHWs has become dominant. The underlying tension between CHWs' role as extension worker and change agent remains.

1.3 NATIONAL LEVEL OF LARGE-SCALE CHW PROGRAMMES

Starting in the middle of the 1980s, there were some successful CHW programmes, such as the Brazilian National Health Care Programme (Special Service for Public Health – Serviço Especial de Saúde Pública), initiated in 1987. Over time, this programme achieved universal coverage of primary health care services and led to improvement in health status of the target population. This programme uses the services of one of the largest CHW networks in the world.

In Bangladesh, a community-based family planning programme was launched in the mid-1970s with a team of Family Welfare Assistants. It is considered to be one of the most successful family planning programmes in the developing world. About 10 years later, a Bangladeshi non-governmental organisation, BRAC, started a CHW programme with women members from a micro-credit savings group. The women had received training in an field of their interest, including different types of income-generating activities, or in the field of health. The CHWs were known as Shashtya Shebikas.

The Female Community Health Worker Programme in Nepal, started in 1988, was another notable programme. It was an outcrop of a CHW programme that was started in Nepal after the 1978 Alma-Ata conference, but had failed in the 1980s because of lack of government funding. In the last decade, these CHWs, or Female Community Health Volunteers, expanded areas of work. Their responsibilities included detection and treatment of common childhood diseases (like pneumonia), distribution of oral contraceptives, antenatal care, promoting health services for first aid, immunisation, and family planning. Brazil, Bangladesh and Nepal saw significantly rapid reduction

in under-five mortality since 1990. The CHW programmes in these countries have contributed greatly in making this achievement, which is seen as among the best in the world.

The Indian government gives high priority to integrated development in rural areas, where 80 percent of the country's population resides. Towards this goal, in 1977, the Ministry of Health and Family Welfare initiated the rural health scheme. It aimed to bring basic health care within reach of every citizen by deploying medical, paramedical and community health workers. Stress was given to promotion of health and prevention of diseases. The India government has been since 1974, with help from the UNFPA (United Nations Population Fund), UNICEF and WHO, running the multi-purpose health workers' scheme. The scheme involved uni-purpose health personnel of vertical programmes in areas of smallpox vaccination, malaria surveillance, family welfare health and tuberculosis and they were trained to function as multi-purpose workers to provide integrated health services to the rural population. Forming the backbone of the scheme were teams, each having a male and a female multi-purpose health worker, supported by sub-centre and primary health centre staff. Operational study of the scheme was carried out by the National Institute of Health and Family Welfare for assessing the effectiveness of the reorientation training programmes, to identify problems in the retraining for multi-purpose work and related field work, and to develop suitable health information systems that are geared to the decision-making process. The scheme's implementation has been accelerated since 1977, after the community health worker scheme was launched, and for which the multi-purpose workers were to provide support. The government is helped by the WHO and UNICEF to achieve the objectives of the study. Technical support was also provided for planning, implementation and evaluation of rural health services. In 1978, a further project (IND PPS 001) was launched in order to enhance understanding of health economics and its contribution in improving health planning and management. It is expected these projects would significantly contribute to the rural health scheme's success.

In 1977, the Indian government started an ambitious yet controversial programme to train people from villages as CHWs. In the initial year, 774 of the 5400 PHCs in India went out to train 110,000 health workers. The aim was to train one worker for every 1000 population in rural areas by 1981, which meant that 580,000 villagers would

have to be trained. Candidates for the post of medical officers of PHCs would be nominated by communities. PHCs would select trainees in consultation with community members and others, including Block Development Officers and multi-purpose workers. Criteria for candidates was that they should be literate, service-oriented, physically active, and able to devote many hours a day for voluntary work. Male or female candidates were eligible. Preference was given for those under 30 years of age. They were to have a minimum six years of schooling, should have experience practicing some form of medicine, should belong to the Scheduled Castes. During the three-month training, they would get Rs 200 rupees a month as stipend. They would also spend two to three hours a day for health care in their native communities. They were not to be counted as government employees but the government would supply them with medicines and Rs 50 rupees a month. CHWs would know how and when to refer villagers to clinics, but their job was not of supervisory nature in the health service bureaucratic hierarchy. There would be appraisal of their performance but as voluntary work in their respective communities. Their primary work would still be considered as within the regular system of village occupations. From the viewpoint of healthcare policy-makers, a key role of CHWs would be as cultural brokers between villagers and the state's professional healthcare system.

1.4 NATIONAL HEALTH POLICY IN INDIA

The National Health Policy (NHP) 1983 aimed at providing 'Health for All' by the year 2000 through universal comprehensive primary health care. This was in the spirit of optimistic empathy for the health needs of populations, especially the poor and underprivileged. However, looking back, it can be observed that the financial resources and public health administrative capacity that was marshalled fell far short of what was actually needed to achieve the ambitious and holistic goal. In this context, it was observed that implementing NHP 2002 in tune with the realistic expectations with regard to financial resources and likely growth in public health administrative capacities would be appropriate. The recommendations of NHP 2002 would, therefore, be to try to maximise availability of health services taking into account realistic available capacity. The changed circumstances in India's health sector since 1983 had created a situation where it was necessary to review the sector for formulating policy for NHP 2002. The need was to have a new policy framework

to achieve public health targets in the socio-economic situation prevailing in the country. NHP 2002 would need to be based on objective assessment of both the quality and efficiency of available public health facilities. The quality of the exercise would be affected if the limitations of available public health infrastructure was not taken into account while framing the new policy. NHP 1983 had recommended improving capacities of volunteers and paramedics for them to be effective in the community. Health volunteers would need to have knowledge, skills and the technology to be able to serve communities. NHP 2002 accepted the gender-related disparities and their impact on health and overall development of families, especially children. It was acknowledged that empowered women would be catalysts in improving the overall health of communities. NHP 2002 underlined the shortage of manpower and use of paramedics in providing health services. Corrections in its framework included integration of various organisational structures, optimisation of health service manpower, decentralisation, community participation, and extension of referral hospital care to community levels as per the Indian Public Health Standard in every block of the country⁴.

1.5.1 DEFINITION OF COMMUNITY HEALTH WORKER

The term “community health worker” (CHW) takes into account various community health aides who are selected, trained, and work in their local communities. A WHO Study Group (WHO 1989) had proposed a widely-accepted definition: “Community health workers should be members of the communities where they work, should be selected by the communities, should be answerable to the communities for their activities, should be supported by the health system but not necessarily a part of its organization, and have shorter training than professional workers.”

Regarding who CHWs were and are in terms of their age, gender, status, and other parameters, the many answers in related literature show the diversity of CHW programmes. In this context, two factors can be agreed upon in almost all related literature: it is that CHWs come from communities they serve and have little or no secondary and no tertiary education.

1.5.2 ROLES AND ACTIVITIES

As a wide range of different community health workers perform a wide range of tasks, a typology is not easy. A simple distinction, though, can be drawn between generalist and specialist CHWs.

1.6 GENERALIST

Generalist village health workers have been working to develop national health programmes since before the Alma-Ata declaration. Some have been involved in largescale national programmes, such as the "Chinese barefoot doctor" programme, and also various health programmes in India. Others have been working in smaller programmes of non-governmental, faith-based and community-based organisations. Some of these programme models are explained in books including 'Health by the People' (Newell, 1975) and 'Practicing health for all' (Morley, Rohde & Williams, 1983). Ofori-Amaah (1983) made a detailed review of CHW programmes in 46 countries. She wrote that the CHW was expected to perform a range of functions that, as per the respective country reports, included home visit, provision of water supply, environmental sanitation, treatment of simple, common ailments, first aid, health education, nutrition and surveillance, communicable disease control, maternal and child health and family planning programmes, community development activities, referrals, record-keeping, and collecting data on important events.

India has had a long and rich history of small and big CHW programmes. there was a major national CHW scheme in the late 1970s. It was aimed at providing one CHW for every 1000 population "to provide adequate health care to rural people and to educate them in matters of preventive and promotive health care" (Chatterjee, 1993; Bose, 1983). The programme, however, ran into trouble right from the start. There was resistance from the medical profession. Demands for payment and constantly changing government policies with regard to funding led to the scheme's collapse in many states. The scheme was not properly implemented. There was confusion with regard to the roles of CHWs and multipurpose health workers. Also, the CHWs were trained for limited curative work and were excluded from preventive and promotive work, resulting in frustration and demotivation among them and the local

communities they were serving (Chatterjee, 1993; Bose, 1983). While the government considered the CHWs as volunteers appointed by and accountable to the communities in which they worked, the CHWs themselves, their communities, and the health services considered them as government employees, triggering demands for better pay, instead of the small honoraria they were getting. A large number of CHWs had registered by the late 1980s, but few functioned effectively. On a smaller scale, there were a number of successful projects, including by NGOs, in India and many other countries. A project, called MOTT (mobile orientation and training team), started CHW schemes in some villages in Orissa. It laid stress on community participation. Whether a health care programme was needed was decided and planned by the beneficiary communities. They decided what kind of programme it should be, and the cost, location and type of health centres. The communities chose women from among them to be trained. They made committees of seven to 10 members, including men and women, to assist health workers in their daily activities (Kaithathara, 1990). Training and supervision was in rotation, on a continuing basis, and involving staff from the health centre. According to Kaithathara, besides the health workers, other 'agents of change' are needed in villages, to enable a comprehensive approach that can accelerate awakening among people, thus helping them build their own future together, through a cooperative effort. Unfortunately, like in many cases, there is no systematic evaluation of projects, or statistics of their impact on health, or an idea of the projects' lifespan.

Mitanin (trained community health worker) was another large-scale programme started by the Chhattisgarh government in 2002. It was seen to follow the tradition of Indian CHW programmes and was preceded by detailed studies of previous experiences (SOCHARA, 2005). Requested by the Chhattisgarh government, the Society for Community Health Awareness, Research and Action (SOCHARA) evaluated the programme in 2005 and presented their evaluation report (SOCHARA, 2005). According to it, Chhattisgarh, a new state formed in 2000, with a population of 20 million, had features of a rural, underserved community, with low health and education indicators. Its creation was seen as an opportunity to "strengthen measures to improve health and health care". The idea was to have a mitanin, or trained community health worker, for every one of the 54000 majratola's/para's (hamlets) of the state. It saw political commitment and pressure from the highest level, as the

state's Chief Minister took personal interest in its launch and progress (SOCHARA, 2005). The programme was initiated with collaborative effort of the state, NGOs, and funding agencies, who set up a dedicated facility – the State Health Resource Centre (SHRC), which had the charge of operationalising and running the programme. Mitanin, who are women recruited from their local communities, get 20 days' of training and work closely with primary healthcare staff. Training was also organised for them. While Block Medical Officers (BMOs) organised training programmes for mitanins, the expenses were borne by the government. Stage one of the training had six rounds and based in an institution. Stage two of the training was refresher course, held at regular intervals at the cluster and panchayat levels. The first stage involved preparing the mitanin by building certain basic attitudes, and imparting relevant knowledge and skills. After the training, she was expected to carry out tasks including blood smear preparation, antenatal care, weighing children, detection of anaemia, malnutrition detection and care, chloroquine treatment for fever, ARI (Acute Respiratory Infection) treatment, early detection and referral, treating dehydration, and health education for certain groups. After training, they were required to work for two to three hours every day for two or three days every week. The rest of the time they could spend for farming or other income-generating activities. Unlike the Brazilian programme, the Indian programme involved paying compensation in cash or kind and it would be the responsibility of communities, while the government ensured training and retention and integration of the work of maintains with the government services, besides providing free medicines and material.

1.7 SPECIALIST COMMUNITY HEALTH WORKERS

Many programmes during the past 20 years have used CHWs to address public health issues. This is often, but not only, the case for NGO-run programmes, which have a programme-specific focus. Specialisation can be a way to overcome difficulties experienced in finding the best mix of CHW roles and tasks and the proper balance in the breadth and depth of tasks (Bhattacharyya et al., 2001). Specialist CHWs are frequently used in areas, including maternal and child health, reproductive health, family planning, malaria control, TB care, treatment of ARIs, HIV/AIDS care, immunisation, food security and nutrition, diarrhoea management, community rehabilitation, treatment of skin diseases, environmental health and sanitation, and collection of basic health information in communities, including record-keeping.

1.8 ROLE OF GOVERNMENT IN HEALTH SECTOR

India's National Rural Health Mission (NRHM) is a step forward in bringing convergence of health services and correcting the architecture of the country's health care delivery system. One of the better visible strategies to streamline health sector activities is identification of health objectives and targets. For instance, in the US, a simple yet effective idea is the 'Healthy People 2010' initiative, which offers health objectives in a manner that allows various groups to integrate their efforts and work as a team. In India, too, a road map for "better health for all" is needed, so that communities, states, organisations and all sectors can use it. It will also facilitate for changes in resource allocation for public health interventions, and provide a platform for inter-sectoral action, thus bringing policy coherence.

1.8.1 GOALS OF NATIONAL RURAL HEALTH MISSION

1. To cut Infant Mortality Rate (IMR) and Maternal Mortality Rate (MMR), universal access of public health services to women's health, child health, water, sanitation and hygiene, immunisation and nutrition
2. Prevention, control of communicable and non-communicable diseases, including endemic diseases
3. Access to integrated comprehensive primary healthcare
4. Population stabilisation, gender and demographic balance
5. Renewal of local health traditions and mainstream AYUSH
6. Promotion of healthy lifestyle.

The National Rural Health Mission, launched by the Indian government in April 2005, envisions providing health-care services to rural populations, particularly the vulnerable sections. Many innovations were introduced under NRHM. Promoting health-care services through a social activist, the ASHA (Accredited Social Health Activist), in every village, is among the core strategies of NRHM. The ASHA is

expected to create awareness about health and mobilise the community for health planning and expanding health services. The ASHA is the mobiliser, facilitator and link between the ANM, sub-centres, PHCs, Anganwadi workers of ICDS, and the community. She is required to play an enabling role in preparing the community for ownership of public health programmes. She is expected to be the first contact person for any community member in need of health care. The mission's key component is to provide every village in the country with a trained female community health activist: the ASHA, who is the first port of call for community members to access health services. She is a community health activist who has the task of spreading awareness about health and its social determinants, and mobilising the community towards local health planning, and increased utilisation of public health services. She is expected to be a promoter of good health practices. She has to provide a minimum package of curative care that is suitable and feasible for a specific levels and make timely referrals.

Six years after the implementation of NRHM in the state, there have been continuous efforts to strengthen the ASHA programme every year. In Meghalaya, the ASHA is selected from her village itself and is accountable to it. Working on a voluntary basis, she is actively involved in providing help to community members, especially in health services. Here, too, the ASHA is the member secretary of the Village Health and Sanitation Committee (VHSC).

1.8.2 ABOUT ACCREDITED SOCIAL HEALTH ACTIVISTS (ASHAs)

ASHAs are CHWs instituted by the Government of India's Ministry of Health and Family Welfare (MoHFW) to carry out specific health-related activities of the National Rural Health Mission. Launched in 2005, the mission's complete implementation was targeted for 2012. After full implementation, there should be "an ASHA in every village" in India, which is a target making up a total of 250,000 ASHAs in 10 states. The total number of ASHAs in the country by July 2013 was reported to be 870,089. According to statistics provided by states in December 2014, 32 states and Union territories have a total of 859,331 ASHAs. This was excluding data from Goa, Himachal Pradesh, Chandigarh and Puducherry, as selection of ASHAs was ongoing in these states.

ASHAs are local women trained to act as health educators and promoters in their local communities. The MoHFW defines them as health activist(s) in the community who will create awareness about health and its social determinants and mobilise communities towards local health planning and increased utilisation and accountability of available health services. The debate on ASHAs' role centres around three typologies: ASHA as activist, ASHA as link worker/facilitator, and ASHA as community healthcare provider⁵. Their tasks include motivating women to opt for institutional delivery, bringing children to immunisation clinics, encouraging family planning (including surgical sterilisation), providing first aid for minor illnesses and injuries, keeping demographic records, and improving village sanitation. ASHAs are expected to serve as a key communication link between the public healthcare system and rural populations.

It is also important to address issues faced by the health workers to facilitate work satisfaction and to improve their work efficiency⁶. Among matters that need to be looked into to help them function better are personal and cultural issues, financial provisions, and working conditions.

1.8.3 SELECTION CRITERIA OF ASHAs

ASHAs are basically required to be female residents of the village and are selected to serve, and should stay in the village for long-term. Married, widowed, or divorced women are preferred over unmarried women as cultural norms in India require a woman to leave her village and migrate to her husband's place after marriage. In the selection of ASHAs, preference is given to women who are qualified up to Std 10 and aged between 25 and 45. They are selected by and accountable to the gram panchayat (local self-government). In the absence of suitable literate candidates, semi-literate women with formal education less than Std 8 can be selected. Some important factors considered for selection as ASHAs are:

- The candidate must be resident of the village where she wants to work as ASHA.
- One ASHA is appointed for every 1000 population.
- She must be aged between 25 to 45 years.
- She must be married/ widowed or divorced.

- She must be literate; but preference is given to women who are qualified up to Std 10; this criterion is relaxed if no suitable candidates are available in the village.
- ASHAs are selected through a rigorous process involving community groups, self-help groups, Anganwadi, Block Nodal Officer, District Health Officer, Village Health Committee, and the Gram Sabha.

1.9 TRAINING SUPPORT

- Building capacities of ASHAs is a continuous process.
- ASHAs have to undergo a series of trainings to acquire the necessary knowledge, skills, and the confidence to perform the role expected of her.
- Induction training of ASHAs is of 23 days, spread over 12 months.
- On-the-job training continues throughout the year.
- Prototype training material is developed at the national level, subject to changes at the respective state level.
- Cascade model of training is proposed through training of trainers, including contract and the distance-learning mode.

1.10 FACILITATION AND SUPPORT

Facilitation and support systems are made available to ASHAs from the district to village levels. For facilitation, monitoring and supervision at the district level, the District Community Mobiliser, Block Community Mobiliser and Facilitator positions are created. Also, a grievance redressal committee is put in place.

1.10.1 DISTRICT COMMUNITY MOBILISER

- S/He is responsible for supervising ASHA activities.
- Collects reports from Block Community Mobiliser.
- Coordinates quarterly meetings of the monitoring group.
- Coordinates between the state and the district.
- Monitors ASHAs' performance.
- Updates ASHA software.
- Arranges training/development programmes.

- Ensures disbursement of performance-based incentives.
- Monitors vacancies and appointments of ASHAs.
- Circulates guidelines to concerned officials involved in the programme.

1.10.2 BLOCK COMMUNITY MOBILISER

- S/He is responsible for supervision of ASHA activity
- Provides technical and non-technical support to ASHAs
- Conducts monthly meetings of ASHAs
- Maintains reports and registers of ASHAs
- Organises quarterly meetings of monitoring group
- Assists ASHAs in preparation of village health plan, micro-plan for immunisation and RCH programme
- Coordinates with DHO, THO and MO PHC for better functioning
- Prepares report of ASHA activities and performance
- Assists in updating of ASHA software
- Arranges training and development programmes.

1.10.3 ASHA BLOCK FACILITATOR

- There is one facilitator per 20 ASHAs.
- Facilitator has to be a mentor, guide and counsellor to the ASHAs.
- He/she is also expected to support, supervise build capacity of the ASHAs and monitor individual performance of ASHAs.
- Prepares reports of ASHAs' activity and performance
- Coordinates monthly meetings of ASHAs
- Updates ASHA software.

1.10.4 GRIEVANCE REDRESSAL COMMITTEE

The Grievance Redressal Committee is set up at the district level, notified by the District Health Society (DHS). There are to be five members in the committee, two from NGOs, two from government departments from a non-health sector, and one nominee of the DHO. Three members should be women.

A goal of the NRHM is to provide every village in the country with a trained female CHW, or ASHA, who is selected from the village and accountable to it. She will be

trained to work as an interface between the community and the public health system.

The key components of ASHA are:

- The ASHA must primarily be a woman resident of the village, married/ widowed/ divorced, preferably in the age group of 25 to 45 years.
- She should be literate; preference in selection is for those qualified up to Std 10 wherever they are interested and available. The selection criteria is relaxed only if no suitable candidate with this qualification is available.
- ASHA is chosen through a rigorous process of selection involving community groups, SHGs, Anganwadis, Block Nodal Officer, District Nodal Officer, Village Health Committee, and Gram Sabha.
- Capacity-building of ASHAs is a continuous process. She must undergo a series of training episodes to acquire the required knowledge, skills, and confidence to perform her spelled-out roles.
- The ASHA will receive performance-based incentives for promoting universal immunisation, referral, and escort services for Reproductive and Child Health (RCH), and other health programmes, and construction of household toilets.
- Provided with knowledge and a drug-kit to deliver first-contact healthcare, every ASHA is expected to be a fountainhead of community participation in public health programmes in her community.
- The ASHA is to be the first port of call for any health-related demands of deprived sections of society, especially women and children who find it difficult to access health services.
- The ASHA is a community health activist tasked with creating awareness on health and its social determinants, and mobilising the community towards local health planning, and increased utilisation and accountability of available health services.
- She should promote good health practices and provide a minimum package of curative care that is appropriate and feasible for that level and make timely referrals.
- ASHA will provide information to the community on health determinants like nutrition, basic sanitation and hygiene, healthy living and working conditions, information on existing health services and the need for timely utilisation of health and family welfare services.

- She will counsel women on birth preparedness, importance of safe delivery, breast-feeding and complementary feeding, immunisation, contraception and prevention of common infections, including Reproductive Tract Infection/Sexually Transmitted Infections (RTIs/STIs), and care of young children.
- ASHAs will mobilise the community and facilitate access to health and related services available at the Anganwadi/sub-centre/primary health centres for immunisation, Ante Natal Check-up (ANC), post-natal check-up, supplementary nutrition, sanitation and other services provided by the government.
- She will act as a depot holder for essential provisions like Oral Rehydration Therapy (ORS), Iron Folic Acid Tablet (IFA), chloroquine, Disposable Delivery Kits (DDK), oral pills, and condoms, all of which are made available in the villages.
- ASHAs cannot function without adequate institutional support in the villages. Therefore, they are supported by women's committees (like self-help groups or women's health committees), village Health and Sanitation Committees of the Gram Panchayat, peripheral health workers, especially ANMs and Anganwadi workers, and trainers of ASHA, in addition to periodic in-service training.

1.11 ROLES AND RESPONSIBILITIES OF ASHA

- Create awareness and provide information to community.
- Counsel mothers on birth preparedness, safe delivery, feeding practices, immunisation, family planning, RTI, etc.
- Facilitate community access to health care and facilities
- Accompany pregnant women and children to health facility
- Provide care for minor ailments
- Act as depot holder for ORS, IFA, DDK, oral pills, condoms
- Provider of DOTS
- Newborn care and treatment of childhood illness (IMNCI)
- Attain all training activities organised by state, district and block offices
- Attend meetings at all levels
- Coordination with ANM, MO, PHC, VHSNC, facilitator, block mobiliser, district mobiliser
- Implementation of Home-Based Neonatal Care (HBNC) at the village level

- Inform births and deaths, and disease outbreaks
- Construction of toilets.

Theories of community health worker:

1.12 LOGIC MODEL

Logic models are used by programme planners, policymakers, project managers and analysts to effectively and visually communicate the basic concept of their policies and programmes. Funnell and Rogers define a programme theory as “an explicit theory or model of how an intervention, such as a project, a programme, a strategy, an initiative, or a policy contributes to a chain of intermediate results and finally to the intended or observed outcomes”. A logic model maps intended relationships and causal connections between what the programme plans to do and what it expects to achieve. A logic model commonly includes contextual factors that could positively or negatively influence a programme’s implementation and the attainment of results. Though the logic model has its conceptual roots in programme evaluation research, it has a broader reach. It guides programme design, implementation, monitoring, operational research, and evaluation. Over the past two decades, mainly in industrialised countries, interest in the application of causal models has increased among academics, non-governmental organisations and practitioners of evaluation and government agencies. In non-industrialised countries, too, this model of causal thinking in the early stages of policy and programme development is catching on.

1.13 INFORMATION PROCESSING PARADIGM

Persuasive communication in social marketing campaigns helps increase physical activity, and involves three stages of message processing -- attention to the message, comprehension of content, and acceptance of the content.

1.14 SOCIAL SUPPORT

Social support, when made part of health promotion interventions, can be instrumental, informational, emotional, or appraising (providing feedback and reinforcement of new behaviour).

1.15 PROFILE OF STUDY AREA

1.15.1 DISTRICT PROFILE OF NANDURBAR

Nandurbar is an administrative district in the northwest part (Khandesh Region) of Maharashtra, along the Gujarat border. The district, formed after bifurcating Dhule district in 1998, has Nandurbar City as its district headquarters. Nandurbar has an area of 5034 kms² and a population of 16, 48,295 as per the 2011 Census. Its northern boundary is marked by the Narmada river. The dialects/languages spoken in the district include Ahirani, Bhili, Pardhi, Marathi, Hindi and Gujari. Though well connected with railways and roads, Nandurbar is among the most backward districts of the state. Infant and maternal mortality rates are high, as is child malnutrition. It has a high concentration of tribal population. Nandurbar has six talukas -- Akkalkuwa, Akrani Mahal (also called Dhadgaon), Taloda, Shahada, Nandurbar, and Navapur.

Out of the district's total population of 16,48,295, 8,33,170 are males and 8,15,125 are females. Nandurbar constitutes 1.46 per cent of the state's total population. The population density of the district is 276 inhabitants per square kilometre. The decadal population growth rate from 2001-2011 was 25.5 per cent. With males constituting 50.54 percent of the total population and females about 49.45 percent, the district's sex ratio is 972 females for every 1000 males.

Nandurbar's child sex ratio is 944 female children per 1000 male children, in 2011. The literacy rate of the district is 64.38 per cent as per the 2011 Census. Sex-wise literacy rates indicated that while 72.17 per cent males are literate, it is 56.47 per cent for females, a difference of 15.7 per cent. Female literacy is lower than the state's average of 75 per cent.

1.15.1.1 KEY DEMOGRAPHIC INDICATORS: NANDURBAR DISTRICT (2011)

Sr. No.	Items	Values
1	No. of Blocks	6
2	No. of Villages	957
3	Population (2011)	1648295
4	Population - Males (2011)	833170
5	Population - Females (2011)	815125
6	Literacy Rate (2011)	64.38
7	Literacy Rate - Males (2011)	72.17
8	Literacy Rate - Females (2011)	56.14
9	Sex Ratio (2011)	972
10	Child Sex Ratio (2011)	944
11	Density of Population (2011)	276
12	Percent Urban (2011)	16.71
13	Percent SC Population (2011)	2.91
14	Percent ST Population (2011)	69.27

1.15.1.2 KEY HEALTH AND SERVICE DELIVERY INDICATORS (DLHS-4): MAHARASHTRA AND NANDURBAR DISTRICT

Sr. No.	Indicators from DLHS-4	Maharashtra	Nandurbar
1	Mothers registered in the first trimester (%)	61.6	67.6
2	Mothers who had at least three ANC visits (%)	74.4	75.8
3	Mothers who got at least one TT injection (%)	88.7	86.2
4	Institutional births (%)	63.5	80.4
5	Home deliveries assisted by SBA (%)	5.7	8.3
6	Children fully immunised (%)	69.0	78.9
7	Children breastfed within one hour of birth (%)	52.5	75.1
8	Percent of women using modern FP methods	63.9	57.4
9	Total unmet need for FP (%)	13.6	24.2
10	Unmet need for spacing (%)	5.9	14.6
11	Unmet need for limiting (%)	7.7	9.6

Source DLHS4

STotal number of ASHAs required in the district is 1850 and total positions filled are 1839.

Shahada is one of the administrative blocks of Nandurbar district. It climate of the block is hot throughout the year maximum temperature goes upto 48 degree Celsius in summer and minimum temperature fall to 9 degree Celsius. Average rainfall is 552 mm in a year. Shahada is known for its religious importance. From the excavation on the bank of Gomai river sculptures was found known as Pandavleni.

This is the evidence of inhabited and existence of Shahada was since 1700 BC. In connection with the religious composition Hindus are majority in the block; followed by Islam; Jain; Buddhism; Christianity; Sikhism.

Population						Literacy	
	All	SC	Percent	ST	Percent	Total	Percent
Total	346352	16203	4.67	213203	61.55	184423	53.24
Male	174499	8241	2.37	106180	30.65	106051	30.61
Female	171853	7962	2.29	107023	30.90	78372	22.62

Source: Census 2011

1.15.2 DISTRICT PROFILE OF SANGLI

An administrative district in western Maharashtra, Sangli is situated in the river basins of the Warna and Krishna rivers. It has the districts of Satara and Solapur to the north, Vijapur to the east, Kolhapur and Belgum to the south and Ratnagiri to the west. In geographical features, Sangli district has contrasting dimensions and a variety of landscapes in terms of relief, climate, and vegetation. The climate varies from the rainiest to the rainiest. Chandoli (Shirala) region gets average annual rainfall of above 4000 mm. The driest are Atpadi and Jath tehsils, which get average annual rainfall of around 500 mm. Vegetation cover also varies from monsoon forest cover in the western regions to scrub and poor grass in the eastern regions. Sangli's geographical location is North Latitude 16.4 to 17.1, and East Longitude 73.43 to 75.00. It has a minimum temperature of 14.0 Celsius and a maximum of 42.0 Celsius.

As per the 2011 Census, Sangli district's population is 2,822,143. The population density is 329 inhabitants per square kilometre. Its decadal population growth rate from 2001-2011 was 9.18 percent. The district's sex ratio is 964 females for every 1000 males (Census 2011). Sangli's literacy rate is 82.62 percent. While Marathi is the principal language in the district, Kannada is also widely spoken.

The child sex ratio in Sangli is 867 female children per 1000 male children (2011). The literacy rate of the district is 72.62 per cent as per the 2011 Census. Gender-wise literacy rate is 78.11 per cent for males and 66.11 per cent for females, with a difference of 12 per cent. Female literacy is lower than Maharashtra's average of 75 per cent.

1.15.2.1 KEY DEMOGRAPHIC INDICATORS: SANGLI DISTRICT (2011)

Sr. No.	Items	Values
1	No. of Blocks	10
2	No. of Villages	733
3	Population (2011)	28,22,143
4	Population - Males (2011)	14,35,728
5	Population - Females (2011)	13,86,415
6	Literacy Rate (2011)	72.62%
7	Literacy Rate - Males (2011)	78.11%
8	Literacy Rate - Females (2011)	66.11%
9	Sex Ratio (2011)	966
10	Child Sex Ratio (2011)	867
11	Density of Population (2011)	329/sq. m. (Census'11)
12	Percent Urban (2011)	25.48
13	Percent SC Population (2011)	12.51
14	Percent ST Population (2011)	0.64

1.15.2.2 KEY HEALTH AND SERVICE DELIVERY INDICATORS (DLHS-3): MAHARASHTRA AND SANGLI DISTRICTS

Sr. No.	Indicators from DLHS-3	Maharashtra	Sangli
1	Mothers registered in the first trimester (%)	61.6	71.1
2	Mothers who had at least three ANC visits (%)	74.4	81.6
3	Mothers who got at least one TT injection (%)	88.7	97.3
4	Institutional births (%)	63.5	76.1
5	Home deliveries assisted by SBA (%)	5.7	2.8
6	Children fully immunised (%)	69.0	87.5
7	Children breastfed within one hour of birth (%)	52.5	52.5
8	Per cent of women using modern FP methods	63.9	69.3
9	Total unmet need for FP (%)	13.6	9.8
10	Unmet need for spacing (%)	5.9	5.5
11	Unmet need for limiting (%)	7.7	4.3

Source DLHS4

Total number of ASHAs required in the district is 1952 and total positions filled are 1546.

Miraj is one of the administrative blocks of Sangli district. Climate of the Miraj is somewhat pleasant throughout the year. During summer maximum temperature goes upto 34.7 and minimum of 12.8 Celsius. Average rainfall is 635 mm

in a year. In the context of religion There are Muslim community is in majority followed by Hindu; Jain; Buddhism; Christianity; Sikhism.

	Population					Literacy	
	All	SC	Percent	ST	Percent	Total	Percent
Total	351788	46781	13.29	2205	0.62	259428	73.74
Male	180973	83634	23.77	1136	0.32	143959	40.92
Female	120815	23147	6.57	1069	0.30	115469	32.82

Source: Census 2011

1.16 SUMMARY

In this chapter researcher has covered the historical background of Health sector, NRHM, ASHAs roles and responsibilities etc. Also this chapter consists of profile of the study.

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CHAPTER II

REVIEW OF LITERATURE

2.1 INTRODUCTION

In this chapter, the researcher has made a comprehensive attempt to understand the various dimensions of the Accredited Social Health Activist (ASHA) scheme under the National Rural Health Mission (NRHM), initiated in 2005. An attempt has been made to locate the gaps and understand the subject to formulate the study for investigation. The review revealed the importance as well as the gaps in the scheme. The researcher has reviewed some of the prominent studies carried out across the globe.

1. Vandana Kanth, Anil Cherian, Jameela George, article “The contribution of Accredited Social Health Activist (ASHA) under National Rural Health Mission (NRHM) in the implementation of Comprehensive Primary Health Care in East Champaran district, Bihar (State) India (2010)”, published in Health and Medicine, December 15, 2015.

The cited study makes an attempt to look at the contribution of ASHAs in strengthening comprehensive primary health care. A sample of 497 was selected from Purbi Champaran district in north Bihar, of which 199 were ASHAs, 17 were auxiliary nurse midwives (ANMs), 255 were Anganwadi workers (AWWs), 15 were panchayat members, and 11 were *mukhiyas* (village chiefs), among others. The data reflects contradiction in the role played by ASHAs working under the guidelines of NRHM. There were lacunae in understanding the role of ASHAs and other stakeholders. ASHA workers were not involved in any health planning and health promotion activities. The selection of ASHA workers was done by the village headman (*mukhiya*) and the training seems not to be attended by ASHAs. The feedback of ASHAs' contributions in comprehensive primary health care appears negative due to improper selection, poor equipment training, and lack of assistance given to them.

2. Shashank K. J., M. M. Angadi, K. A. Masali, Prashant Wajantri, Sowmya Bhat, Arun P. Jose, article “A Study to Evaluate Working Profile of Accredited Social Health Activist (Asha) And To Assess Their Knowledge About Infant Health Care”, published in *International Journal of Health Sciences and Research* 2013; 5(12): 97-103.

This study dwelt on the coverage population of ASHA workers and their knowledge of infant care. The study shows that each ASHA covers a population of 1078. According to the study, knowledge among ASHAs about infant care was as follows: 34% of ASHAs said that breast feeding should be stopped after one year, and 25% said mothers should discontinue breast feeding when the child has diarrhoea. About oral pills, 43.9% ASHAs conveyed that mothers should take pills while lactating. A majority of them were unaware of their role in modifying the behaviour of women with regard to infant feeding.

3. Saji Saraswathy Gopalan, Satyanarayan Mohanty, Ashis Das (2012), “Assessing community health workers’ performance motivation: A mixed-methods approach on India’s Accredited Social Health Activists (ASHA) programme”, published in the *BMJ Publishing Group Limited*, <http://group.bmj.com/group/rights-licensing/permissions>.

This study was conducted in the state of Orissa and discusses the motivation of community health workers (CHWs). It shows that the motivation level is high; whereas, it also points to the weakness of the system and suggests parameters for improvement. The CHWs are seen to be more motivated by individual and community level factors, than by health system determinants. The qualitative findings also support the survey outcomes that the healthcare delivery status and the human resource management modalities for CHWs are not satisfactory for them. The study recommends that CHW management requires changes to ensure adequate supportive supervision, skill and knowledge enhancement, and enabling working modalities.

4. Nirupam Bajpai and Ravindra H. Dholakia, article “Improving the Performance of Accredited Social Health Activists in India”, working papers No. 1, May 2011, Columbia Global Centers/South Asia, Columbia University.

This study was carried out in the four states of Rajasthan, Bihar, Chhattisgarh and Uttar Pradesh. It focused on the selection procedure, remuneration, training, and supervision of ASHAs. The findings throw light on the motivation level and leadership and communication skills of ASHAs. The study involved a knowledge test for hiring new ASHAs. It shows that the education criteria were often not considered for evaluating her potential performance at work.

The study suggests that candidates can be provided with brief reading materials in advance and be tested on the basis of these to determine their comprehension and communication skills. ASHA candidates are fully aware of their roles and responsibilities, financial benefits they stand to get, and the prospects in their future career. It also suggested ensuring appropriate number of ASHAs is in place and limiting the coverage population for each ASHA to 1000. Also, it suggested developing a mechanism to recruit additional ASHAs as needed to keep up with the increasing rural population.

5. P. K. Garg, Anu Bhardwaj, Abhishek Singh, S. K. Ahluwalia, study “An Evaluation of Asha Worker’s Awareness and Practice of Their Responsibilities in Rural Haryana”, published in National Journal of Community Medicine, Vol. 4, Issue 1, Jan.-March 2013, www.njmcindia.org.

This study aimed to check the awareness of ASHAs about their practice and responsibilities. Majority of ASHA workers were aware about their role and responsibility in helping with immunisation, accompanying clients for delivery, and providing ANC and family planning services. Only 17-19 percent of ASHAs were aware about birth and death registration, helping ANMs in village health planning, and creating awareness about basic sanitation and personal hygiene.

6. State-wise result of ASHAs' work effectiveness and performance in the state of Uttar Pradesh, evaluation study report of the National Rural Health Mission (NRHM) in seven states by Planning Commission, Government of India, New Delhi, Feb. 2011.

ASHA was introduced under the NRHM as a link between the community and the rural health system to motivate and help vulnerable sections, including the poor, women and children, to improve their accessibility to basic health services when needed. The facility survey prompted information about functioning of ASHAs in the selected villages through structured schedule as well as focus group discussions (FGDs) to highlight their knowledge and awareness about their roles and responsibilities under the programme. The study was conducted in 2010-11 in seven states: *Assam, Bihar, Odisha, Rajasthan, Jharkhand, Andhra Pradesh, Kerala and West Bengal*. The functioning of ASHAs in the seven states is discussed in the report.

In Uttar Pradesh, most of the ASHAs have received training. However, their regular mentoring needs to be strengthened. They have substantially increased the awareness of service availability at the community level. ASHAs require regular refresher training and also need a career path for good performance. The results show the need for more training for ASHAs.

7. State-wise result of ASHAs' work effectiveness and performance in the state of Madhya Pradesh, evaluation study report of the National Rural Health Mission (NRHM) in 7 states by Planning Commission, Government of India, New Delhi, February 2011.

In the 50 District Health Centres (DH) studied in Madhya Pradesh, majority of the ASHAs there have been trained and are reported to be equipped with medical kits. But the selection process has not always followed guidelines. Mentoring of ASHAs is lacking because of lack of field visits by the ASHA mentoring group as funds for the purpose are not released in time.

8. State-wise results of ASHAs' work effectiveness and performance in the state of Jharkhand, evaluation study report of the National Rural Health Mission (NRHM) in 7 states by the Planning Commission, Government of India, New Delhi, February 2011.

Sahiyyas (local name of ASHA) in Jharkhand were selected by NGOs through Village Health Committees. Most ASHAs have undergone three modules of training and are equipped with proper medical kits. Interestingly, the modules had been developed in the local contexts. Payment of incentives is generally delayed and needs streamlining.

9. State-wise result of ASHAs' work effectiveness and performance in the state of Orissa, evaluation study report of the National Rural Health Mission (NRHM) in 7 states by the Planning Commission, Government of India, New Delhi, February 2011.

The study shows that most of the ASHAs have been trained. 48% have completed up to the fourth module. ASHAs were provided with drug kits and they were found to be rooted in the community, highly motivated, and their competencies and skills were good. They had good team work with women SHGs and AWWs. Posters providing details of ASHAs' payments were displayed in all the facilities. The role of ASHAs in nutrition supplementation and women empowerment has been emphasised through commissioning of ASHA *Griha*, or help desk-cum-rest house, in district headquarter hospitals and medical colleges in the state and they are generally managed by ASHAs on rotation. The number of registered Rogi Kalyan Samitees in Orissa is 481, with 32 in DHs, 231 in CHCs, 101 in block PHCs and 117 in PHCs. This was possible due to the role of ASHAs' in health promotion. It shows that ASHAs played a significant role in improving services among underserved and marginalised groups, especially in difficult areas of Orissa.

10. State-wise results of ASHAs' work effectiveness and performance in the state of Assam, evaluation study report of the National Rural Health Mission (NRHM) in seven states by the Planning Commission, Government of India, New Delhi, February 2011.

ASHAs are the visible face of NRHM and their JSY (Janani Suraksha Yojana, for safe motherhood intervention) work is popular among rural women in the state. Most of them have reported yearly earnings of less than Rs 10,000. Medicine kits are provided, but there is no arrangement for replenishment. A weekly radio programme on ASHAs seems to be quite popular in the state. General demands of ASHAs in the state are higher incentive as well as referral transport money for accompanying pregnant women. The communalisation process under NRHM in the state seems to have picked up. Under the decentralisation component of NRHM, 26255 of around 26312 villages in Assam were studied.

11. State-wise result of ASHAs' work effectiveness and performance in the state of Jammu & Kashmir, evaluation study report of the National Rural Health Mission (NRHM) in 7 states by the Planning Commission, Government of India, New Delhi, February 2011.

The study report demonstrates the significant role played by ASHAs in improving and strengthening the quality of health services with other health systems. In the state, 9764 ASHAs are in place in 6654 villages. Most of the ASHAs have been trained in two parts/sessions, and received drug kits in 2008-09. However, the kits have generally not been replenished. Many motivated ASHAs were found working in the system. Some of them even paid for referral services from their own pockets to bring pregnant women to hospital for deliveries or ANC check-ups. A few among them are tracking children due for immunisation and maintaining registers. Most of the ASHAs are found to be aware of their roles and responsibilities and are helping the community in organising health activities under the sub-centre. Incentive payments for ASHAs normally get delayed by an average of a month. Her participation in sensitising adolescent girls is not found to be satisfactory.

12. State-wise results of ASHAs' work effectiveness and performance in the state of Tamil Nadu, evaluation study report of the National Rural Health Mission (NRHM) in 7 states by the Planning Commission, Government of India, New Delhi, February 2011.

The study showed that the ASHA scheme had not yet been implemented in Tamil Nadu. The tradition of *ayahs* helping VHNs/ANMs in villages is functioning well in the state. It has often been reported that shortfalls of *ayahs* in villages is getting serious. However, the institution of *ayahs* in the villages is still relatively popular and could be made stronger by inducting some of those who meet the selection criterion for ASHAs in villages.

13. Lipekho Saprii, Esther Richards, Puni Kokho, and Sally Theobald, study “Community health workers in rural India: Analyzing the opportunities and challenges Accredited Social Health Activists (ASHAs) face in realizing their multiple roles,” published in *Human Resource for Health*, 13:95, Dec. 9, 2015.

This study was carried out in the state of Manipur. The study findings are presented under the following two categories:

1. Role and position of ASHAs in rural Manipur, including as health educator/link worker, service provider and activist.

ASHAs are seen as responsible for disseminating health information. Through home visits and counselling, they motivate women for antenatal care and hospital delivery. It was noted that ASHAs, as service providers, were trained and equipped with basic medicine (the ASHA kit) and blood pressure instruments, and are able to treat minor illnesses and monitor blood pressure of people in the community. Most ASHAs saw themselves as the first people to be contacted to provide services in the community. As activists, ASHAs were mostly instructed to encourage achieving health targets like immunisation coverage and institutional delivery. In-depth interviews with an ASHA trainer revealed that training and supervision are mostly focused on institutional delivery and provision of services in the community, with the activist role receiving minimal focus.

2. Factors influencing ASHAs in performing their roles and responsibilities

All ASHAs who were included in the study said they were dependent on the JSY scheme, as the scheme helped them get a good enough amount as compensation, because other tasks had poor incentives, or had no incentive at all. Under the JSY

scheme, ASHAs receive the largest amount as incentive for pregnancy referral and for escorting women for institutional delivery. Therefore, they consider pregnancy cases as a principal source of income. However, there is dissatisfaction among them regarding the limited, inconsistent and irregular payment of incentives. It was reported that erratic payment has a negative effect on ASHAs' ability to effectively carry out their role. This, in turn, entails negative consequences for their families and their relationship with the community they serve. The study found a strong link between ASHAs' financial incentives, their performance, and their taking up maternal health services. According to the study, there are obstacles to community health workers realising their spelt-out roles identified in related literature. These obstacles include personal mistrust, the entrenched tradition of home delivery, and the poor attitudes of service providers. It was also identified that ASHAs lack a clear understanding of what is to be achieved through activism, and how it should be achieved. In addition, any measures aimed at addressing social, economic or institutional barriers are largely a political process, which involves the element of struggle for power and control over resources.

14. *Srivastava S. R., Srivastava P. S., "Evaluation of trained Accredited Social Health Activist (ASHA) workers regarding their knowledge, attitude and practices about child health", published in Rural and Remote Health, Dec. 3, 2012, An International Electronic Journal for Rural and Remote Health Research, Education, Practice and Policy.*

The above mentioned article discusses a cross-sectional that was carried out in Palghar taluka in Maharashtra's Thane district. The study aimed to investigate the knowledge, attitudes and practices of ASHA workers with regard to child health, so as to enable suitable interventions in the form of refresher training sessions that could be conducted to improve their knowledge deficiency in relevant areas. The study shows that in spite of the training provided to ASHAs, there were still shortcomings in their knowledge of various aspects of child health morbidity. The study suggested that monthly meetings could be an effective way to reinforce various aspects of child health. Refresher training should be give at regular intervals for all ASHA workers. In

future training sessions, more stress should be laid on high-risk cases that require prompt referral attention.

15. Farah N. Fathima, Mohan Raju, paper “Assessment of ‘Accredited Social Health Activists - A National Community Health Volunteer Scheme in Karnataka State, India”, published in Journal of Health, Population and Nutrition, 2015 March, 33 (1):137-145.

The above mentioned study indicates that the ASHA programme was found to be successfully operational in the villages of the three districts undertaken for study in Karnataka. A combination of three strategies were adopted: 1) demand creation 2) increased access to services, and 3) local capacity building.

The paper discusses the elements and theoretical aspects related to ASHAs at the national level. Differences may exist in the way the ASHA programme was conceptualised and the way in which the functions in the three domains have been interpreted by the stakeholders. The above study gives insights into the ‘*achievements*’ and ‘*opportunities*’ of the ASHA programme that programme officers at the national and state level could consider in order to improve the programme. With regard to performing tasks, it was observed that there were similarities in some areas. ASHA workers mostly performed the task of link workers and community health workers and, to a small extent, as social activists.

16. Bhatnagar R., Singh K., Bir T., Datta U., Raj S., Nandan D. (2012), “An assessment of performance-based incentive system for ASHA Sahyogini in Udaipur, Rajasthan”, published in the Indian Journal of Public Health, 2009, Vol. 53, pp. 166-70.

The above study sought to look at the performance-based incentive system for ASHA Sahyogini in Udaipur. It identified a common cause that led to dissatisfaction among ASHA workers with regard to their incentives, compared to the work they did, especially among ASHAs working in tribal areas. It was observed that timely payment of incentives, necessary cooperation from staff, including ANMs, AWWs

and hospital staff, in addition to better community awareness, are required for the better performance of ASHAs.

17. Saji Saraswathy Gopalan, Satyanarayan Mohanty, and Ashis Das, “Assessing community health workers’ performance motivation: A mixed-methods approach on India’s Accredited Social Health Activists (ASHA) programme”, published in BMJ Publishing Group Limited, 2012, <http://group.bmj.com>.

This study looked at the performance motivation of CHWs and their determinants on the ASHA programme. It was found that there was no association between levels of satisfaction on incentives and the extent of motivation. In fact, other reasons were observed – like, for instance, insufficient healthcare delivery status and working modalities were some of the factors that affected the motivation of ASHAs. In order to improve the conditions of the CHW, or ASHA, there is a need for amendments to ensure sufficient supportive supervision, skill and knowledge enhancement, and enabling working modalities.

18. Rushikesh M. Maru, “The community health volunteer scheme in India: An evaluation”, published in *Social Science & Medicine*, Vol. 25, Issue 5, 1987, pp. 443–459.

This paper focused on the larger context of the evolution of the Primary Health Care organisation in India. Later, the micro-level study focused on key issues in the design and implementation of the community health volunteer (CHV) scheme. These issues relate to the range and quality of services which address the most common and prevalent health problems of the rural population. The quality and effectiveness of services were assessed by collecting information from users of CHV services as to whether they got full relief and if the relief was full, and whether they were referred to PHC/sub-centre staff. It is clear from the analysis that CHVs are effectively treating the most common diseases. Health activities other than curative services getting some attention from CHVs are those which are perceived as similar to curative medical technology. It is also clear that CHVs are serving all socio-economic strata of population. As in other developmental programmes, the problem is not of reaching the

rural poor, but one of mobilising community support for non-curative tasks such as health education, sanitation and environmental hygiene. It was concluded that if primary health care programmes have to be based on community participation, policy makers must also plan for simultaneous changes in the structure and culture of the existing health bureaucracy. Without such changes, community mobilisation elements of the primary health care design may remain weak and ineffective.

Help rendered by CHVs to PHC staff was evaluated, given that it is important to know how far formal health functionaries consider the CHVs' role as supportive of their activities. In the 1979 national study, when asked about help received from CHVs, a large majority of field workers stated that CHVs were helpful in their activities. Also, 51% of the supervisors mentioned that the CHV scheme had helped improve the quality of services provided by their field workers. The 'UP Study' also revealed that field workers valued the linkage role of CHV in relation to the village community. For example, many of them stated that CHVs helped influence reluctant villagers to accept certain health services, such as family planning and immunisation.

Study on the implementation and problems of logistics and supply of manuals, kits and medicines showed that the CHV scheme has succeeded in bringing primary curative care to the doorsteps of people. To a smaller extent, it has also helped improve related services such as family planning, immunisation and detection and treatment of malaria. Both the village community and the field staff of the regular healthcare organisation find the CHV as a useful link between the community and the primary health centre. Also, CHVs are not confined to only a privileged few, but they cater to a cross-section of different castes and class groups in the village community.

19. Peter A. Berman, Davidson R. Gwatkin, Susan E. Burger, "Community-based health workers: Headstart or false start towards health for all?" (1987), published in *Social Science and Medicine*, Vol. 29, No. 10, pp. 1163-1174, 1989.

This is a review-based paper on community-based worker programmes. CHWs increase the coverage and equity of service delivery at low cost, compared with alternative modes of service organisations. A basic lesson from this review is that CHWs must be adequately supported and that such support requires more resources

than are now spent on CHW programmes. CHWs cannot be seen as a marginal addition to existing services, funded by limited one-time special expenditures. If they are to have a significant impact, they must be an integral and effective component of the health system, and they must be funded as such. Unfortunately, the emphasis on the low cost of CHW activities has led planners to see them as requiring little resources. Low average cost services are appropriate for low-income countries, but high coverage and effectiveness may imply substantial increases in total costs. Underfunding CHWs will merely extend inadequate services. This paper looked at measurable indicators such as CHW tasks and quality of care, the level of institutional support in training, programme management, and supervision, which is the most significant determinant. The limited support and built-in capacity for such support of the less-successful large-scale programmes differentiates them from the successful small-scale projects reviewed. In the small projects, CHWs were often well-integrated in the healthcare delivery system for both support and referral. In larger programmes, CHWs may essentially work alone, with rare supervision, sporadic supplies, and little viable referral. If large-scale programmes were capable of providing the support needed by CHWs, their potential could be great. This requires significant increase in resources and management skills, which may not be available in many countries. CHWs appear to be a less expensive solution but to be effective they may be more expensive in terms of management resources, which are scarce. Of course, improving CHW training, supervision, and logistics will also increase costs. The most striking finding is the contrast between the Chinese CHW programme and the others, especially as the Chinese programme was often cited as a model. The unique conditions of social organisation and control in China have often been cited as essential to the success of this programme as well as a constraint on its replication elsewhere.

20. *R. Sauerborn, A. Nougara, H. J. Diesfeld (1989), "Low utilization of community health workers: Results from a household interview survey in Burkina Faso", published in, Social Science and Medicine, Vol., 29, No. 10, pp. 1163-1174.*

This paper examined the following:

1. The extent to which CHWs were consulted in case of disease

2. The referral pattern of seriously ill patients from the CHW to the next professional facility

3. The determinants of people's choice on whether to use professional or community care.

The study is based on the model of health-seeking behaviour, as outlined by Kroeger. The variables found to be associated with healthcare utilisation in the literature can be grouped as follows: 1. disease variables, e.g., type of disease, its perceived severity and acuity (2) individual variables, e.g., ethnicity, gender, age, education (3) household variables, e.g., household size and structure, income (4) service-linked variables, e.g., cost of treatment/transport, availability and access. This study used the stratified cluster-sample method to select sample size. The questionnaire was designed in close collaboration with the Ministry of Health. It was tested in a pilot study and modified consequently.

The result was that the utilisation of CHWs was found to be insufficient in three ways: 1. for mild diseases, which the CHWs were supposed to treat, but villagers made only minimal use of them 2. for serious diseases, which the CHWs should identify and refer, but they were almost completely bypassed 3. Infants were not at all taken to the CHWs, irrespective of the severity of the disease 4. Reasons for the failure of the CHW scheme are discussed in two sections: a) Lack of community participation included in the selection criteria (two male CHWs per village) were imposed; important criteria of community participation were, therefore, not fulfilled. b) Another source of low community support could be conflicts within the village, especially between the traditional hierarchical power structure and the new ones, like the neighbourhood committees, or, in this case, Committees of the Defense of the Revolution.

The suggestion would be to adhere to the concept of the CHW as provider of basic curative care to encourage the choice of women as CHWs, and to enlarge their tasks beyond those already assumed by village mothers. This would mean longer and better training, closer supervision, a greater variety of equipment and drugs for a wider range of interventions (antibiotics, and parasitic drugs) to cope with the bulk of common diseases. Two problems arise from this. First, will the CHW (probably female) who has been chosen be able to absorb the amount of formal knowledge

required to comply with the diagnostic and treatment regimens? Second, will (s)he agree to spend the time and effort required in view of her already hard-pressed time? Issues of regular pay, professional recognition and a career perspective will have to be addressed. Skills of women as providers of care in common diseases have to be improved, besides improving peripheral professional health services, retraining staff and extending the network of existing services. In such a model, the CHW could remain a village-based contact and resource person, without the role of healthcare provider, which involves training, supervision, logistics of drugs and equipment, as well as personal financial support.

21. Matthew J. O'Brien, Allison P. Squires, Rebecca A. Bixby, Steven C. Larson, 2009, "Role Development of Community Health Workers: An Examination of Selection and Training Processes in the Intervention Literature", *published in Preventive Medicine, 2009, Dec; 37(6 Suppl. 1): S262–S269.*

This paper was made with review-based literature to:

1. Perform a summative content analysis of selection and training processes in published CHW intervention studies
2. Present a conceptual model of CHW role development, informed by the current analysis that will guide future researchers when reporting CHW selection and training processes.

The Community Health Worker National Workforce Study conducted by the Health Resources and Services Administration (HRSA) grouped CHW roles into the following five categories: 1) member of care delivery team 2) navigator 3) screening and health education provider 4) outreach (enrolling) informing agent; and, 5) organiser. Similarly, the health targets for CHW programmes are diverse, including cardiovascular disease, diabetes, asthma, maternal/child health, cancer screening, and general health promotion. Lack of role clarity and the absence of standardised procedures for CHW selection and training also affect programme results. This study focused on these two central components of CHW role development selection and training processes in an effort to develop a model that will help future researchers design and report their CHW programmes in the scientific literature.

Qualitative content analysis was used to study descriptions of CHW selection and training in published intervention studies. A secondary search was completed using MEDLINE and CINAHL to select articles published between 2005 and 2008 using the same search criteria. The study found that this summative content analysis generated rich data about the selection and training of CHWs. The current analysis also highlighted a common pathway leading from implementation to evaluation of the CHW programmes. Consistent reporting of CHW selection and training will allow consumers of intervention research to better interpret study findings. A standard approach to reporting selection and training processes will also more effectively guide the design and implementation of future CHW programmes. All community-based researchers must find a balance between describing the research process and reporting more traditional scientific content. The current conceptual model provides a guide for standard reporting in the CHW literature.

22. T. Takasugi, A.C.K. Lee, "Why do community health workers volunteer? A qualitative study in Kenya", published in, Vol. 126, Issue 10, Oct. 2012, pp. 839–845.

This study aimed to evaluate the factors that motivate volunteers and to ascertain these motivational drivers. The qualitative study method used for focused group discussion helped explore determinants of CHWs' work motivation. The study was undertaken in western Kenya. The group discussions were conducted at local health facilities. Thematic analysis of the transmissions was undertaken. Finally, a variety of factors were identified as important drivers of motivation. These included financial as well as non-financial drivers, such as personal recognition, personal development and working conditions. It was clear from this study that financial drivers were important. This study revealed the importance of some form of reward, be it financial or otherwise, in order to retain and maintain the engagement and motivation of volunteer CHWs in these settings. Similarly, non-financial drivers such as recognition, supervision, training and support are also crucial.

23. *Gill Walt, Myrtle Perera, Kris Heggenhougen, "Are large-scale volunteer community health worker programmes feasible? The case of Sri Lanka", published in Social Science & Medicine, Vol. 29, Issue 5, 1989, pp. 599-608.*

This study looks at one such large-scale volunteer community health worker programme in Sri Lanka to understand the motivation of volunteers and the feasibility of relying on volunteers to support primary healthcare policies. This study was based on a collaborative research study carried out in 1987, which reviewed policy and practice in national CHW programmes in general and drew lessons from three in-depth country case studies in Botswana, Colombia and Sri Lanka. Voluntarism is a visible feature of life in Sri Lanka, possibly because of the influence of Buddhism. For a Buddhist, merit gained through good deeds is an important central concept. However, other circumstances have also affected the willingness for voluntary service. The combination of Buddhism with its emphasis on enlightenment, which is easily identified with education, and a relatively autonomous female population, plus free education from the 1940s established a relatively well-educated female population with few job opportunities. Voluntary work was seen as a legitimate activity for such, largely middle class, women. The growth of the volunteer programme, however, started from the mid-1970s. International organisations such as Unicef introduced volunteers in urban slums.

The study was conducted at both the macro and micro level. At the micro level, two categories of health volunteers were studied: one, in a settlement area (Mahaweli), where they have some curative tasks, and another, in a non-settlement (non-Mahaweli) area, where their functions are purely educative and promotive. In each of the settlement and non-settlement areas, one public health midwife (PHM) area was randomly selected and within each PHM area two villages were selected purposively. Questionnaires were used for the in-depth interview. The focused group discussion method was used to interact with groups. The findings are organised under certain main headings, the profile of the health volunteer included. The age group in both settlement and non-settlement health volunteers was 22-26 years. Regarding how volunteers are introduced to the volunteer programme, focused volunteers are supposed to be chosen by the community to which they are accountable; however, this seldom occurs. The motivation for health volunteers is the hope that this would lead to employment; service to the community is their primary motivation for

volunteering. Motivation also depended on factors like training, which, it was found needed to be of three months, effectiveness of the health education messages volunteers are promoting, their place in the PHC system, and attitudes.

In the settlement areas, volunteers were known by householders for their curative tasks. In non-settlement areas, volunteers were clearly seen as advisors and educators, with no curative role. Perception of volunteer roles and functions by health volunteers, and their personality, capability and enthusiasm play a major role in motivation. Some health volunteers pointed out the difficulty in persuading people to follow allopathic, rather than folk practices. They were in fact confused by their training, which emphasised on allopathy. The conclusion is that large-scale community level volunteer programmes will be characterised by high attrition and low activity rates and will only be sustainable under particular enabling conditions.

24. Karin E. Johnson, Wilson K. Kisubi, J. Karanja Mbugua, Douglas Lackey, Paget Stanfield, Ben Osuga, "Community-based health care in Kibwezi, Kenya: 10 years in retrospect", published in *Social Science & Medicine*, Vol. 28, Issue 10, 1989, pp. 1039–1051.

This paper focused on health promotion and prevention with the community-based healthcare system and community participation. To be successful, sensitisation to community-based health care must involve a grassroots approach, where community leaders first help understand the community-based health care concept. Getting support of the community for CHWs requires considerable effort on the part of the project staff, and it seems to be the only way towards recognition of CHWs' work. It also became apparent that preventive and promotive health services should be integrated structurally and operationally with curative health services to provide the most benefits for the community served. Finally, although there are some differences of opinion, it is felt that, with some refinements, the project could be replicated in other parts of Kenya.

25. Mannan, S. M. Rahman, A. Sania, H. R. Seraji, S. E. Arifeen, P. J. Winch1, G. L. Darmstadt and A. Baqui, "Can early postpartum home visits by trained

community health workers improve breastfeeding of newborns?”, for the *Bangladesh Projahnmo Study Group, published in Journal of Perinatology, 2008, Vol. 28, pp. 632–640.*

This study looks at the intervention to assess postpartum mothers for breastfeeding techniques, and providing counselling and hands-on support to encourage successful breastfeeding. This study stated the nature of ‘feeding problems’ and examined if early postpartum visits by trained health workers can improve rates of successful breastfeeding in neonates with no other associated neonatal morbidity. A cluster randomised trial was used to understand the facts about mortality rate and breastfeeding. Community health workers assessed and recorded the breastfeeding status of mothers in their visit record forms during each postpartum NC visit. CHWs were not explicitly aware of the study hypothesis, although they were aware that their counselling and coaching were meant to improve the feeding practices of mothers. Visit records collected by CHWs were used as sample for the analysis. The study found that anxiety over sufficiency of breast milk supply is the most common problem, in that it often results in cessation of breastfeeding in the early stages. These findings suggested that psychological support for breastfeeding mothers through early counselling and hands-on support for achieving proper techniques, particularly position and attachment, can aid the mother in preventing and overcoming feeding problems in the early postpartum period. The findings provided evidence of the effectiveness of breastfeeding support through early postnatal visits as part of a larger newborn and maternal care intervention. The study concluded that, in addition to large scale mass communication-based promotional approach, one-on-one counselling and hands-on support to mothers for proper breastfeeding techniques by trained workers should be part of any postpartum package, and such support should be made available in the very early days, possibly within 72 hours, to engender a successful initiation of breastfeeding.

26. *R Martinez, R. Vivancos, B. Visschers, L. Namatovu, E. Nyangoma, J. Walley 2007, “Training needs, practices and barriers in the work of community reproductive health workers in Masindi district, Uganda”, published in journal*

Tropical Doctor, April 2008, Vol. 38, University of Auckland Library, June 10, 2015.

This study focused on the role played by CHWs in family planning counselling and distribution of contraceptive methods in rural communities. The study aimed to discover the current practices, barriers and training needs of CRHWs. The purposive sample design was used and semi-structured questionnaire was used to gather information from the CRHWs. A focused discussion was generated around issues of their current practice. The study found that low levels of activity can be attributed to several factors, of which stigma, misconceptions and lack of support are the most important. CRHWs had to face misconceptions among communities. Supervision and links with a health unit was important as they gave the CRHW recognition and made them feel part of a team. It may also have an impact on the monitoring of activities and assessment of use of and demand for their services. Local leaders can help the community workers dispel myths and misconceptions surrounding issues of family planning. Finally, continued approach to learning through support and supervision by health workers should be encouraged and links between the health units and the community leaders must be improved.

27. Araya Medhanyie, Mark Spigt, Yohannes Kifle, Nikki Schaay, David Sanders, Roman Blanco, Dinant Geert Jan and Yemane Berhane, "The role of health extension workers in improving utilization of maternal health services in rural areas in Ethiopia: A cross sectional study", published in BMC Health Services Research, 2012, 12:352, <http://www.biomedcentral.com>.

This study focused on the extent to which specially trained community health workers have contributed to improvement in utilisation of maternal health services by rural women in Ethiopia. The study was conducted to investigate which variables may be related to good utilisation of maternal health services. A cross-sectional survey was used to collect data. The purposive sampling method was used to select the areas. Selected participants' sampling frame of households with women who had under-five children was developed from the log book of the Health Extension Workers (HEWs). The systematic random sampling method was used to select 80 women with under-five children from each kebele (neighbourhood). Utilisation of maternal health

services included: family planning, antenatal care (ANC), health facility delivery, postnatal care (PNC), HIV testing, and use of iodised salt. It was found that the role of HEWs in improving utilisation of maternal health services was the greatest in relation to family planning and ANC. The study participants had obtained contraceptives from the health posts. It seemed that women preferred the health centre to the health post for ANC follow-up.

Since the introduction of the Health Extension Programme in 2003 and deployment of HEWs, there has been an increase in the proportion of women who utilised family planning, antenatal care, and HIV testing. On the other hand, their deployment and work have not showed any improvement in utilisation of health facilities for delivery, postnatal checkup and use of iodised salt. Primary care facilities, particularly health posts, were almost unutilised by women for maternal health services. Women preferred to visit health centres instead of health posts. Women who were literate listened to the radio, participated in income generating activities and had been working towards graduation or had graduated, as a model family was more likely to access and utilise comprehensive maternal health services. The study finding on family planning agrees with other studies conducted in Ethiopia. These studies showed HEWs have improved access to family planning. The HEWs failed in improving utilisation of health facility delivery, PNC checkup and use of iodised salt. This calls for urgent interventions in HEP. Innovative approaches are needed to improve the effectiveness of HEWs in relation to these services.

This study has shown that HEWs have brought essential maternal health care closer to the rural population in Ethiopia. Nevertheless, their success is not for all components of maternal health services. HEWs brought improvement in utilisation of family planning, ANC and HIV testing but not in assisting births. The perception that HEWs may be less competent in assisting births, given the huge workload they already have and the poorly equipped health posts. The strong cultural beliefs supporting home births make it unreasonable to expect substantial change in where and how women give birth. These challenging factors call for innovative strategies to support the efforts of HEWs in identifying risky mothers, their birth preparedness, and in improving their referral to health centres where midwives and better facilities for assisting births are available.

28. *David Mukanga, James K. Tibenderana, Juliet Kiguli, George W. Pariyo, Peter Waiswa, Francis Bajunirwe, Brian Mutamba, Helen Counihan, Godfrey Ojiambo, Karin Kallander, “Community acceptability of use of rapid diagnostic tests for malaria by community health workers in Uganda”, published in Malaria Journal 2010, 9:203, <http://www.malariajournal.com/content/9/1/203>.*

The aim of this study was to explore community acceptability of the use of rapid diagnostic tests (RDTs) for malaria diagnosis by community medicine distributors (CMDs) within the context of community case management of fever in children under age five in Uganda. A qualitative research approach was used for focus group discussions and key informant (KI) interviews were used for data collection. The study found that community medicine distributors (CMDs) were trusted by their communities because of their voluntary services, ease of access, and perceived effectiveness of the anti-malarial drugs they use. The high level of community acceptability for home management of malaria (HMM) was likely a result of its convenience, given the fact that malaria risk was often the highest in remote rural areas, where the quality and coverage of health services was the lowest. A well-designed behaviour change communication strategy will be required because a successful HMM strategy relies not only on adequately trained CMDs and the availability of drugs but also on a well-informed community.

29. *David Mukanga, James K. Tibenderana, Stefan Peterson, George W. Pariyo, Juliet Kiguli, Peter Waiswa, Rebecca Babirye, Godfrey Ojiambo, Simon Kasasa, Franco Pagnoni and Karin Kallander, “Access, acceptability and utilization of community health workers using diagnostics for case management of fever in Ugandan children: A cross-sectional study”, published in Malaria Journal, 2012, 11:121 <http://www.malariajournal.com>.*

This study assessed household access, acceptability and utilisation of CHWs trained and provided with malaria rapid diagnostic tests (RDTs) and respiratory rate timers (RRTs) to practice ICCM (integrated community case management). This is a cross sectional study. A semi-structured questionnaire was used to collect data from the

caregivers. The findings show that accessibility to CHWs was high, with majority of the households residing within one kilometre of a CHW's home. The high accessibility by households to CHWs suggested that the programme is meeting its goal of bringing curative services for febrile children as close as possible to their homes.

ICCM with diagnostics is acceptable, increases access, and is the first choice for caregivers of febrile children. However, one-third of caregivers relied on drug shops, despite the presence of CHWs. This implies that the service needs to be better known and better accepted, and CHWs need to have a constant supply of commodities. It also underscores the significant role played by drug shops and the need to involve them during programming. More than half of the caregivers of febrile children utilised CHW services over a three-month period. It appears that the use of RDTs and RRTs may have improved the utilisation of CHW services.

30. D Modi, J. Patel, S. Desai, and P. Shah, "Assessing completeness of pregnancy, delivery, and death registration by Accredited Social Health Activists [ASHA] in an innovative health project in the tribal areas of Gujarat: A cross-sectional study", published in Postgrad Med., 2016, July-Sept., 62(3), 170-172, PMID: PMC 4970343.

The study found that the proportion of pregnant women registered through the Innovative Mobile-phone Technology for Community Health Operation (ImTeCHO) used by ASHA was similar to enumeration. The purpose of this study was to assess an innovative health intervention to ensure completeness of pregnancy, delivery, and death registration by the ASHAs in the tribal areas of Gujarat. This cross-sectional study was undertaken by local voluntary organisation Society for Education Welfare and Action Rural (SEWA Rural), which randomly selected five predominantly tribal villages. A pre-tested questionnaire was used to collect data through household survey. The ASHA was interviewed to identify reasons behind the non-registration of the event through the ImTeCHO application. The villages were selected through stratified random sampling so that equal numbers of villages were chosen from two study PHCs. The study showed that ASHAs found the use of mobile application quite

acceptable, feasible, and useful. Therefore, they were more inclined to register pregnant women and deliveries in a timely manner.

31. Khurshid Alam, Sakiba Tasneem and Elizabeth Oliveras, “Retention of female volunteer community health workers in Dhaka urban slums: A case-control study”, published by Oxford University Press in association with London School of Hygiene and Tropical Medicine, by Advance Access publication, September 7, 2011, in Health Policy and Planning, 2012, 27, pp. 477-486.

The study focused on the factors of retention of CHWs in urban slums in Dhaka, where BRAC has implemented the Manoshi project. The study used the mixed-method, and included both quantitative survey and qualitative focus group discussions. In the quantitative component, a case-control design was used to assess factors related to retention of CHWs. Epi-Info was used to estimate the required sample size. While the level of CHW income may be related to retention in the programme, data on CHW income were not collected from dropout CHWs because recall bias is likely to be a differential for current and dropout CHWs. This study could not capture the impact of insufficient income or dissatisfaction with pay. The achievement of personal growth through training and professional development and expectation of future employment were also not measured in this current model. At the family level, this model measured the impact of household responsibilities and family disapproval and family support. At the community level, it measured the CHWs’ expectation of social recognition, changes in social prestige, and community approval. At the organisational level, it measured competition of CHWs with other providers in the community, competition from other sources of employment, and supportive supervision; but could not capture clear job description and career progression, heavy workload, and dissatisfaction with management style.

It is evident from the study that financial incentives were the most commonly discussed factor associated with CHW retention. Despite a number of studies showing that expectation of future paid employment (Kironde and Bajunirwe 2003; Franco et al. 2004; Willis-Shattuck et al. 2008; Rahman et al. 2010) and insufficient income/dissatisfaction with pay (Khan et al. 1998; Ahmed 2008; Rahman et al. 2010) are related to CHW retention, there was no association found in this study. This study

identified a significant effect of household responsibilities on CHW retention. Community acceptance and recognition of a CHW's services was related to retention and is a non-financial incentive that may motivate CHWs to continue in a volunteer programme. The study combined multiple items to measure social prestige and most of the CHWs felt that after they became CHWs, they were honoured more by the community, received more greetings, and were more often invited to solve social disputes, including internal conflicts in families. These factors negatively affected CHWs' motivation in their attendance at maternal and neonatal emergencies during holidays and at night. Despite concerns that competition with other health service providers in the slums might negatively affect CHW retention, a weak association was found in this regard. Some factors that encourage CHWs to remain in the programme are common to both urban and rural areas – the urban environment poses new challenges and reduces obstacles to this model of service delivery. The specific recommendations that came from the CHWs in this study may help improve CHW retention within the Manoshi project and in other programmes employing volunteers.

32. Jennifer A. Callaghan-Koru, Adnan A. Hyder, Asha George, Kate E. Gilroy, Humphreys Nsona, Angella Mtimuni, and Jennifer Bryce, "Health Workers' and Managers' Perceptions of the Integrated Community Case Management Program for Childhood Illness in Malawi: The Importance of Expanding Access to Child Health Services", published in The American Society of Tropical Medicine and Hygiene; 87 (Supplement 5), 2012, pp.61-68.

This study was conducted with the objective of exploring the perceptions of health workers and managers about community case management (CCM) provided by health surveillance assistants (HSAs) during the programme's first year in Malawi. This study used qualitative approach, in-depth interviews and FGDs in six districts. Interview and discussion guides covered a variety of health system issues involved in CCM implementation, including informants' overall perceptions about the CCM programme. The study found that most participating health workers, both managers and HSAs, responded positively to the introduction of the CCM programme in Malawi, regardless of whether the district was high-performing or low-performing in terms of supervision and drug supply for CCM. Managers and HSAs agreed that the

CCM addressed health system needs by expanding access to the underserved and by reducing caseloads at health facilities. The HSAs reported an increase in feelings of usefulness, self-esteem, and prestige when operating CCM clinics. These positive perceptions are consistent with those reported in a small number of studies on CCM implementation and are likely to have helped the programme's strong early implementation in the six districts included in this study. HSAs wanted continued expansion of their clinical role. Managers preferred to view CCM as a limited mandate, with some characterising CCM as a stop gap measure. In addition, existing community health workers can benefit from increased motivation and an enhanced relationship with the community when curative services are added to their activities. These findings are positive for the current efforts to expand the provision of CCM in sub-Saharan Africa and elsewhere.

33. Karen Daniels, Marina Clarke and Karin C. Ringsberg, "Developing lay health worker policy in South Africa: A qualitative study", published in *Health Research Policy and Systems*, 2012,10:8, <http://www.health-policy-systems.com>.

This paper explores the contemporary development of the lay health worker (LHW) policy in South Africa and explains if and how gender was considered in this process. A qualitative design was used to understand the phenomena under investigation as experienced by the actors involved in it. This study involved in-depth interviews, which were sufficiently open to allow informants to speak freely and share their insights on LHWs, LHW policy development and the issue gender in implementation in policy and policy development. By using the purposive sampling method, informants were selected for interviews. The study found a lack of voice and power among LHWs as a collective in the contemporary policy redevelopment process. The lack of participation in the policy process by ordinary people is not unique to the present policy process as it has been argued that public participation in agenda-setting in developing countries has been limited. There also did not appear to be a gender lobby engaging with the policy process, and the role of the gender focal point appeared to be limited. This suggests a possible failure of gender mainstreaming as a national government policy process to have an impact on the development of LHW policy.

34. *Cuixia Ge, Jialiang Fu, Ying Chang and Lie Wang, “Factors associated with job satisfaction among Chinese community health workers: A cross-sectional study”, published in BMC Public Health, 2011, 11:884 <http://www.biomedcentral.com>.*

This study aimed to clarify the level of job satisfaction of Chinese CHWs between a metropolitan (Shenyang) and a small city (Benxi) in Liaoning province and explore its associated factors. A cross-sectional survey was conducted for this study. The multi-stage sampling method was applied. A self-administered questionnaire survey was conducted among the community health workers. To clarify job satisfaction, the study used the Minnesota Satisfaction Questionnaire (MSQ), which included six items that referred to supervision-human relation, company policies, compensation, and so forth. From this study, the job satisfaction among Chinese CHWs in the two cities varies from ‘moderately satisfied’ to ‘not fully satisfied’. Community health workers had lower job satisfaction in Shenyang, in comparison to Benxi. This study strengthened the evidence that stress and burnout were negatively associated with higher job satisfaction.

35. *Joseph Mumba Zulu, John Kinsman, Charles Michelo, and Anna-Karin Hurtig, “Integrating national community-based health worker programmes into health systems: A systematic review identifying lessons learned from low-and middle-income countries”, published in BMC Public Health, 2014, 14:987, published online: Sept. 22.*

This is a review-based study with the objective of identifying, appraising, selecting and synthesising quality research evidence relevant to the question. This study used systematic search to use websites for literature. The research suggested that programmes must have been formed and operated by the government and should have training, supervision and incentive structures that are standardised and well-defined by the government. It should have been scaled nationally in or after the 1990s (the period when there was renewed enthusiasm for CBHW programmes in LMICs). Also, it should have been operational for not less than five years. Only four programmes

met the inclusion criteria: Accredited Social Health Activists (ASHAs) in India, Community Health Agents (CHAs) in Brazil, Health Extension Workers (HEWs) in Ethiopia, and Lady Health Workers (LHWs) in Pakistan. This study used a thematic analysis approach for analysed and synthesised data of literature. The study findings factored integration of national community-based health worker programmes into health systems. Characteristics of the problem, attributes of intervention, the adoption system, and the health system characteristics are major components. Prior understanding of contextual factors that can impact the integration process is critical for successful integration of national CBHW programmes into health systems. This suggests the need to have comprehensive approaches for providing baseline contextual data at the beginning of an integration process, about which stakeholders should be aware as they integrate CBHW programmes into the health systems. In addition, it is important to follow a stepwise approach to any national CBHW programme integration process in order to reduce some of the planning and managerial difficulties that can be associated with rapid scale-up and integration. As they mature, CBHW programmes have the potential to reduce the huge human resources needed and for extending primary healthcare services to ‘hard to reach’ groups and areas if appropriate attention is given to their integration processes in the health systems. Considering that health systems are interconnected, dynamic and complex in nature, and that they consist of independent agents whose behaviour is based on physical, psychological and social rules, the use of other research frameworks which acknowledge health systems as complex and adaptive systems would help provide additional insights on this subject.

36. M. Viswanathan, J. Kraschnewski, B. Nishikawa, L. C. Morgan, P. Thieda, A. Honeycutt, K. N. Lohr, and D. Jonas, “Outcomes of community health worker interventions”, RTI International University of North Carolina Evidence-based Practice Center Research Triangle Park, North Carolina AHRQ, Publication No. 09-E0 14, June 2009.

This is a qualitative study, which assessed the effectiveness and cost of CHWs in terms of outcomes such as healthcare utilisation, and disease and injury prevention, maternal and child health, cancer screening and chronic disease management. The

study sought to obtain evidence on the characteristics, effectiveness and costs of CHW interventions. It undertook randomised controlled trials and comparative non-randomised cohort studies that assessed the effect of interventions of community health workers, in which the effect of the interventions could be evaluated independently and were eligible for inclusion in the review. A validated quality assessment tool with nine keys was used to assess quality in studies. This included background, sample selection, specification of exposure, specification of outcome, soundness of information, follow-up, analysis comparability, analysis of outcome and interpretation. Strength of evidence was evaluated based on Agency for Healthcare Research and Quality Comparative's Effectiveness Methods Guide. The study findings show that community health worker interventions led to improved knowledge of participants on disease prevention and cancer screening, but the strength of evidence was only moderate. CHW interventions resulted in greater improvement in participant behaviour and health outcomes when compared with various alternatives. Other studies suggested that CHW interventions provided no statistically significant difference in benefit, compared with the alternatives. It shows that there are areas that require further research.

37. Ruth Jackson, Fisaha Haile Tesfay, Hagos Godefay, Tesfay Gebregzabher Gebrehiwot, "Health Extension Workers' and Mothers' Attitudes to Maternal Health Service Utilization and Acceptance in Adwa Woreda, Tigray Region, Ethiopia", published in <http://doi.org.olog.sci-hub.bz/10.1371/journal.pone>, March 10, 2016.

This study explored the attitudes of HEWs and mothers towards maternal health services in Adwa Woreda, Tigray Region. This is a qualitative study which included HEWs and women to gain a better understanding of the social context of maternal health related behaviours. The themes focused on barriers to health services, women's social status and mobility, and women's perceptions of a skilled birth attendant's care. The findings showed that in the 2011 EDHS, 13% of currently married women made their own decisions about their own health care, while 25% said that their husbands mainly took such decisions. The women said that due to HEWs, many husbands were supportive when their wives were pregnant. Some men approached HEWs directly for

assistance. However, the absence of men for many months of the year did not motivate some women to attend ANC or stay at health centres before their child was born if no one was at home to look after the other children. At times, it can be difficult to find enough men to prepare a stretcher and carry an expectant mother to the main road. Some communities had to appoint older school boys to do this. The support of Women Development Groups and HEWs has increased the rate of skilled birth attendance by calling ambulances to transfer women to health centres either before their EDD or when labour starts at home. These findings add to the growing body of evidence that health workers at the community level can work with women's groups to improve maternal health, thus reducing the need for emergency obstetric care in low-income countries. Other studies emphasise how women's groups can lead to substantial reduction in maternal and newborn mortality in rural, remote and resource-limited settings. One study in Ethiopia argued that the HDA is likely to be an effective strategy for improving maternal and newborn health practices as it involved strategies to mobilise communities, to encourage pregnant mothers to give birth in health facilities, create effective supportive and referral linkages within the primary health care units, staff health centres with midwives to ensure continuous availability of basic emergency obstetric care services, and the provision of ambulances to *woredas* to mitigate transportation barriers.

38. *Ilona Verhagen, *Bas Steunenberg*, *Niek J. de Wit* and *Wynand J. G. Ros*, “*Community health worker interventions to improve access to health care services for older adults from ethnic minorities: A systematic review*”, published in *BMC Health Services Research*, 2014, 14:497, <http://www.biomedcentral.com>.**

This is a review-based study aimed at investigating whether CHWs are also effective in providing benefits to ethnic minority older adults. The study used the PubMed database (2002-present) for studies on the use of CHWs. It focused on CHW interventions and health-related outcomes. Studies were conducted in Western countries, limited to Europe, the US, Canada, Australia, and New Zealand, as these countries currently host a growing number of aging adults belonging to ethnic minorities. The studies were categorised as per CHW roles, and the outcomes were assessed. According to Andrews, CHW roles were grouped into four categories, based

on the aim of their intervention: outreach, case management, data collection, and education. In line with other reviews on CHWs, outcomes were grouped into three categories: access to care, health behaviour, and health status. The study concluded with some caution that there were indications that CHWs could help improve healthcare use, health behaviour, and health outcomes among ethnic minority older adults. The study recommended that more uniformity in the interventions could be useful in determining which elements made the interventions effective. This also means that future studies should evaluate whether the type of training, supervision, type of CHW, and the function(s) of CHWs have an impact on the effectiveness of CHWs. Therefore, a clear description of the training and supervision procedures used, specification of the functions, and the type of CHWs that delivered the intervention are needed. In addition, an additional cost-effectiveness study would help determine whether CHW interventions are a cost-effective alternative to health interventions in promoting and preventing diseases.

39. A Witmer, S. D. Seifer, L. Finocchio, J. Leslie, and E. H. O'Neil, "Community health workers: Integral members of the health care work force", published in *Public Health*, 1995 August: 85 (8 Pt 1): 1055-1058.

This paper focused on the health workforce. Reform initiatives have largely focused on a mix of training and distribution of primary care providers. An important but largely overlooked member of the health care workforce is the community health worker. This paper concentrated on the initial phase of community health workers in promoting health in the United States, which included their roles in facilitating healthcare access through outreach, health promotion and disease prevention services. Evaluation of maternal and child health programmes has demonstrated that community health workers can successfully teach concepts of primary or secondary prevention and improve access to prenatal care. Community health workers facilitate community participation in the health system and educate providers about community health needs, cultural relevance, and outcomes of care. The effect of CHWs' role in health education and outreach contributed significantly to increased detection of breast and cervical cancer, improved childhood immunisation rates, decreased rates of infant mortality and low birth weight, hypertension control, and smoking cessation. In

managed care settings, as mentioned earlier, community health workers contributed to a greater use of preventive and primary care services by Medicaid enrollees. The community health worker's success has been measured by completion of programme objectives, programme sustainability, or impact on healthcare access, cost, and quality. In practical terms, such programmes should continually assess community health needs and demographics, hire staff from the community, reflect the linguistic and cultural diversity of the population served, and promote shared decision-making among the programme's governing body, staff, and community health workers. There were several barriers, such as inadequate use of such workers by the healthcare delivery system as a whole. Among the barriers are lack of a standard definition and conceptualisation. The legitimacy granted to the CHW, the media, and popular culture often reinforces the dominant paradigm of professionalism in healthcare delivery, practice and training. Secure funding and dependence on multiple sources pose a continuous threat to CHW programmes and hinder their ability to conduct rigorous evaluations. This study gave recommendations to overcome barriers that policymakers faced, especially with regard to potential risks inherent in building a formal infrastructure for CHW programmes, and financial and other securities. Imposing rigid structures and restrictions may inhibit innovation and flexibility, thereby minimising the effectiveness of programmes. The healthcare system largely focused on acute care needs. Meanwhile, the community-oriented approach of community health workers must not be overlooked as a strategy for expanding access, reducing costs, and improving quality.

40. Siddhartha Gogia & Harshpal Singh Sachdeva, "Home visits by community health workers to prevent neonatal deaths in developing countries: A systematic review", published in Bull World Health Organ, 2010, Sept. 1:88 (9):658-666B.

This paper aimed to determine whether home visits for neonatal care by community health workers can reduce infant and neonatal deaths and stillbirths in resource-limited settings with poor access to health facility-based care. This study used trials comparing groups that received different experimental interventions, including home visits for neonatal care by community health workers, with a control group that did not receive any home-based intervention by community health workers during the

neonatal period. Trials had a random, quasi-random or non-random design, with individual or cluster allocation eligible for inclusion. However, trials evaluating interventions for the home-based follow-up of infants born and initially cared for in a hospital were excluded, as were single-intervention trials. This systematic review of controlled trials, of which five satisfied the inclusion criteria, indicates that home visits for neonatal care by community health workers are associated with reduced neonatal mortality in resource-limited settings with poorly accessible health-facility-based care when conducted along with community mobilisation activities. Data from three trials showed a reduction in the stillbirth rate. Only one trial showed evidence of reduced infant mortality and neonatal cause-specific mortality (from sepsis, asphyxia, prematurity and hypothermia). While on meta-regression no variable emerged as a significant predictor of an effect on neonatal mortality, subgroup analyses suggested that the survival benefit is higher as intervention coverage increases and possibly when curative care (injectable antibiotics for neonatal sepsis) is provided in addition to preventive or promotive interventions. The following gaps in the evidence base need to be urgently addressed to guide policy: i) the effectiveness of the intervention package in high-mortality settings in other regions, particularly sub-Saharan Africa; ii) the effectiveness of the intervention package in settings with lower neonatal mortality rates (15–29 and 30–45 deaths per 1000 live births³¹); iii) the benefit of adding a curative component (especially the treatment of neonatal sepsis) to preventive or promotive neonatal care; iv) the relative efficacy of home visits of a certain number and timing (e.g., 1 versus 2–3 in the first week of life); and v) ways to achieve high coverage and an intervention of high quality in programme settings.

41. *Oliver R. Herber and Bridget M. Johnston, 2012, “The role of healthcare support workers in providing palliative and end-of-life care in the community: A systematic literature review”, published in Health and Social Care in the Community, 2012.*

The aim of the review is to provide a descriptive overview of what is known about the role of Health Care Support Workers (HCSWs) in end-of-life care and to investigate the challenges and supporting factors that influence HCSWs’ ability to provide such services. This paper reported and discussed the findings from the review, which

combined quantitative and qualitative research. A comprehensive literature search was carried out to retrieve all relevant articles published in the English language. HCSWs were actively involved in a wide range of tasks required to fulfill the patients' desire to be cared for and to die at home. Unclear role boundaries (crossing professional and informal care division) act as a stressor that causes feelings of stress. The varying UK/USA context did not suggest any differences in the roles/tasks performed by HCSWs. The type of studies included in the review does not allow any inferences to suggest that in the absence of HCSWs, hospital admission would have been necessary. The paper debates some of the challenges and supporting factors that influence HCSWs' ability to provide palliative and end-of-life care in the community. It outlines the strengths and weaknesses of the review and draws a conclusion. The paper closes with implications for further research. While acknowledging the wide range of tasks provided by HCSWs in palliative and end-of-life care, there are also a number of challenges related to the role. These included inadequate training (*Ferguson et al. 1998, Miskella & Avis 1998,*). The review showed that a substantial proportion of HCSWs had no nationally recognised qualification, no training on appointment, or preparedness for their job (*Miskella & Avis 1998, Devlin & McIlfatrick, 2010*). In some situations, HCSWs tended to have on-the-job training from co-workers, who themselves may not have had any formal training (*Devlin & McIlfatrick, 2010*). This may have affected the standard and quality of care delivered. A study involving 42 in-depth interviews with HCSWs stated that their primary focus is keeping patients clean, changing beds and providing oral care. Likewise, in a qualitative study, HCSWs describe the importance of attending to patients' personal needs of cleanliness and comfort through bathing and positioning (*Touhy, et al. 2005*). The extent to which HCSWs undertake tasks that family members would normally undertake themselves suggests that their work is located at the intersection between professional and informal care. Whilst HCSWs act as substitute relatives or surrogate family, they differ from the nurse and seem to share more commonalities of informal care. The similarity of the role to that of informal care appears to make HCSWs more approachable to patients. Domestic support represented only 2% of all end-of-life tasks conducted by HCSWs. This was perceived as a source of stress and may be linked to the issue of unclear role boundaries (*Devlin & McIlfatrick, 2010*). HCSWs also provided respite care to allow short breaks for informal care during the day, or

overnight support to enable families to have a good night's sleep as family caregivers frequently experience sleep problems (*Carter 2003*).

42. Jason B Christopher*, Alex Le May, Simon Lewin and David A. Ross, "Thirty years after Alma-Ata: A systematic review of the impact of community health workers delivering curative interventions against malaria, pneumonia and diarrhea on child mortality and morbidity in sub-Saharan Africa", published in *Human Resources for Health*, 2011, 9:27, <http://www.human-resorce-health.com>.

This paper reported how they conducted the systematic review. It gives an analysis of the studies identified by the review, with descriptions of the CHW programmes they evaluated and the observations and conclusions made. The reviews were summaries of research evidence that address a clearly formulated question using systematic and explicit methods to identify, select, and critically appraise relevant research. It also aimed to collect and analyse data from the studies that are included in the review. Inclusion criteria made for the review was that they define CHWs as individuals trained for delivering curative care (with or without preventive health interventions) for malaria, pneumonia or diarrhoea to children aged less than six years. The intention behind this was to evaluate CHWs who improve access to this curative care by working in community settings. Evidence from this review suggests that CHW programmes can have large impact on child mortality when these programmes deliver ITNs or malarial chemoprophylaxis in an endemic malaria setting. Such reductions in mortality would bring about large gains in child survival in sub-Saharan Africa if these programmes were implemented at scale. However, 30 years after Alma-Ata, there is still little evidence from Africa on the effectiveness of CHWs delivering curative interventions against pneumonia and diarrhoea, or comprehensive packages of interventions against the major causes of mortality in children (pneumonia, diarrhoea, malaria, and, in some settings, HIV). Large-scale rigorous studies, including RCTs, are now urgently needed to provide policy makers with more evidence on the effectiveness of CHW programmes on child mortality.

43. *Andrews J. O.¹, Felton G., Wewers M. E., Heath J. ,“Use of community health workers in research with ethnic minority women”, published in J. Nurs Scholarsh, 2004; 36(4):358-65.*

This paper explores the roles and effectiveness of community health workers with ethnic minority women in the United States and focuses on CHWs in the US. CHWs serve as liaisons between community members and providers, promote community advocacy and community capacity building, provide cultural meditation, counselling, social support and culturally appropriate health education, promote attendance at appointments and adherence to medication and other medical regimens, and promote delivery of direct healthcare services. (Institute of Medicine, 2003; Rosenthal, 1998; Swider, 2002)

The analysis provides a critical appraisal of the use and effectiveness of community health workers in health-related research with ethnic minority women. Two research questions were addressed 1) What roles do CHWs perform in research with ethnic minority women? 2) What health related outcomes have been associated with CHW interventions with ethnic minority women? Regarding CHW roles, it varied as per the purpose and design. Intervention, involving the case manager, outreach, educators, training and supervision, varied depending on the nature of services. The CHWs focused on a variety of health conditions. The outcomes related to access to health services and showed that CHWs improved ethnic minority women's access to prenatal care, postnatal care and testing. CHWs could reach and mobilise the population to promote access to healthcare programmes, but they lacked in consensus concerning CHWs' role and responsibility in assisting with retention of participants during the study. Another outcome focused on using CHWs as case managers, and it was more successful in retaining subjects, than using them for outreach only.

Reports provided evidence of community involvement, with community health workers being used to identify, intervene and evaluate the health concerns of community members. Although consensus on the definition of roles of CHWs is lacking, evidence indicated that CHWs were effective in increasing access, knowledge and effecting behaviour change among ethnic minority women

44. *Brynne Gilmore and Eilish McAuliffe, “Effectiveness of community health workers delivering preventive interventions for maternal and child health in low- and middle-income countries: A systematic review”, published in BMC Public Health, 2013, 13:847DOI: 10.1186/1471-2458-13-847©, Gilmore and McAuliffe; licensee BioMed Central Ltd. 2013.*

This article reports findings from a systematic review of studies evaluating the effectiveness of exclusively preventive interventions for Maternal and Child Health (MCH) delivered by CHWs in low- and middle-income countries (LMIC) at the household level. There was no review protocol for this review. As this review included both experimental and observational studies with large heterogeneity in interventions and measures, a statistical analysis is inappropriate. When reviews include studies that cannot be combined statistically but are still undertaken with the same amount of rigor and quality, they are classified as qualitative systematic reviews. With the findings from the study allowing a greater variety of study designs to be included, as opposed to the traditional systematic review criteria of only randomised controlled trials, a larger number of studies were identified for inclusion in this review. The same scope of CHWs’ involvement in MCH prevention interventions identified in other reviews was not identified here, partially because of the often-multidimensional role of a CHW, involving both prevention and curative activities. The curative aspect was excluded as this review was interested exclusively in preventive activities. The finding warrants further investigation into CHW performance, motivation and retention – which are the main obstacles facing CHW programmes – as there is debate on whether single interventions or multifaceted interventions are best suited for CHWs’ community participation. Ownership, leadership and adequate resources, appropriate selection, training, continual learning, support and supervision, as well as incentives to influence retention and motivation,

are all essential considerations when designing and implementing CHW programmes, though this list is not exhaustive. Each identified study's success, or lack of it, may be influenced by various factors and contexts and they should be considered when investigating and initiating new programmes. There is a need for further studies to assess the effectiveness of CHWs delivering interventions on malarial prevention in a wider range of contexts over longer periods of time and with varying support structures in place.

This review found moderate evidence that community health workers are effective in delivering preventive interventions for maternal and child health in low- and middle-income countries. Further investigation into CHWs delivering preventive interventions should be conducted to strengthen support for this role. The practicality of scaling up such initiatives under similar programme guidelines should also be considered. Evidence from this review suggests several strategies that should be further explored, including combining hygiene education with breastfeeding interventions to reduce diarrhoea rates among infants by using visual aids that can be left with the mother as educational tools with specific and targeted health messages. Variations in interventions, training and outcomes make it difficult to compare all included studies. However, the following important findings emerged from the research:

1. Community health workers are effective at increasing acceptability of mother-performed practices, such as skin-to-skin care and exclusive breastfeeding.
2. Community health workers can provide interventions beyond their traditional scope and with more intense training, such as those of a psychosocial nature, or delivering scheduled intermittent preventive treatment for malaria. Further research into CHWs providing services for mental health issues is highly encouraged to address these imperative, yet vastly under-resourced, issues.
3. CHWs are effective in delivering health promotion or education, especially with simple, targeted messages. The use of visual aids may also be very valuable in relaying these messages.

It is recommended that policy makers explore the option of increasing CHWs' responsibility in the prevention of maternal and child morbidity and mortality, though interventions need to be tailored to specific settings and contexts. Prevention services provided by CHWs may serve as a tactic against the HRH crisis and is cost

effective in both training and provision due to lesser responsibility, compared to curative interventions, and may reach more households as many interventions are educational promotions and, thus, allow for knowledge transfer between households.

45. A. Olaniran, B. Madaj, S. Bar-Zev, et al, “The roles of community health workers who provide maternal and newborn health services: Case studies from Africa and Asia”, *BMJ Global Health*, 2019; 4:e001388.

A wide range of community health workers function in low-income and middle-income settings, and most of them are expected to provide one or more aspects of maternal and newborn health (MNH) care. The above mentioned study examined CHWs providing MNH services in Bangladesh, India, Kenya, Malawi and Nigeria. It looked at the scope of practice of CHWs with regard to providing MNH care in varied settings. The study highlighted the need for a better understanding of the diverse types of CHWs in different settings and their responsibilities, roles, duration of training, and type of remuneration. The study reviewed 23 policy documents, conducted 36 focus group discussions, and interviewed 131 key informants. The data was then analysed using thematic analysis.

It was found that, irrespective of the duration of their training (8 days to 3 years), all CHWs identified pregnant women, provided health education, and screened for health conditions that needed referral to higher level of care. Therapeutic care, antenatal care, skilled birth attendance, and providing long-acting reversible contraceptives were done exclusively by CHWs who had over three months of training. Meanwhile, community mobilisation and tracking of patients was done by CHWs with less than three months of training. It was seen that CHWs faced challenges including pressure to provide MNH services beyond their training and practice during emergencies. Also, in some settings, instead of focusing on their traditional roles based in community settings, CHWs had to carry out facility-based roles, where health professionals may be unavailable and/or referral not possible. Also, despite getting training, some CHWs have limited roles in MNH care, as health professionals might prevent CHWs from providing those services that are seen as the exclusive domain of health professionals. Therefore, it is implied that policy-makers and programme planners should be clearer about roles and responsibilities of various types of CHWs and revise the scope of their practice. They should reflect on the training duration to address challenges that restrict CHWs from giving MNH services stated in the scope of their practice.

Lessons from the MDGs era show that, globally, shortage of health professionals is an obstacle to achieving health-related SDGs and UHC, especially for MNH. Recommendations have been made to revise existing health policies to attain sustainable and responsive skills to available health professionals, with focus on

CHWs as a frontline cadre within multi-disciplinary primary healthcare teams. CHWs are increasingly expected to take on additional tasks, including in the domain of MNH. Even though there is some clarity regarding education and the training duration of various health professionals, CHWs tend to be described in generic and non-specific terms. Health professionals are usually described as those with a degree or higher qualification. Meanwhile, a CHW is a paraprofessional, or lay health worker, with deep understanding of a community's culture and language. Also, most CHWs have shorter training than health professionals and their basic role is seen to be to provide culturally suitable health services to the communities they work in. It is expected that this study's findings would help local and global stakeholders recommending expanded MNH roles for CHWs.

The study had grouped CHWs into Level 1 and 2 paraprofessionals, based on training duration. All CHWs had education up to secondary level, but significant differences were seen in their training durations before entering service. A general trend seen is that the longer the training, the more likely the CHWs were to be facility based. CHWs of the Level 1 category had secondary education and received pre-service training of 8-21 days. This category included FWA and HA in Bangladesh, ASHA in India, and CHV in Kenya. CHWs of this category were mostly community residents and selected by community members in collaboration with government representatives. Their tasks mostly involved providing services through community-based activities, including home visits and community outreach activities. CHWs of the Level 2 group had received post-secondary pre-service training for between three months and three years in a government-accredited institution, and were also mostly selected through government representatives. They tended to be facility based, helping women and babies who access services at the healthcare centre where they were based. Their tasks included occasional home visits and community outreach activities. This group included CHCP and CSBA in Bangladesh, ANM in India, HSA in Malawi, and CHEW and JCHEW in Nigeria.

The selection criteria for CHWs vary depending on their duration of training. Compared to those selected as CHWs before receiving training, CHWs with longer duration of training, of two to three years, are appointed only after they complete their training. Also, those with longer training may not be necessarily from the community they are selected to serve. The reason given by programme officials in Nigeria for CHWs not being from the same community is that some communities do not have local members with the required academic grades to get admission for long-duration training in training institutions. So, there is no choice for the government but to appoint trained CHWs from outside the local community.

The challenge of CHWs having to perform roles in MNH care beyond their competencies, especially during emergencies, is made worse by mal-distribution of the scarce health workforce in LMICs. Policy-makers facing twin challenges of inadequate number of health professionals and pressure to meet large local health needs could learn from a qualitative study that explores task-shifting clinical roles

from nurses to HSAs to meet local health needs in Malawi. The study presents an opportunity for policy-makers to think of the possibility of increasing the depth of CHW scope of practice in specialisations for technical roles, or expanding non-specialised roles to less technical ones. This could help train some CHWs in specialisations that could meet local health needs. Moreover, the above mentioned multiple case studies show how FWAs in Bangladesh undergo a three-week specialisation training to meet local needs of family planning. Research can explore a range of themes, which evaluate the possibility and usefulness of expanding their specialisations in some technical roles.

To minimise the challenge of CHWs not being allowed to perform functions that are considered the exclusive domains of so-called health professionals, policies should be developed and implemented to enable each type of health worker to function in a multidisciplinary primary healthcare team. This approach could ensure effective task-sharing between CHWs and health professionals. Policy-makers working in places with communication and transport problems which force CHWs to engage in precautionary referral of women in labour could consider limiting the role of CHWs to antenatal care only. Then, pregnant women can be referred to waiting rooms of referral centre at 36 weeks' gestation as in some LMICs.

The challenge of CHWs having to engage in facility-based services at the expense of their work in community is exacerbated by inadequate financial support for transport to the community. In Malawi, it was seen that HSAs tended to neglect their community-based roles to meet their facility-based work. In such cases, task-shifting could be useful. This would require identifying and training new CHW cadres who can provide services, particularly community-based services that were earlier provided by CHWs, who, due to task-shifting, now have to perform additional facility-based tasks. This could help prevent widening of the gap in service coverage of hard-to-reach communities, and where some community members do not have the physical and financial access to facility-based services. It is also seen from evidence that community-based services are able to provide better financial and physical access to MNH services in difficult-to-reach communities, than facility-based services. Therefore, policy-makers at the local and global levels should review the unintended impact of task-shifting facility-based roles on CHWs at the cost of their traditional community-based roles, and its implications on UHC.

46. A. N. S. Khan, F. Karim, M.A.K. Chowdhury, et al, "Competence of healthcare professionals in diagnosing and managing obstetric complications and conducting neonatal care: A clinical vignette-based assessment in district and sub-district hospitals in northern Bangladesh", *BMJ Open*, 2019, 9:e028670. doi: 10.1136/bmjopen-2018-028670.

This above study examines the competency of MNH professionals in managing MNH complications with the use of clinical vignettes at health facilities in Bangladesh, and how the characteristics of professionals and MNH service provisions affect their competencies. The study included 15 government hospitals, where 134 MNH professionals were interviewed between August and September 2016 with the use of a structured questionnaire, using clinical vignettes on obstetric complications, including antepartum haemorrhage and pre-eclampsia, and neonatal care (low birth-weight and newborn care). It was found that MNH professionals' competency was low. Ten and 24 percent of the health professionals got 'high' scores (75%) in maternal and neonatal vignettes, respectively. Medical doctors were seen to have higher competency than nurses and midwives for maternal vignettes, with similar competency for neonatal vignettes. Professionals in health facilities where there are more normal deliveries demonstrated better competency than their counterparts. Professionals in health centres having more specialised newborn and emergency obstetric care over six months had higher competency in newborn and maternal care matters.

Though MNH professionals were seen to have an overall low competency, it was linked to exposure to higher number of obstetric cases at the facility they worked in. Arranging regular in-service training could help improve the skills of MNH professionals in obstetric and neonatal care in areas where these facilities are heavily accessed. The study assessed the competence of doctors, nurses, and midwives in handling complicated obstetric and neonatal cases using clinical vignettes. It identified the link between the competency of healthcare professionals' and their individual-level factors. It looked at the types of cadre, work experience, training, and health facility-related aspects, including the type of facility, provision of MNH services, and obstetric caseload. The study highlighted the need for health authorities to prioritise continuous professional development and practical clinical training to ensure competent and skilled birth attendance in low-resource settings.

In the global agenda of MDGs and SDGs, priority has been given to maternal and neonatal survival. In the MDG phase, MMR and neonatal mortality rates have been reduced by 44 percent and 49 percent, respectively, between 1990 and 2015. Despite this, an estimated 303,000 mothers and four million newborns are still dying every year worldwide, 99% of them in low-income regions. Evidence shows that the highest mortality risk for mothers and their infants is on the first day of birth. Significantly, it is estimated that 16–33 percent of maternal mortality could be prevented if the major causes of death can be managed in time and efficiently by skilled attendance during childbirth. However, just the presence of skilled birth attendants in health facilities equipped with key emergency care tools may not ensure the best practices of intrapartum and immediate postpartum care. To improve survival of mothers and newborns through best practices, health professionals' competence to diagnose and manage childbirth complications is needed, even as LMICs struggle to increase skilled birth attendance for childbirths. In LMICs, what remains unaddressed is the

knowledge and skill gap of the skilled birth attendants. This is owing to limited resources to assess and improve the competencies of MNH professionals in these countries.

Clinical vignettes or written case simulation is a cost-effective and proven method to evaluate the performance and quality of healthcare professionals' actual practice, particularly in low-income areas, where documentation is more often incomplete for obstetric cases. Such assessment is more feasible and accurate than direct clinical observation of health professionals' performance where actual performance could be constrained by shortage of essential drugs, equipment, and erratic presentation of critical obstetric cases. The above mentioned paper assessed healthcare professionals' competency in managing maternal and newborn complications using clinical vignettes at district and sub-district level health facilities in northern Bangladesh. The clinical vignettes were adopted from two studies held in Ghana to evaluate the quality of care evaluation of hospital-based MNH services. The study found an overall moderate competency among MNH workers and its association with the demand for institutional deliveries, availability of infrastructure, and workload. However, the link with various attributes of healthcare professionals in detail was not looked at. The paper also explored if individual factors like type of cadre, training in emergency care, work experience, health facility factors including facility type, obstetric caseloads, and emergency provisions influenced the competence of health professionals. This paper's findings could be useful in designing capacity development programmes for MNH professionals and to bring procedural changes in health facilities in LMICs to improve outcomes.

The study found low competency in diagnosing and managing critical obstetric and neonatal conditions among health professionals at DHs and sub-DHs in northern Bangladesh. Inadequate provision of health services for management of obstetric emergencies or specialised newborn care in the facilities, and low coverage of recent refresher training could have reflected in low the competencies of MNH professionals at hospitals. The competency, measured by the vignette scores, showed significant differences among the cadres of health professionals, and was linked to obstetric caseloads of the health facilities.

All healthcare professionals were working in obstetric or neonatal wards in the selected health facilities, and were expected to achieve standard competencies for frontline management of scenarios in maternal and the newborn vignettes. The vignette scores showed that most of the professionals achieved less than 50 percent of the total score, indicating low competency for the obstetric complications but indicated better competencies for newborn complications. This could be because of poor knowledge of managing obstetric complications due to lack of recent training in the subject. The proportion of health professionals receiving a training within the last 12 months on management of maternal complications (7%) was lower than those getting training on neonatal complications (30%), whereas most of them never received in-service training in these subjects. Capacity development through training

of maternal, newborn and child health care professionals is a key intervention to improve health outcomes. But desired outcomes in this matter are not achieved owing to inadequate post-training monitoring, follow-up, and refresher training. In India, a study on the feasibility and effectiveness of skill-and-drill based training for MNCH workers at sub-district and district -level health facilities showed improved skills among health workers after the intervention. However, the study stressed the need to ensure sufficient infrastructure and equipment to translate the improved competency into actual practices. The study found higher vignette scores among health professionals who worked in facilities with 'high' caseload of deliveries but remained almost similar in low-use and medium-use health facilities. This association shows that experiential learning or on-job experience could add to competence achieved from academic training.

Not surprisingly, the study showed that doctors had significantly better knowledge scores than nurses and midwives in maternal complication matters. But they had similar scores in newborn treatment. With higher level of academic and clinical training, doctors would have higher competency scores than nurses and midwives in maternal vignettes, which involve more intensive clinical procedures than the newborn scenarios. The similar competencies in newborn vignettes show that advanced pre-service clinical training of health professionals does not always translate into better knowledge and skill. Similar evidence was found for sick child treatment in a multi-country study. Therefore, policymakers need to consider task shifting from doctors to nurses and midwives to improve efficiency in health facilities of LMICs, especially for less intensive procedures like immediate newborn care, or for identifying obstetric complications and referral. Timely initiative is needed, as in Bangladesh the newly inducted midwifery cadre are expected to work full swing from 2016.

The study found that median maternal vignette scores were higher, though not statistically significant, among health professionals in health facilities better equipped for emergency obstetric care; whereas, for newborn vignettes, scores were significantly higher in health facilities with good newborn specialised care. This shows that inadequate provision for emergency management in facilities could lead to low competency of MNH professionals because of less exposure to critical cases. Studies show that competence of health professionals is the result of active engagement in evidence-based practices, which can be implemented only if health centres have facilities for procedures. Therefore, procedural quality of care requires structural improvement of the health facilities.

The authors suggest cautious interpretation of the study as it assesses competence of professionals using clinical vignettes, which examine what one should do at an expected level, not what one does in actual settings. Clinical vignettes are a cheap option, compared to direct clinical observation for assessing the knowledge and skill of health professionals, or where poor chart documentation of obstetric cases makes chart abstraction unfeasible. Also, the objectives of the study do consider if MNH

professionals' competency gap results in poor quality maternal and neonatal care in the selected health facilities. Therefore, future research should ideally focus on exploring the association of health professionals' competency with their actual practice and its outcomes for the health of mothers and newborns in the health facilities.

Clinical vignettes, however, can be useful to assess the competency, which is a key indicator of performance, of MNCH professionals in settings with low resources. It has been found that the cadre and obstetric caseload of health professionals at health facilities were associated with their competence in diagnosis and management of maternal and newborn problems. The arrangement of periodic skill-based and drill-based in-service and refresher training using nearby health facilities as labs could be a possible way to improve MNCH professionals' competence in LMICs.

47. "Health rights are the bridge between law and health", published online in Lancet on April 30, 2019, [http://dx.doi.org/10.1016/S0140-6736\(19\)30809-8](http://dx.doi.org/10.1016/S0140-6736(19)30809-8).

The Lancet–O'Neill Institute Commission on Global Health and Law aims to bridge the gap between health and legal professions. Its report highlights the importance of law and its contribution to health and health care. It is a compilation that reinforces the relevance of law as a legal determinant of health. The Commission aimed to increase the awareness of the health workforce of law by throwing light on the extent to which they already work within the legal parameters. This understanding is expected to promote role of the health profession and the global health community in shaping legal determinants of health. The report discusses right to health as a part of international human rights law and explains its legal basis and the obligations it confers on countries. If this legal entitlement is conferred on all people, it could promote its relevance to health workers, and put the focus on people, rather than nations. The report also offers practical advice – for instance, by referring to technical guidelines, including a rights based approach to reducing maternal mortality, the UNDP Global Commission on HIV and the law, and the Siracusa Principles balancing individual rights vis-à-vis public health issues during epidemics or other health crises. However, in this first report, the rights-based approach does not inform in detail the case studies. But, doing so would have two benefits.

One is that rights-based approaches could offer the health profession a practical, accessible path to understand and shape legal determinants; two, a global health law report framed around human rights, at a time when human rights are threatened by populist movements, could help advance human rights. Human rights are not just binding global laws conferring obligations on states with regard to health care and its social determinants. Significantly, human rights are moral imperatives grounded on the universal agreement that all people are entitled to be treated with dignity and without discrimination, and where they are active participants in matters concerning

them. In this frame, human rights have two key roles: one is technocratic and legal, where people in the concerned jurisdictions are informed about the law and the obligations of states; two, the empowering rights are to be claimed by people to address inequalities arising from power inequities. The second role of human rights could help the health profession shape the law to improve health and reduce inequities. The Commission's report on UHC presents an opportunity to bridge the gap between law and health. In this report, UHC is presented as a vision for action on sustainable development, and as a study to identify how the law works to lay the foundation for and to implement health for all. The report explains how countries can achieve greater equity and UHC, including management of funds and use of overseas development aid. It identifies legal mechanisms that can promote and protect UHC, from including constitutional provisions ensuring right to health, to facilitating dispute resolution at local levels. The guide focuses on moving from the "what" to the "how". Health professionals are not able to efficiently contribute to UHC because the legal aspects of health are beyond their professional training. This is where the human rights-based approach could enable health professionals to help the communities they serve to claim their health rights. This requires framing legal determinants as human rights. Thereby, communities could take part in policy framing and monitor how governments fulfil human rights duties, which includes providing quality health care to all. However, engaging with human rights within the law or policy could be difficult. As Yamin and Cantor explain, health workers and advocates face ground difficulties when they challenge the power asymmetries that lead to ill health and inequities. There are risks in making people accountable, or trying to change local customs to improve health of people, including women, children and marginalised groups. But the human rights-based approach provides opportunities to people in non-legal professions to help achieve UHC beyond legal mechanisms. Including human rights approaches in global health law makes legal tools transformative mechanisms to address health inequities.

48. Hermen Ormel, Maryse Kok, Sumit Kane, Rukhsana Ahmed, Kingsley Chikaphupha, Sabina Faiz Rashid, Daniel Gemechu, Lilian Otiso, Mohsin Sidat, Sally Theobald, Miriam Taegtmeier and Korrie de Koning, "Salaried and voluntary community health workers: Exploring how incentives and expectation gaps influence motivation", published in Human Resources for Health, 2019, 17:59 <https://doi.org/10.1186/s12960-019-0387-z>

Studies have shown that a factor that determines the performance of CHWs is the incentives they receive. The guidelines of the WHO with regard to the support to be given to CHWs to optimise CHW programmes highlight the need to strengthen their performance. For this, they need to be motivated, which invariably depends on incentives. The above mentioned paper discusses the role of incentives in improving CHW motivation. The study used comparative analysis to understand the connection between incentives and motivation based on available data of qualitative studies in six

countries. They relied on a conceptual framework of factors that influenced CHW performance. The studies defined motivational factors as financial, material, non-material and intrinsic. It included semi-structured interviews and FGDs with CHWs, supervisors, health managers, and select members of the community.

It was found that a combination of incentives determined motivation in similar and sometimes different ways. The manner in which CHWs were engaged for work – that is, whether employed or volunteering – determined how various types of incentives affected each other, and also the motivation of CHWs. It was observed that the “expectation gaps” that influenced motivation negatively include lower than expected financial incentives, delayed payments, smaller than expected material incentives and job enablers, and unequal distribution of incentives across groups of CHWs. The studies also observed that incentives could be a cause for friction for the interface role of CHWs between communities and the health sector.

The study results showed that whether CHWs were employed or were volunteering had a bearing on the way incentives influenced motivation. Intrinsic motivational factors were seen, and were therefore significant to the employed CHWs as well as the volunteers. In the case of many salaried CHWs, they did not compensate for the de-motivation caused by the perceived lower financial rewards. Therefore, introducing and/or sustaining a form of financial incentive is important to strengthening their motivation. Managing their expectations appropriately with regard to financial and material incentives is necessary to avoid frustration caused by expectation gaps or “broken promises”, which are seen to affect motivation. To sustain their motivation, a steady amount as incentives promised seems to be as important as increasing the absolute level of incentives. This is significant also because CHWs are, as the study notes, often from low socio-economic backgrounds. Besides, the WHO has suggested that CHWs should be supported by the health system even when they are not a formal cadre.

The article also stresses the importance of extrinsic factors, which include financial, material or non-material incentives. Fixed salaries for those employed formally, allowances for volunteer CHWs, and performance-based incentives are the possible financial incentives. Among material incentives are health insurance, clothes, or tools required for carrying out their work. Non-material incentives include recognition in community, preferential treatment and acquiring new skills. Providing CHWs vehicles is also considered as a motivating incentive. The study authors call these “job enablers” as these provisions are basic resources that help create an enabling environment for CHWs to perform well.

The above literature review provides significant background inputs for the present research on ASHAs, which also looks into motivational and incentive aspects of the ASHAs. This researcher has discussed these aspects in detail in this paper in the context of ASHAs in Maharashtra.

49. “Past, present, and future of global health financing: a review of development assistance, government, out-of-pocket, and other private spending on health for 195 countries, 1995–2050”, *Global Burden of Disease Health Financing Collaborator Network*, article published online in *The Lancet*, April 25, 2019; Correspondence to: Dr Joseph L Dieleman, Institute for Health Metrics and Evaluation, Seattle, WA 98121, USA, dieleman@uw.edu[http://dx.doi.org/10.1016/S0140-6736\(19\)30841-4](http://dx.doi.org/10.1016/S0140-6736(19)30841-4), pp. 2233-2256)

Financial resources are important contributors to health systems anywhere in the world, as they are needed to buy medicines and supplies, build health facilities, and pay health workers. Limited funds are a universal constraint for all health systems. WHO identifies health financing as a key building block of health systems. The above reference presents an estimation study, which looked at health spending in 195 countries and territories from 1995 to 2016. The spending was categorised into government spending, out-of-pocket spending, and prepaid private health spending. The study estimated development assistance for health (DAH) from 1990 to 2018 and also future health spending. It used a combination of linear mixed-effect models with time series specifications to estimate domestic health spending from 2017 through 2050, and DAH from 2019 to 2050. Data were extracted from a broad set of sources tracking health spending and revenue and were standardised. Demographic decomposition methods were used to evaluate factors linked to changes in government health spending between 1995 and 2016. The study also examined evidences to support the theory of health financing transition. The authors projected two alternative future scenarios based on higher government health spending to assess the potential ability of governments to generate more resources for health.

An understanding of past trends and future projections in health financing helps plan and allocate resources needed to achieve universal health coverage and other health goals. Studies, including those by the Global Burden of Disease Health Financing Collaborator Network, have tracked past and projected future health spending in terms of funding sources (that is, government, prepaid private, out-of-pocket, and DAH) up to 2040. A WHO report in 2018 documented global patterns of decreasing external financing and rising domestic public funding. Notably, research on global health financing transition shows that economic development makes countries spend more on health. On the other hand, decreased spending is seen to be due to development assistance and out-of-pocket spending. Also, among low-income and middle-income country groups, the gap between countries with the highest and lowest government health spending per capita is projected to widen. Based on the evidences, it is seen that development assistance for health has “plateaued” and future projections suggest that low domestic health spending and high out-of-pocket spending would continue in low-income countries. The study suggests that prioritisation of health and economic development should be supported as key mechanisms to increase government health spending and address global inequities in health spending. Considering the limited

financial resources for health in all countries and low health financing in some, it is important to identify and implement policies to generate additional resources and improve the efficiency of health spending to maximise health outcomes in the future.

Globally, governments are the largest funding sources in the health sector. A major driver of change in high-income nations and in North Africa and the Middle Eastern countries has been government prioritisation of health; whereas, in upper-middle-income, lower-middle income, and low-income countries, economic development was the key factor. In upper-middle-income countries, especially Southeast Asia, East Asia, Oceania, Latin America, and the Caribbean, increase in health spending is seen to be proportionate to increase in government spending. The lowest increase in government health spending was seen in low-income countries, where economic development was the leading factor that contributed to this growth.

In the present study on ASHAs, the researcher details the financial aspects related to the work and motivation of community health workers (CHWs) and lists suggestions in terms of possible financial measures and incentives to CHWs from the government.

50. Lawrence O. Gostin, John T. Monahan, Jenny Kaldor, Mary DeBartolo, Eric A. Friedman, Katie Gottschalk, Susan C. Kim, Ala Alwan, Agnes Binagwaho, Gian Luca Burci, Luisa Cabal, Katherine DeLand, Timothy Grant Evans, Eric Goosby, Sara Hossain, Howard Koh, Gorik Ooms, Mirta Roses Periago, Rodrigo Uprimny, Alicia Ely Yamin, “The legal determinants of health: Harnessing the power of law for global health and sustainable development”, published online in *Lancet*, April 30, 2019, 393: 1857–910, [http://dx.doi.org/10.1016/S0140-6736\(19\)30233-8](http://dx.doi.org/10.1016/S0140-6736(19)30233-8).

While progress has been made in terms of health care in India and around the world, it is also evident that a lot more remains to be done. Law is a key determinant in ensuring health care delivery to the community. According to the above article, in the globalised world, promoting public health and equity requires cooperation and coordination within and among states. An effective tool for ensuring global health is law, which, unfortunately, remains under-utilised and not so well understood. In this context, lawyers and health professionals can cooperate to introduce evidence-based laws to ensure the public health and safety. The *Lancet* Commission highlights the role law can play in helping achieve global health with justice through legal instruments, legal capacities, institutional reforms, and by ensuring rule of law. The aim is to enhance understanding among the global health community of law, regulation, and rule of law as tools to advance community health and equity.

The term law implies legal instruments, including statutes, treaties and regulations for public policy, and also public institutions like courts, legislatures, and other agencies that are responsible for creating, implementing, and interpreting the law. Rules and frameworks established by law shape social and economic interactions and influence social determinants of health. Proper laws facilitate strong health systems, ensure safe

and nutritious food, evaluate and approve safe drugs and vaccines, create safer workplaces, and improve built and natural environments. On the other hand, laws that are not properly designed, implemented, or enforced harm marginalised populations and reinforce stigma and discrimination. The report of the *Lancet* Commission, which brings together leaders from areas of health, law, and governance from around the world, is structured around four legal determinants of health. These determinants show how law can influence health and equity. The report, rather than making a systematic review of law in global health, advocates the crucial value of law in advancing global health with justice.

Of the four legal determinants, the first states that law can translate vision into action on sustainable development. The UN Sustainable Development Goals (SDGs) present a bold and unifying vision for global health and development. Law can be used to lay the foundations for Universal Health Coverage (UHC), which is a crucial for sustainable development. The second legal determinant states that law can strengthen the governance of national and global health institutions by structuring and streamlining the many institutions, norms, and processes that govern global health. The third legal determinant states that law can implement fair, evidence-based health interventions to create favourable conditions for good health. The fourth legal determinant stresses on building legal capacities for health, so as to enable progress towards global health and sustainable development by reinforcing productive and mutually reinforcing linkages between law and health.

The report finally presents seven concrete recommendations for action, based on identified reform areas, principles of good governance, and the right to health. Recommendation one suggests that the UN, WHO, and international partners should set standards to support implementation, and objectively evaluate compliance with SDG for UHC, as well as the UN political declaration on UHC in 2019. Recommendation two advises that governments should strengthen or create a legal mechanisms, such as a constitutional or statutory right to health, to ensure rights-based UHC on the basis of principles of equity and non-discrimination, including affordability, financial protection, accountability, transparency, privacy, participation, and sustainable financing. The above article highlights the need for health laws to promote equity and achieve health with justice. This requires non-discrimination, equitable distribution of benefits and resources within and across communities, within countries, and globally, and protecting underserved communities. Nationally, lawmakers should look at the needs of the poorest, the most vulnerable, and the marginalised. International norms should be implemented at national and local levels to reduce health inequities. To achieve the SDG motto of “leaving no one behind”, public health laws must focus on areas of extreme inequity.

Also, health laws must look at sectors beyond health as those sectors play an important role in achieving public health and cutting inequalities. The criminal justice system, taxes, urban planning, trade, agriculture, housing, and the environment have an impact on public health. Urban planning, social services, and education, among

other sectors, can positively influence public health. However, areas outside of the health sector are often neglected. Another key factor is Health Impact Assessments (HIAs). HIAs using quantitative, qualitative, and participatory techniques, with particular regard for health equity, measure the health impact of initiatives in sectors like criminal justice, housing, education, education, nutrition, and revenue. The all-of-government or health-in-all policies approach adopted by HIAs towards governance can help improve health across sectors. Many countries and sub-national jurisdictions like Thailand, Slovakia, and some US states have laws which require HIAs for policies, and they influence the outcome of the public health policies and programmes. Other laws empower public health authorities, or even the public, to request an HIA. Evidence shows that HIAs can have a positive effect on public policy. The need for reform in multiple sectors was highlighted in 2008 by the WHO Commission on the Social Determinants of Health. However, institutions including the WHO and governments have not devoted the attention and resources required to address the social determinants of health. Therefore, it is argued that law can be highly effective in defining and operationalising government action.

Finally, the report says health laws should be supported by good governance. Health with justice can be achieved only with good governance, sound regulatory principles, and the rule of law. Good governance involves transparency, community engagement and inclusive participation, monitoring and evaluation systems, rooting out corruption, and accountability at all levels, from legislating, implementation, to enforcement.

In the current study on CHWs, this researcher, while evaluating and assessing the personal, socio-economic and demographic profile of ASHAs, touches upon issues of government's health policy and steps needed to improve health delivery under NRHM.

51. Rina Agustina, Teguh Dartanto, Ratna Sitompul, Kun A. Susiloretni, Suparmi, Endang L. Achadi, Akmal Taher, Fadila Wirawan, Saleha Sungkar, Pratiwi Sudarmono, Anuraj H. Shankar, Hasbullah Thabrany, on behalf of the Indonesian Health Systems Group, "Universal health coverage in Indonesia: Concept, progress, and challenges", review in Lancet, 393: 75–102, published online on December 19, 2018, [http://dx.doi.org/10.1016/S0140-6736\(18\)31647-7](http://dx.doi.org/10.1016/S0140-6736(18)31647-7).

Community health programmes to ensure UHC play a key role in improving public health, particularly in terms of nutrition, disease identification, disease control, nutrition, and the overall health of the community. The abovementioned review focuses on the concept, progress and challenges of UHC in Indonesia. Like in India, China, Brazil and Mexico, the health scenario in Indonesia is fast changing in terms of health and nutritional status. Infectious diseases, non-communicable diseases, under-nutrition, and obesity have always remained a scourge and burden. However, non-

communicable diseases are among the top ten causes of death across age groups, followed by communicable diseases, road injuries, and premature births. In 2016, tuberculosis (TB) was one of the major causes of death, after road injuries and intestinal infections. Mental health issues are also a rising concern. Meanwhile, increase in life expectancy from 48.6 years in 1960 to 71.7 years in 2017 led to increase in the population of young as well as the older people, with the proportion of people above age 50 expected to grow from the present 19 percent to 25 percent by 2030, and that of 65-plus people from 5 percent to 10 percent. This demographic shift poses new challenges for UHC as the proportion of elderly people who were ill reached 29 percent in 2015; hypertension, arthritis and stroke were the most prevalent problems. About a third of these people did not seek medical help, one reason for that being the cost of treatment.

Maternal health, in particular, influences not only the health of the mother but also of the child and future generations. UHC programmes contribute to ensuring the health and well-being of the mother and, thereby, of the child. The above review presents the situation of maternal mortality and its determinants in Indonesia. It is seen that skilled attendance at birth went up from 49 percent in 1997 to 83 percent in 2012, and institutional births rose from 26 percent to 63 percent. But, while maternal mortality ratio (MMR) dipped in other low and middle -income countries (LMICs), in Indonesia it remained high and stagnant – about 300 maternal deaths per 100,000 live births from 1994 to 2014. The high mortality is linked to poor quality of care and delayed referral. These issues were highlighted in the 2011 National Survey of Health Facilities, which showed that only 60 percent of districts and 85 percent of cities had functional basic emergency obstetrical and neonatal care facilities. Also, referral transportation was limited in 21 percent health centres, and round-the-clock clean water and electricity was available only in 35 percent of them. About 80 percent of government district and city hospitals did not meet the criteria for comprehensive emergency obstetrical and neonatal care centres; 17 percent did not have an obstetrician-gynaecologist, 51 percent did not have an anaesthetist, and 47 percent had doctors who were not trained in comprehensive emergency obstetrical and neonatal care procedures. As regards midwives, 50 percent of them were not trained in comprehensive emergency obstetrical and neonatal care. Indonesia being an archipelago nation hampered effective distribution of health services, but factors such as urban and rural location, wealth and education also played a role. However, utilisation of maternal health services went up, with the proportion of pregnant women visiting a health provider for antenatal care rising from an already high 82 percent in 1994 to 90 percent by 2012. This is similar to the improvement in other nations, though there are still inequities across provinces and socioeconomic status. For instance, skilled attendance at birth is seen to be 20 percent greater in wealth quintile Q1 than in quintile Q5, and more than 20 percent of overall deliveries were at home with an unskilled attendant or family member, especially for people living in poverty. Progress was also seen in outcomes of contraception measures until 1997, ten years after Indonesia set up the National Population and Family Planning Agency.

Until 1997, 58 percent of couples used modern contraception, with a small gap in use between high-income and low-income groups. Yet, this gap remained unchanged up to 2013 and to the present, even though the Health Law of 2009 made it mandatory for modern contraception to be made available in all primary healthcare facilities. These conditions highlight the challenges for maternal health and safe delivery, and reproductive services in general, and the need for UHC to address them. According to the review, in order for the UHC to be effective, there is a need to coordinate efforts to improve health systems and service delivery, indicating a greater role for UHC in improving access to care.

The above review also evaluates human resources for healthcare services as a factor in healthcare delivery in Indonesia. In 2001, decentralisation of governance in Indonesia from the national to district level gave autonomy to districts to prioritise sectors for development. However, health and its human resource needs received uneven attention and inadequate funding and incentives for equity. From 2004 to 2015, the health worker to population ratio rose only slightly, or remained static, with deployment of only 16 physicians, 5 dentists, 88 nurses and 44 midwives per 100 000 people. This falls 50 percent short of the target. Distribution was not aligned with growth in population and migration. In 2015, adequate number of dentists were available only in 53 percent health centres, general practitioners in 75 percent centres, midwives in 62 percent centres. In 2019, the Indonesian government targets 45 physicians, 13 dentists, 180 nurses, and 120 midwives per 100000 population. While the target for nurses and midwives may be achieved in some provinces, the overall projected number of health professionals from private and public schools will fall short. As seen in most countries, doctors and midwives tend to concentrate in cities. It is seen that their willingness to work outside of developed areas decreases because of undeveloped facilities in the less developed areas. Though there are improved policies and incentives for work in rural areas, less than 10 percent of physicians practice among rural communities, which accounts for 45 percent of Indonesia's population. These factors have led to inequalities in service delivery and lower quality of care, necessitating policies for investments in health infrastructure to optimise UHC. To address this shortage, in 1983, the Ministry of Health started community health outreach activities, called integrated health posts, where a team including a midwife, nursing assistant and vaccinator visit each village, or village subdivision, every month to provide basic reproductive, maternal, neonatal, and child health services. Around 300000 health posts, facilitated by community health volunteers selected by the village, are held every month. These volunteers are not professionals and get a modest allowance and have limited accountability. But if they are recruited properly and supervised, it could have positive effect. Also, in the interest of UHC, better engagement with the frontline health care posts could pay dividends if linked with an efficient mobile digital health-information system to track needs and service provisions. The review points out that the UHC system in Indonesia needs to offer a variety of care options in specific locations to incentivise coverage and use of services.

In the context of the present research on ASHAs, the Indonesia example, especially with regard to its healthcare delivery systems, offers some key inputs to understand the **roles and possibilities in community health care with relation to ASHAs** in Maharashtra.

52. Chinmay N. Gokhale, Sophie S. Simon, Rujuta S. Hadaye, Sujata R. Lavangare, "A cross-sectional study to screen community health volunteers for hip/knee-osteoarthritis and osteoporosis", article published in Journal of Family Medicine and Primary Care, Vol. 8 , Issue 6: June, 2019, Screening of CHVs: Osteoarthritis and osteoporosis, downloaded from <http://www.jfmnp.com> on Wednesday, September 18, 2019, IP: 14.139.114.34].

Community health volunteers (CHVs) are the point of first contact for community members when it comes to health needs. However, the issue of the health of health volunteers has largely remained a neglected area. The above cited article presents a study conducted to estimate the proportion of hip/knee osteoarthritis (OA) and osteoporosis among CHVs and understand determinants of their current bone health status. OA is a degenerative disease mainly affecting hip and knee joints, and osteoporosis is characterised by diminution of bone mass. Both these diseases have a substantial economic impact on society. Health volunteers being peripheral health workers are prone to such diseases owing to their socio-demographic and occupational profile.

This study, conducted in the urban field practice area of a teaching college in Mumbai, included CHVs of a Mumbai municipal ward with seven health posts, of which five were randomly selected. Of the 96 CHVs employed under the five health posts, 16 did not take part in the study as they had duties elsewhere, reducing the final sample size to 80. The questionnaire included a screening tool for OA taken from a previous study. The weight, height, and blood pressure of the participants were recorded and bone mineral density at the level of ankle was measured. It was seen that 50 (62.5%) of the participants had increased body mass index (overweight obese), 10 (12.5%) were hypertensive, 14 (17.5%) CHVs screened positive for hip OA, and 29 (36.3%) were positive for knee OA. Hip OA was associated with advancing age, parity, and obesity. Knee OA was associated with age and exercise. In total, 16.3 percent subjects were found to have osteoporosis and 61.2 percent had osteopenia. The study revealed that a high number of CHVs had bone and joint problems, which requires them to take preventive measures such as health education and screening. Also, 57 (61.3%) of the CHVs were between 30 and 59 years and 12 (15%) were over 60 years. About 59 CHVs (73.7%) had up to two children, whereas the remaining had three or more children. When asked about their lifestyle, it was found that only 23 out of 80 participants exercised regularly; only eight CHVs exercised for the recommended 30 minutes per day. Participants with higher BMI were more likely to be screened positive for OA. Surprisingly, the proportion of hip OA was higher

among participants who gave history of doing exercises. Increasing age of participant was significantly associated with chances of developing knee OA. The study found that those who exercised regularly were protected from developing knee OA. Multivariate analysis showed that for hip OA, age between 30 and 59 years, parity of three to five children, overweight/obese as per BMI, and history of doing exercises had higher odds of being screened positive. CHVs with normal blood pressure were protected against hip OA. Thirteen participants (16.3%) had osteoporosis and another 49 CHVs (61.2%) had osteopenia.

Bone and joint diseases, though on the rise, are neglected public health problems. A background paper on OA by the WHO concluded that there is a large burden of OA and absence of effective biomarkers and diagnostics one of the main reasons. Varthakavi et al. concluded that osteoporosis was a neglected health problem in India and lack of detection and unawareness were the main reasons. Hence, previous published literatures support the fact that these diseases may go undiagnosed and thereby untreated in many patients. The primary care givers, such as family physicians, can detect these diseases early with use of cost-effective screening tools. Peripheral health workers such as CHVs deserve priority screening as they are responsible for overlooking the health of the community. This study showed that advancing age, higher parity, and positive history of exercise were major determinants for hip OA. Exercise is generally labelled as protective against OA.

OA and osteoporosis may have a negative impact on routine activities of CHVs affecting both quantity as well as quality of the work that comprises of delivery of healthcare services at the grassroots level. CHVs, therefore, must be trained and sensitised about OA and osteoporosis and also educated about related issues such as weight reduction, exercise, and regular blood pressure monitoring. This study also calls for regular screening for peripheral health workers and adequate treatment for those who screen positive. Such studies may be repeated in similar and different settings because such efforts help raise awareness about such neglected non-communicable diseases, and may also help in detection of the latent cases. In short, CHVs are at a high risk of developing problems, such as hip/knee OA and osteoporosis, in addition to other health problems, such as higher levels of BMI and blood pressure.

In the present research by this researcher, the health of ASHAs themselves has not been discussed in detail. However, it can be observed that they do a lot of physical travel, including walking, to reach their beneficiaries. Therefore, the health problems of ASHAs, especially of the knee and bones, would be of interest for further research.

53. Nirmal Kandel, Jaya Lamichhane, “Female health volunteers of Nepal: The backbone of health”, article published in *The Lancet*, Feb. 09, Vol. 393, ISSUE 10171, PE19-E20, 2019DOI:[https://doi.org/10.1016/S0140-6736\(19\)30207-7](https://doi.org/10.1016/S0140-6736(19)30207-7)

In the 1980s, Nepal initiated its female community health volunteer programme, called “mahila swoyemsewika”, means “female volunteer”. Their roles were initially to support family planning, including distribution of birth control pills and condoms. Over time, their roles expanded to include other programmes. They work to achieve the Millennium Development Goals and other targets. For the past 30 years, the programme became the backbone of the health system in Nepal. Today, more than 50 000 volunteers are involved in educating villagers through health promotion, including nutrition, sanitation, HIV, family planning, and maternal and child health. They deliver health services for family planning, de-worming, polio campaigns, and integrated management of childhood illnesses), and collect and report demographic data in the community.

Female volunteers helped reduce child and maternal mortality through programmes like immunisation, integrated management of childhood illnesses, family planning, and preparing pregnant women for delivery. Every government healthcare programme uses female CHVs to achieve targets of community-based programmes. This is because of the trust the volunteers have developed over time by selflessly volunteering for the community. They have carried on steady work in the community. Nepal has been through a decade-long conflict. Yet, its health indicators fare better than its neighbours. This is mainly because of the work done by the female community health volunteers and healthcare workers. Their work in the aftermath of the 2015 earthquake was praiseworthy as they were the first responders and ensured continuity of maternal and child health programmes and other essential programmes.

Their services are exemplary and are seldom included in the theory of public health practices. For instance, every CHV in each village ward is aware of children and households who need or have missed routine vaccinations. They make door-to-door visits and counsel parents about the need for vaccination. After the 2015 earthquake, they provided psychological support to prevent post-traumatic stress disorder in victims. Therefore, the volunteers have won the trust of the villagers, who freely share their stress, pain, and problems with them. This is important where psychological disorders are often stigmatised. Society and institutions in Nepal are traditional, conservative, and patriarchal. Women are generally restricted to childbearing, household maintenance, and income earning. Despite such social structures, norms and values, the CHVs have established their status as respectable members of the community. In the community, the CHVs, who do not get regular pay, are among the busiest workers. Every day, they make house calls for health programmes and attend meetings or training while managing their daily lives, households, children, family and farms or businesses.

In rural Nepal, the practice of ritual healing and biomedical services compete with each other. The reconciliation between these practices is facilitated by the women community health volunteers as they help villagers to negotiate the pluralism. The volunteers are uniquely equipped to deal with it. They are part of the social system and provide medical and healthcare information in a resource-constrained setting and are not alienated by established norms and gender roles and have earned respect. That is why the success of every health and social programme depends on mobilising these volunteers. Their social stature is so high that political parties have used them for their favour, especially during election campaigns to influence voters. This has led to some politicisation of the women CHVs. But it has helped improve their knowledge on basic and political rights, which they disseminate to families and communities, leading to increased political awareness among rural communities. Public health practitioners recommend involving female CHVs in risk management for non-communicable disease management and oral health. They can also influence the local population to stop smoking, avoid harmful use of alcohol, and maintain good oral health.

The contribution of these volunteers to Nepalese health programmes and to the health status of Nepal has helped the country achieve health goals and, at the same time, contributed to global health. They have enabled success of polio and measles elimination, helped nutrition programmes, and are the first responders in emergencies such as cholera outbreaks, pandemic influenza, or earthquakes. Thousands of such CHVs have made selfless contribution to global health, making them the Florence Nightingales of Nepal.

54. Jody Heymann, Jessica K. Levy, Bijetri Bose, Vanessa Ríos-Salas, Yehualashet Mekonen, Hema Swaminathan, Negar Omidakhsh, Adva Gadoth, Kate Huh, Margaret E Greene, Gary L. Darmstadt, on behalf of the Gender Equality, Norms and Health Steering Committee, “Improving health with programmatic, legal, and policy approaches to reduce gender inequality and change restrictive gender norms”, third in a series of five papers, published online in Lancet, May 3, 2019; 393: 2522–34, [http://dx.doi.org/10.1016/S0140-6736\(19\)30656-7](http://dx.doi.org/10.1016/S0140-6736(19)30656-7) .

Gender inequalities and restrictive norms negatively impact health, but little research has focused on solutions. The paper cited above reviewed literature for rigorously evaluated programmes aimed at reducing gender inequality and restrictive gender norms and improving health. Four mutually reinforcing factors for change were identified: 1) multi-sectoral action 2) multilevel, multi-stakeholder involvement 3) diversified programming 4) social participation and empowerment. Little research has investigated the effects of national-level law and policy reforms. So, this review was followed up by original quasi-experimental studies on laws and policies related to education, work, and income and social determinants of health in which gender inequalities exist. It was tested if laws and policies affected health outcomes and

gender norms, and if changes in laws and policies brought changes in gender norms and thereby the health effects. The paper discussed examples of how better governance could support gender-equitable laws, policies, and programmes, immediate next steps, and future research needs.

Unfavourable social circumstances like educational disadvantage, poverty, and poor working conditions raise morbidity and mortality. This is shown in published literature that were summarised by the WHO Commission on Social Determinants of Health. Gender inequalities and power imbalances were seen to affect interpersonal relationships and individual agency. An analysis of surveys from 54 countries in 2018 shows that four in five women did not have an agency in critical aspects of family relationships. The care-giving and household responsibilities of women and girls are disproportionate globally. Data from 83 countries and areas show that compared to men, women allocate 2-to 6 times of their day to unpaid care and house work. Lower wages, pensions, or social protection for women disadvantage them, especially as households have fewer resources, and less money is spent on the health and education of all children. It is understood that gender inequalities disadvantage women and girls. But both gender inequalities and restrictive gender norms negatively affect the health of people of all sexes.

The study gave some important messages. High-quality gender-transformative programmes shared many features – multi-sectoral action, multi-level and multi-stakeholder involvement, diversified programming, social participation and empowerment. Tuition-free primary education and paid maternity and parental leave policies improved gender equality in decision-making and better health outcomes. These policies had both direct positive health effects and impact on health facilitated by more gender equality in decision-making. Broadly speaking, policies and programmes that lead to greater equality in education and at work have positive effects for increasing life expectancy, considering that educational parity is linked to improved life expectancy of both sexes, and increased work parity is linked to better female life expectancy. Better gender equality in governance helps passing and implementing transformative programmes, laws, and policies; the approaches of many countries to increase gender equality in leadership and monitoring equity of budgets and human resource allocations is promising. For policy and programmatic interventions, long-term follow-up of their passage, support, and implementation at all levels is needed. Settings that are important to human health include interpersonal relationships, schools, workplaces, and governments, where restrictive gender norms and gender inequalities are prevalent. Restrictive gender norms reinforce inequalities and shape how people live, grow, interact, learn, and work. Gender inequalities and restrictive gender norms should be looked into to enable respect for everyone's human rights, and it could lead to health benefits for everybody.

The above paper focuses on approaches to reduce gender inequalities and restrictive gender norms and improve health. It looks at works in societal, community, and household settings that influence health outcomes but do not deliver medical care. As

these approaches have led to a lot of research, this paper adopts various methods to examine how programmes, laws and policies could impact gender inequalities, restrictive gender norms, and health outcomes. The fifth paper in the series of papers addresses other promising agents of change, including social movements and governance. The authors present a comprehensive review of existing research on the effectiveness of programmes to improve health and to address restrictive gender norms, besides original research on the under-evaluated topic of the potential of laws and policies in changing gender norms and health outcomes at scale. Both – programmes, and laws and policies – are presented in a conceptual model, which builds on the framework presented in paper one of the series of papers. The discussions look at promising reforms in governance that could determine the success of laws, policies, and programmes to improve gender equality. The authors conclude by discussing the implications of findings for ongoing efforts to improve health.

The study authors thoroughly researched peer-reviewed and grey literature to identify rigorously evaluated programmes that fit the criteria for gender-transformative programming and sought to change health outcomes in any area. By studying rigorously evaluated programmes that fit the parameters of the gender-transformative definition and by evaluating changes in health-related or gender-related outcomes, the study authors added to previous reviews that focused largely on programmes implemented in low-income and middle-income countries (LMICs).

A network of civil society organisations and governmental agencies, the Interagency Gender Working Group's (IGWG) was set up in 1997 to address gender equity. In using the IGWG definition, the study authors examined all programmes aimed at transforming gender norms, irrespective of whether they accomplished the aims or not. To identify gender-transformative programmes, they looked at the literature for evaluated programmes that met at least one of the criteria of the IGWG's widely used definition – programmes that “seek to transform gender relations to promote equality and achieve programme objectives... by 1) fostering critical examination of inequalities and gender roles, norms, and dynamics; 2) recognising and strengthening positive norms that support equality and an enabling environment; 3) promoting the relative position of women, girls, and marginalised groups; and 4) transforming the underlying social structures, policies, and broadly held social norms that perpetuate gender inequalities.”

There were some limitations for these. The review of programme evaluations was not restricted by health outcome, age, or geographic area. So, feasibility necessitated limiting the review to quantitative and mixed-methods studies, with experimental and quasi-experimental designs that are suitable for examining causal effect. Potentially high-quality programmes, evaluated only with qualitative or other non-experimental methods, were not included. The generalisability of the findings is limited by the use of experimental designs, if experimental conditions are different from common implementation conditions, or if experiments were carried out in settings that have unique characteristics. Besides reviewing qualitative evaluations, more research is

required on interventions that spread change and are sustained over time. The authors, while examining the decision-making autonomy and health outcomes of women taking into account their disadvantaged status owing to gender inequality, they would have liked to look at how restrictive gender norms also affect men's health. But the DHS do not collect sufficient data on men's health. Also, the absence of individual-level panel data with the DHS limited the study's ability to control unobserved individual confounders.

However, the findings show that well-designed and implemented laws, policies, and programmes have the potential to transform norms and improve health. Effective interventions include those focused on changing restrictive gender norms and those that increase equal opportunities across sex and gender. Also, passage and implementation of laws, policies, and programmes depend on the political leadership and governance mechanisms in place in a particular setting. In the absence of proper institutional environment or sufficient budget allocations, interventions may not bear fruits or be consistent. However, it is pointed out that enabling gender parity in political participation could help pass and implement interventions. LMICs like India, Argentina, Senegal, Rwanda and Bolivia have used affirmative action to enable women's representation in politics. In India, affirmative action increased gender parity in lower echelons of governance, and effects on outcomes have been evaluated. After India introduced the 73rd Constitutional Amendment Act of 1993, reserving a third of all seats in Panchayati Raj for women, women's participation in political decision-making has increased, thus helping formation and enforcement of laws and policies that determine health and gender norms. Significantly, women's increased participation in politics had positive effect on delivery of public health, in terms of more primary health centres, community health centres, government clinics, and government hospitals, and other health-related outcomes, including reduction in neonatal mortality.

The above findings, particularly those related to gender equity, matters of policy and governance, are **significant in the context of the present study on ASHAs**, who are women.

55. "India's health reforms: The need for balance," comment article in Lancet by Gro Harlem Brundtland, The Elders, London W1K 1BJ, published online Sept. 25, 2018, [http://dx.doi.org/10.1016/S0140-6736\(18\)32387-0](http://dx.doi.org/10.1016/S0140-6736(18)32387-0).

Health facilities in India have improved over the years since Independence. However, as the above article by Gro Harlem Brundtland, former director-general of WHO (1998-2003), points out, "India has underinvested in health, never spending more than 1 percent of its gross domestic income on its public health system". On Sept. 23, 2018, India launched extensive health reforms, which the article says, are to be welcomed, adding that the low political priority to health and access to health care has

been surprising. But “things are changing”, says Brundtland, who, along with former UN secretary general Ban Ki Moon (2007-16), had visited India “to discuss India’s strategy to reach universal health coverage (UHC)”. According to her, in India health is rising up the political agenda at national and state levels as leaders are committing additional public financing to meet the growing health needs of India’s large population. Considering the scale of unmet need and limitations of low government budgets, India’s UHC strategy needs to be efficient and equitable. Heavy investment is needed in primary health care services, where health returns are the greatest, as has been demonstrated around the world. As the above article points out, a key pillar of India’s Ayushman Bharat UHC reforms will be the focus on PHC, creating 150000 health and wellness centres to provide free PHC services, including free medicines and diagnostic services. The article praises the Mohalla clinic initiative in Delhi, as it could provide a strong foundation for a PHC-led route to UHC in India. Another reform, the Pradhan Mantri Jan Arogya Yojana (PM-JAY), a health insurance scheme, is aimed at providing over 100 million poor households (about 500 million people) with financial protection against inpatient hospital care in public and private hospitals. It entitles each family annual healthcare aid, with benefits for surgical and diagnostic procedures. The writer expects the programme to be popular as poor people excluded from the health system will get access to some of the best hospitals. However, a concern expressed is that this UHC reform could become unbalanced and favour expensive inpatient hospital care, rather than more cost-effective primary care. Government officials are said to have said that a primary objective of the Ayushman Bharat reforms is to increase hospital admission rates among the poor to bring them at a par with those of the more affluent population. Also, high emphasis to expanding inpatient care may not be appropriate when primary health care settings would be better in dealing with other health priorities like increasing immunisation rates and tackling infectious and non-communicable diseases. Also the launch publicity risks Ayushman Bharat becoming synonymous with hospital insurance for many people, which could lead to people bypassing PHC services to use their gold cards to access specialist care in hospitals. By contrast, the improvement of the health and wellness centres is a slower process. Also, many people might see the annual entitlement of Rs 500 000 worth of hospital care per family per year as an amount they should spend. India’s poorly regulated private hospitals will be only too pleased to meet this demand, but as previous hospital insurance schemes have shown in India, this could result in people being given expensive diagnostic and surgical procedures they don’t need. Furthermore, it is likely to prove difficult to introduce gate-keeping functions into primary care services once people are given instant access to tertiary care. There is a risk that India’s new health reforms could distort public spending towards tertiary care and this may undermine the Indian government’s own target of increasing primary care spending to at least two-thirds of the national public health expenditure. This will be a key figure to track in the coming months and years to see whether India is following a PHC-led route to UHC. Therefore, while commending the priority given to increase access to health care, the article expresses concerns about the balance of the reforms. The says the USA, which spends 17.2 percent of its national

income on health, is still to achieve UHC, pointing to the dangers of a health system built on insuring people against specialist hospital care. At the same time, countries such as Thailand and Sri Lanka are seen as UHC success stories, as they have invested in universal free services with more focus on primary care. It is, therefore, argued that greater political commitment and more public investment in Ayushman Bharat health and wellness centres could help India to reach UHC by 2030.

56. Lori Heise, Margaret E. Greene, Neisha Opper, Maria Stavropoulou, Caroline Harper, Marcos Nascimento, Debrework Zewdie, “Gender inequality and restrictive gender norms: Framing the challenges to health,” *Lancet* 2019, Vol. 393: 2440–54, first in a series of five papers, published online May 30, 2019 [http://dx.doi.org/10.1016/S0140-6736\(19\)30652-X](http://dx.doi.org/10.1016/S0140-6736(19)30652-X).

The above paper examines the relationship between gender inequality, restrictive gender norms, and health and wellbeing. Drawing from past work, it presents a conceptual framework to demonstrate how biological males or females develop into gendered beings, and how sexism and patriarchy intersect with other forms of discrimination, including racism, classism, and homophobia, to make pathways to poor health. It discusses evidence that shows the far-reaching consequences of these pathways, including how gender inequality and restrictive gender norms impact health through differential exposures, health-related behaviours and access to care, and how gender-biased health research and healthcare systems entrench gender inequalities that have serious consequences for health. The combined consequences of the structured disadvantage caused by discriminatory laws, policies, institutions, diet, stress, substance use and environmental toxins have led to discussions on how social injustice creates and maintains health inequities, particularly racial and socio-economic. A parallel question raised is if discrimination based on gender becomes embodied, with negative impact on health. Advocates have for decades worked to remove gender discrimination in global health, with modest success. New plans and political commitment are required to achieve these global health aspirations and the wider UN SDGs.

Gender inequality and restrictive gender norms determine health and wellbeing in powerful yet separate ways. Gender norms sustain hierarchy of power and privilege of male over female and masculine over feminine and reinforce systemic inequalities that limit rights and opportunities for women, men, and gender minorities. Women, especially poor women, face the health consequences of the historical legacy of gender bias; meanwhile, rigid gender norms affect the health and wellbeing of people irrespective of their age, sex, gender, or income status. Gender norms, although deeply entrenched, are not monolithic. They bend and change under social pressure, forces at the macro level, and the everyday choices of individuals who, disregarding the norms, act on their own beliefs and choices. Tackling gender inequality and

restrictive gender norms could have multiple downstream benefits for health and development and is necessary to achieve the UN SDGs.

The above paper presents a conceptual model combining many existing works into a coherent framework to explain how biology, social power, and social experience combine within a gender system and create health-related inequities. It reiterates that achieving gender equality and transforming restrictive gender norms are key to achieving global goals for good health as embodied in the SDGs.

The relevance of gender inequality for health is not a new issue. For decades, women rights movements, feminist scholars and professionals have been calling for gender equality with regard to global health and development, especially during the UN's Decade on Women (1975–85). Their activities peaked in the 1990s and early 2000s. The need for action was articulated by Sen and Östlin in 2007 in a report for the WHO Commission on Social Determinants of Health. Building on available evidence, they argued that gender inequality and restrictive gender norms had negative health outcomes for all people, particularly women and girls. A milestone for global health was the creation of the Commission on Social Determinants, which drew from previous work, including charters on health promotion and others. The Commission stated that health inequities were more a result of social, political, and environmental factors, rather than access to health care. People's circumstances — place of birth, work and age — affect their prospects of living a healthy life. The Commission highlighted that gradients in health outcomes exist along multiple axes of advantage and disadvantage.

On an average, morbidity among women is higher with regard to a particular health outcome, but subsets of men could fare worse than average women as they might be affected by compounding effects of poverty, racism, and other social disadvantages. Therefore, one should go beyond comparing basic binaries of women vs men, rich vs poor and black vs white, and consider so-called clustered deprivations and their consequences for health. The SDG's core commitment to "leave no one behind" addresses shortcomings with regard to how MDGs tracked progress in terms of population averages, like national-level rates of diabetes or maternal mortality, thus masking inequalities among social groups and within countries. Realising SDGs will need focus on the concept of inter-sectionality – the idea that interlocking forms of advantage and oppression, including class, race, ethnicity, ability, and gender inequalities influence one's social position. These factors are not just additive, but work in complex ways. In the US, studies indicate that gender discrimination, racial and ethnic inequalities and socio-economic status have a multiplicative impact on hypertension, self-reported health status, and BMI among poor African-American women. Achieving SDGs will need more efforts towards research to address these intersectional synergies.

The conceptual framework for this series shows the complex gender-health relationship, including how the gender system interacts with the axes of power and

privilege to determine an individual's social position and, thereby, their health. Evidence shows that social norms change, sometimes fast. As we have seen, social rules of communication changed with the advent of email, text messaging, and Facebook. These platforms show how norms can shift spontaneously in response to external factors. Yet, norms remain entrenched, either because they serve a useful purpose, they remain unexamined, or they serve the interests of a powerful social group. When norms limit human development or undermine health and wellbeing, it is possible to start a process to encourage the emergence of new norms, as has been successfully achieved through social movements and programmes to reduce violence against women, remove female genital mutilation, and delay the age of marriage, among other things. It was observed in paper three of this series that such changes in norms can be facilitated through policy and legal reform, or community-based programmatic efforts. It is seen that well executed and sustained efforts to encourage female employment, support girls's education, and reform prejudiced inheritance and family laws can help transform gender roles and norms. In India, a study showed that attitudes of female leadership changed greatly after the law requiring reservation of 30 percent of local village council seats for women was passed. While legal steps are beneficial due to their scale, they depend on successful execution and enforcement, which is frequently inadequate. Evidence shows that legislative efforts can be counterproductive, too, if they try to impose new norms that deviate too much from the status quo. Social movements and citizen action are a second way to change norms. Historically, social movements have successfully challenged social norms that are discriminatory, especially those that consider some groups as inferior and curtail social freedoms. An example is the 'MeToo' movement and movements for LGBTQ rights. The third approach is by working with the community to bring change in norms and behaviours through deliberations on values. This approach is most commonly used in global health and international development. Individuals and groups should first recognise a norm as one that is collectively constructed and be open to change. Norms can be reframed, such as those with regard to corporal punishment as antithetical to core values, and regarding what is best for one's child. Norms should be changed by problem-posing, rather than through didactic means, and by presenting new alternatives, such as non-violent forms of discipline, besides creating an environment for reflection. Studies show that instead of small group processes, there is a need for structured efforts to convey the desired norm through community engagement, theatre, media, and other such ways to disseminate ideas. When the cost of change from norms is seen as high, people should see how beliefs and behaviours of others are changing. So, programmes to change norms should create role models, identify and exemplify those who deviate from norms in a positive way, encourage public declarations, and engage religious and other leaders who would support the cause. Often, promoting a new positive norm is easier than dismantling a negative one, especially those that are difficult to change. Gender norms are particularly persistent, as they are associated with entrenched cognitive patterns, roles, mannerisms, and status vis-a-vis the genders. These associations are reinforced continuously through human interactions, and by the media and the world. These

associations are learnt by children early on and become an automatic cognitive trait that encourages stereotypes and implicit bias. Moving away from those norms is not usually supported by society. Efforts to change prevailing gender relations could lead to backlash from those who stand to gain from the status quo. Also, often unforeseen forces that are beyond the control of those in powerful positions drive change. Economic transition, war, political upheaval, and migration, while posing great challenges to individuals and communities, are also opportunities that force prevailing norms to yield to new realities.

Health outcomes stemming from biological sex result in differences, rather than inequities. The term 'inequity' is defined as the unfair and avoidable differences arising from inequality and structured disadvantage. Though health-related differences can be exacerbated or mitigated by gender systems, health inequities are basically a result of gender inequality and other stratifications, rather than sex per se. Among the structural determinants of health-related outcomes are laws and policies, market forces, and corporate interests, which determine where people live and what resources they have access to. Laws and policies could either reinforce gender inequalities, or, if they are progressive, could improve health and wellbeing. An analysis in paper three of this series shows that policy measures such as paid parental leave could significantly improve the health of women and children. Similarly, social determinants, including socioeconomic status, neighbourhood, food security, and workplace conditions affect health and wellbeing of populations. These determinants are themselves gendered. For example, according to the UN Food and Agriculture Organization, women have reported experiencing more food insecurity than men in about two-thirds of 141 countries. Also, at 48.5 percent in 2018, participation of women in the global labour force was 26.5 percentage points lower than that of men. Conversely, embodiment and cumulative burden indicate the manner in which social processes impact individuals on molecular and physiological level. An individual's social position also impacts health indirectly through gendered pathways to health. Each pathway offers evidence of how gender inequality and norms work through the pathway to generate health-related inequities and other social and economic consequences.

Individuals are exposed in various ways to health hazards from their socially ascribed gender roles and responsibilities. Female participation in the labour force has increased. But women and men continue to be engaged in economic activities considered appropriate for their bodies and their social roles. Men mostly engage in physically demanding jobs; whereas, women mostly take up care or service jobs. Even when members of both the genders have the same job title, the tasks they perform and the salary they receive are not the same. As a result of this gender segregation in jobs, the exposure to disease, disability and injury is differential. While men are more prone to work-related accidents and injuries from heavy work, besides exposure to chemicals, women are exposed to workplace substances like cleaning

compounds, dyes, and textile dust that lead to asthma, or suffer musculoskeletal disorders caused by repetitive movements and working postures.

Access to care is another pathway via which gender norms affect lifelong health. If men are expected to show strength in times of sickness, it is expected of women to care for and give priority to needs of family at the expense of their own health. The gender norms that assign domains to men and women exclude males from engaging in maternal and child healthcare. Also, there are certain acceptable health-related behaviours dictated by gender norms. These combine with individuals' ability to seek care in terms of availability of material resources, time, and the power or permission to act. A study in 65 developing countries showed that cost was a factor that hindered women's access to care. When women do not have financial autonomy, it forces them to depend on men to meet transport and treatment expenses. Among low-income populations, women might turn to informal healthcare providers and low-cost medicines. At the same time, men spend more of the share of resources on their own health needs. Men, mothers-in-law, or elder family members often take decisions about women's healthcare matters. Also, healthcare providers often require the consent of the spouses of women to provide treatment to women. This is also included in some laws. Significantly, women's decision-making autonomy and access to financial resources determine their use of healthcare services in many sub-Saharan African countries. Similarly, in Pakistan, a 1 percent increase in women's decision-making power led to around 10 percent increase in their use of maternal health services.

Gender biases, gender stereotypes and sexism affect patient care, leading to differential health outcomes for men, women, and gender minorities. As women are stereotyped as fragile and overemotional, their health-related complaints are often seen as exaggerated and their physical symptoms are attributed to psychosomatic rather than physical causes. Even in high-income nations, women often get inferior care, compared to men: they are screened less often for diseases and get less aggressive treatment, and substandard follow-up, as seen in cardiovascular care. In the US, particularly among African American women, despite efforts to address gender disparities, more women die of heart disease compared to similarly positioned men, with evidence of gender bias along the entire range of cardiovascular care. The mistreatment, negligence, and abuse of women by medical staff during labour and delivery is manifested in patriarchal the mindset about women and their complaints; for instance, women are expected to be stoic during childbirth despite the pain. One reason why women in low-income settings avoid institutional births is fear of mistreatment, negating an important strategy for reducing maternal and neonatal mortality. These gender biases have worse consequences when health providers deal with poor, marginalised or gender minority patients. Paper four of this series discusses in detail the reality of gender bias in the health system. **Significantly (and particularly in the context of the current study on ASHAs for which this literature review is being done)**, it is observed that female-coded jobs (nurses and

midwives) are given inferior status, than male-coded jobs (physicians and surgeons). Also, within the same job type, women get lower pay than men. Women are under-represented in higher positions of their profession. This is because of obstacles to women's promotion and retention across the healthcare sector and instances of harassment and assault by colleagues and patients. What is noteworthy is that this is not limited to poor countries. In Japan, it was found that its premiere medical school had for decades manipulated its entrance test to limit female admissions. Also, even in the US and the UK, female doctors earn 20-40 percent less than their male counterparts. In addition, instances of out-of-pocket expenditures by women make them vulnerable to poverty.

Biases in research are another pathway to inequities in health. The funding, conduct, and application of research is shaped by people's cultures, social norms, perceptions, and behaviours. This impacts investment patterns in research, besides undermining equity, justice, and scientific objectivity. There are unspoken assumptions regarding the links between gender and disease. These have led to critical gaps in knowledge, including inadequate research on topics such as reproductive health of men or TB in women. Such biases influence how test variables or populations are chosen, defined, and measured. For instance, researchers have concluded that women are less exposed than men to occupational hazards. What is not considered here is how traditional definitions of work could lead to biased estimates of women's exposure to occupational hazards. By considering occupation as paid work, the statistics drawn from any study based on this will exclude domestic work related hazards, including air pollution, unclean water, and pathogenic and psychological risks of caring for sick members in the family. By relying on gender assumptions of work, the researcher might not consider a farmer's wife as occupationally exposed to hazards, even though she might be involved in farming. Also, definitions of occupational risks might not take into account gendered exposures, such as sexual harassment. These issues are not limited to the area of occupational health. Gender-biased definitions, detection or documentation of disease will negatively impact a proper understanding of health issues and implementation of solutions. Gender bias has been observed especially in clinical research, as women have been excluded or under-represented for much of the modern medical age. While a justification often given is that it is to safeguard women and children from research-related risks, the practice of generalising findings from men to non-pregnant women and ignoring health concerns of pregnant women have harmed the populations they intended to protect.

The observations made in the above paper are of particular relevance in the context of the present study, which evaluates the role of ASHAs in providing access to health services and community awareness under the National Rural Health Mission.

57. “Women’s value: Beyond the business case for diversity and inclusion”, published in ‘Perspectives’, www.thelancet.com, Vol. 393, Feb. 9, 2019.

The above ‘Perspective’ article summarises key points from the *Lancet* issue on women in medicine. It addresses topics from a “system imbued with gender bias” to the “unequal distribution of power within societies”. In recent decades, while discussing equality, ideas of equity and social justice have been overwhelmed by market logic and rhetoric. Describing a session at the Clinton Global Initiative conference on harnessing the power of girls and women for sustainable development, journalist Anand Giridharadas, said the discussions stressed on the competitive advantage and business opportunities to be reaped from women’s rise.

According to the author of the above article, academics in fields related to gender see signs of this encroachment of market values into social justice domains. Research on gender-based violence often begins with accounts of the economic cost of such violence to society. Social science research test evidence points to links between the inclusion of women and minority groups in top management teams in business and better financial performance. As business and the economic impact of gender equality or inequality are key research subjects, it must be understood how social changes have an impact on organisations and economic systems. Similarly, evidence-based business and economic cases for gender equality are considered effective means to rally influential groups that would otherwise ignore social equity issues. Also, it makes business sense for genuinely inclusive organisations and societies to increase meritocracy by providing all individuals equal opportunities to contribute.

There is very little evidence on ground on whether organisations and industries with gender equal leadership better address the interests, needs, and concerns of stakeholders. However, studies point to a positive connection between women’s representation on corporate boards and more socially responsible behaviour. In the government sector, women leaders are more likely to consult with the communities they serve, to promote legislation protecting children and families, public welfare, and they also avoid corrupt practices. While these are just average tendencies, as Christopher Karpowitz and Tali Mendelberg says in ‘The Silent Sex: Gender, Deliberation, and Institutions’, the gender composition of political decision-making groups, along with other factors, could influence men’s contributions, leading to decisions that are more considerate towards the poor and vulnerable. An example discussed by Hoobler and colleagues highlights rare research that shifts focus from “what women can do for firms” to “what firms can do for women and, all employees”.

Three implications are suggested for researchers and activists concerned with social justice in science, medicine, and health. One is to give greater consideration to how gender balance could improve organisational culture. Globally, research institutions of medicine and science, technology, engineering, and mathematics are often seen as fitting the masculinity contest pattern. In the medical profession, there are reports of

gender discrimination, sexual harassment, or psychological abuse masked as feedback. These are not ideal working environments for anyone. Harsh work demands and extremely competitive grants culture of medical research tend to push out those who do not conform to the rigid model of hyper-competition, however talented and passionate they may be. Interestingly, one of the study authors, while discussing with a hospital research director about this system's consequences for gender equality, pointed out that it could be potentially harmful for scientific creativity. Notably, the director voiced strong agreement, saying: "It's killing us all."

Another implication suggested is that a wealth of research remains to be done into the question of the impact of gender diversity on science, medicine, and health policy. It needs to be understood how the gender composition of teams could influence research ideas generated and explored, policy development, medical practice, and the wellbeing of health professionals and patients. Caroline Criado Perez's book, 'Invisible Women: Exposing Data Bias in a World Designed for Men', presents fascinating case studies from diverse areas such as medicine, occupational health and safety, transport, technology, politics, and disaster relief. It explains how unintentionally male-biased perspectives have adverse effects on women's physical and mental health and wellbeing. For instance, while research on workplace health and safety has helped reduce workplace injuries and casualties, risks to female workers have been overlooked. Also, scant attention is paid to prevention of injury from heavy lifting in traditionally female occupations, as women carers and cleaners, too, engage in such activities, perhaps more than men engaged in construction or mining. Similarly, research on workplace-related cancers is less developed in the area of impact of chemical exposure among female-dominated jobs like cleaning and cosmetics. Like other scholars, Criado Perez proposes closing "the female representation gap" as a solution. Perez suggests that when women are involved in decision-making in research and knowledge production, they do not get forgotten, and it helps bring female lives and perspectives out of the shadows. Redressing systemic gender bias could transform the way medical research is done, scientific knowledge is gained, and knowledge to practice is applied.

The effectiveness of rational economic arguments in equality has been questioned by academics: whether it would really help overcome bias against inclusion of women and other disadvantaged groups in leadership roles, and, broadly, within a professional sector. There is limited research comparing the effectiveness of business case arguments and legal or fairness arguments. And there is little evidence to support the conclusion that business-case arguments are better. Therefore, there is need of deeper research into these. Instead of telling people about the competitive advantage of inclusion, it might be important to know if cultural norms can be more effectively changed by pointing out that discrimination and abuse at the workplace are against universal ethics.

Issues of gender equity, justice and women's inclusion in social institutions discussed in the above mentioned paper and in other sections of the **literature review assume**

relevance as the present research evaluates the role of ASHAs, who are female community health workers.

2.2 RESEARCH GAP

There are many studies on community health workers, community health volunteers and Accredited Social Health Activists. In this chapter, the researcher has tried to understand the gaps in the previous studies. The above mentioned studies are conducted globally. Here, some of them focus on the following areas:

- Contribution of ASHAs in strengthening the comprehensive primary health care conducted in state of Bihar
- Evaluation of working profile of ASHAs and their knowledge of health care
- Assessing community health workers in the state of Odisha
- Performance of ASHAs in the four states of Bihar, Rajasthan, Chhattisgarh and Uttar Pradesh
- Awareness and practice of ASHAs in the state of Haryana
- ASHAs' work effectiveness and performance in seven states of the country, i.e., Assam, Bihar, Odisha, Rajasthan, Jharkhand, Andhra Pradesh, Kerala and West Bengal
- ASHAs' knowledge, attitude and practices with regard to child health conducted in the state of Maharashtra.

Numerous such research studies have been conducted in various parts of the country. The only study in Maharashtra is conducted in Palghar district. This study focused on the knowledge, attitude and practice of ASHAs regarding child health.

During the review of literature, the researcher did not find any study conducted on role of ASHAs in providing access to health services and community awareness under the National Rural Health Mission, with reference to the state of Maharashtra. Therefore, the researcher has attempted to explore and study this area.

2.3 SUMMARY

Review of literature is crucial for any research. As a part of this study, the researcher has looked at various research studies, including government data, on community health workers, Accredited Social Health Activists (ASHAs) in particular. In the initial stage of implementation of its community health programme, the Union Ministry of Health and Family Welfare had conducted an evaluation study of ASHAs in seven states. The researcher also reviewed research papers published in national and international journals. Similar schemes implemented in other countries have also been reviewed. This gave the researcher insight into various aspects of the topic currently under study.

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CHAPTER III

RESEARCH METHODOLOGY

3.1 INTRODUCTION

The present chapter deals with the research methodology that was adopted for the current study. The chapter includes the statement of the problem, objectives and hypotheses of the study, research design, sampling procedure, and methods and sources of data collection, tools for data collection, and data processing etc.

3.2 STATEMENT OF THE PROBLEM

Empowerment of CHWs through ASHAs is the cornerstone of NRHM's strategy to enable effective community involvement and participation in healthcare services that use the primary health care approach and pursue the Millennium Development Goals (MDGs). Therefore, in order to maximise India's potential to achieve these goals through the NRHM, it is essential to investigate methods to assess the performance of health support systems, particularly with regard to their processes of selection, recruitment, training, supervision, provision of incentives, and expansion to additional roles.

Questions have always been raised about the education and training of health workers, particularly community health workers, to meet public health needs of the country. This has remained a research gap. Various reports highlight the need for quality education and training in the health sector, with emphasis given to medical education institutions. What is urgently needed is a database that provides comprehensive, reliable, and up-to-date information about health workers.

Adequate number of health workers in the proper places and who are properly trained, motivated and supported are the backbone of an effective, equitable, and efficient public healthcare system. There is a need to ensure productivity through developing individual skills. However, an individual does not operate in a vacuum. Their performance is influenced by the environment in which they work. Opportunities for meaningful work, shared professional norms, monitoring and incentives will inevitably influence their performance.

With adequate training, community health workers are able to carry out a broad range of functions, such as that of service providers, health communicators, local organisers, health educators and agents of change. All of these functions are essential for improving the health of communities.

In the state of Maharashtra, there are 35 districts. Barring Mumbai suburbs and Navi Mumbai, the remaining 33 districts have the ASHA scheme under the National Rural Health Mission. In total, 58902 ASHAs have been appointed in various districts of Maharashtra. The state has developed the software to maintain the database of ASHAs and to monitor their activities. The software lists 51 jobs ASHAs are expected to carry out. All these 51 jobs are incentive based, ranging between Rs 1 for selling a sanitary napkin to Rs 1000 for achieving immunisation of 100% children in her jurisdiction.

The illustration given below is of one block of Nandurbar district. It gives an idea of the incentive paid to ASHAs annually. In Nandurbar district, 1796 ASHAs are working and Shahada is one of the blocks in the district. In Shahada, 326 ASHAs were working during 2012-13.

Incentive Paid to the ASHAs

Incentive in Rs	No. of ASHAs	Percent
0	6	1.8
1-1000	22	6.7
1001-2000	13	3.98
2001-3000	15	4.6
3001-4000	19	5.8
4001-5000	17	5.2
5001-6000	13	3.9
6001-7000	16	4.9
7001-8000	5	1.5
8001-9000	9	2.7
9001-10000	10	3
10001-15000	53	16.2
15001-20000	45	13.8
20001-25000	33	10.1
25001-30000	24	7.3
30001-35000	26	7.9
35001-40000	0	0
40001-50000	0	0
Total	326	

Source: District Health Office, Nandurbar

This table gives a picture of the incentives paid to ASHAs. It gives a break-up of the amounts they received and the percentage of ASHAs who got the various amounts. It can be seen that only 1.8 percent of ASHAs received no incentives (Rs 0). The most number of ASHAs (16.2 percent) received incentives in the range of Rs 10000 to Rs 15000. That is, if it is considered that each of them got an average Rs 12500 annually, the earning of each ASHA is Rs 1041 monthly. However, considering the time they spend in the community, the amount is very less. After reviewing secondary data available with the state government, it is seen that ASHAs work on specific responsibilities, such as promoting institutional delivery of SC, ST and BPL category women, and get incentives for the same. Here, it can be seen that they do not get incentives for promoting institutional delivery among Open category women. This has worked against the objective of serving the community as a whole. Out of 51 assigned jobs, ASHAs are prominently involved in carrying out the following eight jobs:

1. Motivating pregnant women for institutional delivery under JSY in tribal areas (incentive Rs 350)
2. Completion of DOTS (RNTCP) (Rs 250)
3. Radical treatment of malaria positive patients sent to BS/PHC with RDK test (Rs 5)
4. Bringing pregnant women for HIV testing to PPTCT Centre (Rs 20)
5. Child immunization for age 0 to 1 years (Rs 100)
6. Child immunization for age 1 to 2 years (Rs 50)
7. HBNC (Rs 250); ASHA monthly meeting (Rs 150)
8. Quarterly meeting of ASHA on immunization; yearly 4 meetings (Rs 75)

The above information is on the basis of data of incentives given to ASHAs in Shahada block of Nandurbar district. Jobs carried by ASHAs may differ from district to district, but there may not be much difference. It is felt that there is a gap in the jobs assigned to ASHAs and jobs ASHAs are actually performing. Considering these statistics, a comprehensive study of the overall ASHA scheme is needed. Some of the crucial points to be studied in detail are regarding the selection process, education,

training, remuneration and job responsibility of community health workers. Such a study is important from the perspective of its implications for the effective functioning of the health system. Therefore, under the given circumstances, it would be practical and meaningful to focus on the topic under the title, ‘An Evaluation Study of ‘ASHA’ in Providing Access to Health Services and Community Awareness under National Rural Health Mission: With Reference to the State of Maharashtra’.

For the study of “An Evaluation Study of ‘ASHA’ in Providing Access to Health Services and Community Awareness Under National Rural Health Mission: With Reference to The State of Maharashtra.” Researcher selected Nandurbar and Sangli districts of Maharashtra. Shahada and Miraj blocks were selected from respective districts. From this study researcher are interviewed 280 ASHAs, 140 ASHAs from each block of Nandurbar and Sangli districts. Nandurbar is tribal and high priority district and Sangli is non-tribal and not listed as high priority district.

Respondents of the study are female health activists working in the village to provide health care services. Which are belongs from the age group of 20 to 45 years.

Selection process of the ASHAs is laid down in NRHM mission document. It includes age, education, caste, marital status. Researcher has tried to explore the adopted selection process by interviewing ASHAs, by asking questions on the age, education, marital status etc. Which gives an idea of adopted process very clearly and bring out if there are any flaws in selection process.

Jobs carried by ASHAs may differ from district to district, but there may not be much difference. It is felt that there is a gap in the jobs assigned to ASHAs and jobs ASHAs are actually performing. Considering these facts, a comprehensive study of the overall ASHA scheme is needed. Some of the crucial points to be studied in detail are regarding the selection process, education, training, remuneration and job responsibility of community health workers. Such a study is important from the perspective of its implications for the effective functioning of the healthcare system. Therefore, under the given circumstances, it would be practical and meaningful to focus on the topic under the title, ‘An Evaluation Study of ‘ASHA’ in Providing Access to Health Services and Community Awareness under National Rural Health Mission: With Reference to the State of Maharashtra’.

The community Health Worker called as ASHA who is the mediator between community and health care services.

ASHA workers are facing various problems while performing their duties, roles and responsibilities. Therefore to understand their problems, perception, level of awareness, work satisfaction. The present study was undertaken for the research.

3.3 SCOPE OF THE STUDY

The present research study was universalized with Nandurbar and Sangli district. The Shahada block from Nandurbar district and Miraj block from Sangli district was the universe of the study. Total 140 ASHAs was interviewed from each block. Kahatul; Total 18 Primary Health Centers were visited from both the blocks. PHC Kalsadi; PHC Kusumwada; PHC Mandana; PHC Padalda; PHC Prakasha; PHC Sarangkhedra; PHC Shahana; PHC Sulwada; PHC Wadala and PHC Wagharde from Shahada block of Nandurbar district and PHC Arag; PHC Bhoose; PHC Erandoli; PHC Kawlapur; PHC Mhisahl; PHC Nandre; PHC Khanderajuri are from Miraj block of Sangli district. The ASHAs between the age group of 18 to 45 was the respondents were involved in the study. Besides ASHAs District Health officer, Block Health officers, Medical officers of the concern PHC, ANM from respective PHCs, District Community Mobiliser, Block Community Mobiliser, Block Facilitators and Facilitators were involved in the study. In this study the perception of ASHA workers, level of awareness, level of work satisfaction, roles and responsibilities of ASHA workers and significantly the problems faced by workers etc. aspects have been studied in this research.

3.4 SIGNIFICANCE OF THE STUDY

- The present study will give a clear and comprehensive picture about the functioning of ASHAs as community health workers and as agents of social change.
- The effectiveness in ASHAs' performance will bridge the gap between the community and the health system in terms of strengthening the latter through community participation and optimum utilisation of healthcare services.
- In NRHM, the role of ASHA as health communicator, local organiser, health educator and agent of change is recognised.

- MOs, ANMs and other health service providers will be benefitted from present study.
- ASHAs will get more training on community mobilisation.
- If recommendation regarding to route some of the cash benefit schemes through is implemented. ASHAs may get respect from community.
- ASHAs may get respect from service providers.
- ASHAs remuneration can be change.
- Involvement of community will be there in preparation of PIP of the village.
- Community participation and mobilisation will be increase.
- Community monitoring will be there.
- The present study will give a clear and comprehensive picture about the functioning of ASHAs as community health workers and as agents of social change
- Presents exhaustive research on the study topic and could be a valuable resource for policy making and future research.
- This study will help programme managers and policy makers bring efficiency in selection, training, support, monitoring, handholding, supervision, evaluation and work performance of ASHA workers in the state of Maharashtra.

3.5 RESEARCH QUESTIONS

- What are the roles and responsibilities of ASHAs?
- What are the problems faced by ASHAs while performing their duties?
- What strategies are ASHAs following to overcome their problems?
- How effective are the interventions followed by ASHAs to overcome problems?
- What strategies are ASHAs using to get community participation for effective programme delivery?

3.6 OBJECTIVES OF THE STUDY

This study evaluates the role of the ASHA scheme in providing access to health services and creating community awareness under the National Rural Health Mission, with reference to the state of Maharashtra. It aims:

1. To study the perception of ASHAs about their roles and responsibilities
2. To look at the appropriateness of the role of ASHAs and the work done by them under the current circumstances
3. To understand the socio-economic and educational status of ASHAs
4. To study the remuneration pattern by correlating it with jobs assigned to ASHAs
5. To identify the views/outlook of other service providers and stakeholders on ASHAs' roles and responsibilities
6. To explore the problems faced by ASHAs while performing duties.

3.7 VARIABLES OF THE STUDY

Independent Variables	Dependent Variables
Education	Knowledge about health indicators
Standard of living index	Acceptance of job responsibility
Annual income of family	Standard of living index
Geographical area of working of ASHA	Level of Work Satisfaction
Incentives received	Level of Work Satisfaction
Community awareness	Access to health care service
Training	Knowledge about health indicators
Roles and Responsibilities	Effectiveness of Health Care services

3.8 HYPOTHESES

1. There is a difference in perception of ASHAs about their roles and responsibilities as per geographical area.
2. ASHA workers are dissatisfied about the incentive they receive.

3.9 OPERATIONAL DEFINITIONS OF THE CONCEPTS

National Rural Health Mission is initiative of Government of India under ministry of Health of Family Welfare. NRHM aims to provide health care services to the vulnerable community of the rural areas. Under NRHM government aims to improve overall health care system in the country. NRHM aims to increase in expenditure on health care from 0.9 % of GDP to 2-3% of GDP. One of the key components of NRHM is to appoint female health activist in every village of the country. There is a integration of health concerns with determinants of health i.e. sanitation, hygiene, nutrition and safe drinking water. Unique effort under NRHM is to prepare programme implementation plan of the village/district as per the health care needs of particular village/district.

ASHA: Accredited Social Health Activist, is a women selected as healthcare service provider from the village. Who has selected from the Gramsabha of the village. The age should be 18 to 45 of years. Her education would be minimum 10th. Person is a native of the said village. Preference is given to widow, deserted women. Who is getting incentive on the basis of performance. Who has to work within the population of 1000. She has to work in the community to provide health care service. She is interface between ANM and community. She is first port of call in any kind of health care need.

Access to Health Care Service: Health care services ANC and PNC care, universal immunization, family planning, non communicable diseases should in the reach of every citizen irrespective of level of education, type of housing, place of residence, income, and social groups.

3.10 ETHICAL CONCERNS IN RESEARCH

In the study, the researcher followed basic principles of ethics in research. It was ensured that the study would not be harmful to anyone and the rights and dignity of participants/respondents would be maintained. While interviewing respondents, their privacy, anonymity and confidentiality was strictly maintained. Informed consent was obtained from the respondents in the local language. Liberty was given to respondent to withdraw any time from the process of the study. The entire process of study was non-exploitative. Accountability and transparency were maintained.

The researcher obtained written permission from the government to conduct the study. The written permission letter was circulated to all concerned government officials, including the District Health Officer of the concerned districts and medical officers of concerned PHCs of the districts.

The researcher has ensured and maintained professional relationship and ethical standards with all respondents.

3.11 RESEARCH METHODOLOGY

3.11.1 RESEARCH DESIGN

The descriptive research design has used for the present study. The stratified sampling method has been used for data collection. Data has been collected from various sources, such as supervisors at various levels, and ASHAs.

3.11.2 SAMPLING DESIGN

3.11.2.1 Universe of the Study

The study was universalized with the limitation of Nandurbar and Sangli districts. The Maharashtra government health department appointed 58902 ASHAs up to May, 2013. There are eight administrative circles of the health department in the state. For the purpose of this study, the researcher has selected two districts on the basis of performance of health indicators. One district was Nandurbar, which is low performing and listed as a high priority district; another is Sangli, which is a better performing and not listed as high priority district. Total 3385 ASHAs are appointed in both the district.

3.11.2.2 Sample Size

A total of 280 ASHAs have been interviewed from Nandurbar and Sangli districts. A total of 140 ASHAs were interviewed from each district; the sample size is 8.27 percent of the total universe, i.e., 3385.

Besides interviewing ASHAs, supervisors at all levels were interviewed, including DHOs, DRCHOs, MOs of concerned PHCs, ANMs of concerned PHCs, ASHA coordinators, block facilitators, facilitators and members/chairmen of VHSNCs.

Focus group discussions of beneficiaries from the selected villages were also conducted.

3.11.2.3 Sample Selection Methods and Technique

The scope of the study is to understand the roles and responsibilities of ASHAs in providing access to health services and creating community awareness under the National Rural Health Mission. The Maharashtra government health department appointed 58902 ASHAs up to May, 2013. Maharashtra is the third largest state in the country and ranking second in population. As per Census 2011, total population of Maharashtra state is 1123.72 lakh. Of this, about 55 percent population resides in rural areas, where NRHM is functioning. There are 35 districts in the state, of which two districts are totally urban, i.e., Mumbai and Mumbai suburbs.

ASHAs were selected using the probability simple random method. One block from each district was selected through the lottery technique by random process. Eighteen PHCs from the selected blocks and 140 ASHAs have been covered from the jurisdictions of the concerned PHCs.

District officers and respective block officers, MOs of concerned PHCs and ANMs of concerned PHCs have been interviewed. Focus group discussions of VHSNC members/chairmen and beneficiaries of the selected villages were also done.

3.2.4 Sources of Data Collection

Both primary and secondary sources of data was collected for the current study.

a. Primary Sources

The primary data was collected from the ASHAs and executive members of health facilities. A semi-structured interview schedule and interview guide was used for all the respondents.

b. Secondary Sources

Secondary data sources were included research studies, articles, and published and unpublished reports collected through various publications and from websites and libraries. For review of literature, the researcher used books, magazines, research journals, national and international research articles published in journals, besides case studies and newspaper articles.

3.2.5 TOOLS OF DATA COLLECTION

Interview Schedule

The semi-structured interview schedule was prepared for ASHAs. This tool was found to be more appropriate as it has the potential to overcome limitations of the structured tools as well as unstructured tools.

The interview schedule was divided into eight sections to collect the required data from ASHAs offer their services to the community to help them access health services and to ensure their participation in the scheme.

Section I: Identification details: It deals with the background characteristics and personal information of ASHAs.

Section II: Training: It deals with the various trainings given to ASHAs.

Section III: ASHA's knowledge: This section assessed ASHAs' knowledge of various schemes.

Section IV: ASHAs' performance and awareness: It assessed the awareness and performance of ASHAs.

Section V: Roles and responsibilities: This section basically includes information collected about the roles and responsibilities of ASHAs.

Section VI: Cash incentives: In this section, data has been collected on incentives paid to the ASHAs.

Section VII: Problem faced by ASHAs: For this section, data was collected regarding the problems faced by ASHAs.

Section VIII: Perception of ASHAs: This section details how ASHAs work as community mobilisers.

Interview Guide

This tool was used to collect information from supervisory cadre i.e. MO, ANM and mobilisers at various levels

Focused Group Discussions

In addition to the personal interview and participatory and non-participatory observation, focused group discussions were used for collection of data. A separate check-list was prepared for the discussion with the beneficiaries.

Observation

Taking into consideration the nature of the study, both participatory and non-participatory observation methods were used to collect data.

3.2.6 DATA PROCESSING

The data collected from the ASHAs and executive members were subjected to verification, quantification and coding by referring a coding key. The coded data were entered in the computer for data processing and analysis. The statistical package for social sciences (SPSS) is used to calculate percentile, frequency distribution tables and cross tabulation, and co relation values.

3.12 PILOT STUDY

The pilot study was conducted in order to evaluate the suitability and validity of the research tools. The semi-structured interview schedules were administered with a selected sample for ASHA. This has helped standardise the tools with necessary modifications, including deletions and additions.

3.13 MAIN STUDY

The main study was done in a period of six months. Since it was required to visit all PHCs from the selected blocks, continued field work was not possible. At least two to three visits were made to each PHC. Sufficient amount of time was spent with all the respondents in order to collect factual data. About an hour was spent with each

executive member to collect primary data and useful insights using the interview guide. The data collected for the pilot study were not included in the main study.

CHAPTER IV

DATA ANALYSIS AND INTERPRETATION

4.1 INTRODUCTION

This chapter gives an analysis and interpretation of the various factors of ASHA and its role in providing access to health services and creating community awareness. The chapter is organised under various subheadings according to the objectives of the study. As the study is descriptive in nature, it has used the descriptive statistical analysis method, using counts, percentages, proportions and frequency distribution tables. The analysis of data is based on primary data collected by the researcher in the area of study. The insights gained from informal interviews, observations and focus group discussions are included and presented along with the analysis and interpretation.

4.2 SOCIO-ECONOMIC STATUS OF THE ASHA WORKERS

4.2.1 Age Distribution of the Respondents

Table No. 1 Age Distribution of Respondents

Completed Age	Frequency	Percent
21 to 30 years	82	29.3
31 to 40 years	149	53.2
41 and above	49	17.5
Total	280	100.0

Table No. 1 shows age distribution of ASHAs. The age of ASHAs is classified into three broad categories: 21 to 30 years, 31 to 40 years and 41 and above.

A total of 280 ASHAs were interviewed for the study. Majority (53.2 %) of them are in the age group of 31 to 40 years, followed by 29.3% in the 21 to 30 years age group, and 17.5% in the 41 and above age group.

It shows that most of the ASHAs are in their middle age and are actively participating and working as healthcare providers.

4.2.2 Marital Status of Respondents

Table No. 2 Marital Status of Respondents

Marital Status	Frequency	Percent
Married	245	87.5
Widow	27	9.6
Deserted	6	2.1
Divorced/Separated	2	0.7
Total	280	100.0

Table No. 2 shows the marital status of the ASHAs. Majority (87.5%) of ASHAs are in the married category. Widowed ASHAs constitute 10 percent, 2 percent are deserted, and 0.7 percent ASHAs are divorced or separated. The table shows that there is good representation of widowed and deserted women in the selection of ASHAs.

Among all selected ASHAs, majority of them are married. Though the representation of widowed and deserted category of women is relatively less, compared to married ASHAs, they have been given a fair representation. It shows that the selection criteria stipulated in the guidelines is satisfying.

4.2.3 Educational Qualification of Respondents

Table No. 3 Educational Qualification of Respondents

Qualification	Frequency	Percent
Illiterate	1	0.4
Primary	4	1.4
Secondary	167	59.6
Higher secondary	82	29.3
HSC +	26	9.3
Total	280	100.0

Table No. 3 shows the educational background of ASHAs. The education of the respondents was classified into five groups: illiterate, primary, secondary, and higher secondary and higher secondary and above.

Out of the 280 respondents, more than half of them (59.6%) are educated upto secondary school, followed by higher secondary (29.3%). Some respondents (9.3%) have completed education upto graduation and postgraduation. Only one respondent is illiterate.

It is clear from the table that most respondents studied up to secondary school. It is seen here that the selection criteria are followed. Wherever women do not satisfy the criteria of minimum of secondary school education, the education criteria for selection has been relaxed somewhat, particularly in tribal areas, such as Nandurbar. Only one respondent from Nandurbar district was found illiterate. This is very negligible. It has been observed by the researcher that a particular ASHA was selected in 2007 as, at that time, there was no awareness among the community and women were not coming forward to work as ASHAs. Therefore, the criterion of minimum qualification was relaxed, so that women may come forward to work as ASHAs.

4.2.4 Religion of Respondents

Table No. 4 Religion of Respondents

Religion	Frequency	Percent
Hindu	246	87.9
Muslim	6	2.1
Christian	2	0.7
Buddhist/ Neo Buddhist	9	3.2
Jain	5	1.8
Animist (Tribal religion)	12	4.3
Total	280	100.0

Table No. 4 shows the religion of the respondents. Respondents are found to be from Hindu, Muslim, Christian, Buddhist, Jain and Animist faiths.

Majority of the respondents (87.9%) belong to the Hindu religion. Some respondents (4.3%) followed Animism (tribal religion). Neo Buddhists and Buddhists constituted 3.2%. Muslims were 2.1 percent. Respondents from Jain religion were 1.8%. Only two were Christians.

The table clearly indicates that from the selected sample of 280, majority (88%) of ASHAs are from Hindu religion. With respect to the other religions, it is below 5 percent. This may be due to the country's demographic Hindu majority factor.

4.2.5 Social Category of Respondents

Table No. 5 Social Category of Respondents

Caste Category	Frequency	Percent
SC	71	25.4
ST	73	26.1
OBC	42	15.0
Open	60	21.4
SBC	9	3.2
VJ/NT/DNT/SNT	25	8.9
Total	280	100.0

Table No.5 depicts the social category of respondents. It has been classified into six categories: Open/General, Scheduled Caste (SC), Schedule Tribe (ST), Other Backward Class (OBC), Special Backward Class (SBC) and Nomadic and De-notified Tribe.

A higher number of respondents (26.1%) belong to the ST category and an almost equal number of respondents (25.4%) belong to the Schedule Caste. Open category respondents are 21.4%. Respondents from OBC category constitute 15.0%. Some of the respondents belong to NTDNT and OBC, 8.9% and 3.2% respectively.

The researcher wanted to know the social representation of ASHAs in the selected area for the study. It is clearly indicated that majority of ASHAs are from the ST category, followed by those from the SC category. Good representation of SC and ST people are seen in the selection of ASHAs. The policy of giving proper representation in government schemes is well maintained in both the districts while selecting ASHAs.

4.2.6 Occupation of Family Members of Respondents

Table No. 6 Family Occupation of Respondents

Family Occupation	Frequency	Percent
Cultivator (Large farmer)	9	3.2
Cultivator (Small/Marginal farmer)	68	24.3
Agricultural Labour	56	20.0
Non-Agricultural Labour	34	12.1
Government Service	6	2.1
Private Service	31	11.1
Business	22	7.9
Self-Employment	41	14.6
None	13	4.6
Total	280	100.0

Table No. 6 explains the primary occupations of the family of the respondents. The occupations are classified into eight groups: cultivator (large farmer), cultivator (small/marginal farmer), agricultural labourer, non-agricultural labourer, government service, private service, business, and self-employment.

It is seen from the table that around a quarter of the respondents' family members (24.3%) are engaged in cultivation, either as small cultivators or large farmers (3.2%). Agricultural labourers constitute 20% of respondents. 12% respondents' families are working as non-agricultural labourers. Self-employment is reported by 14.6% respondents. Respondents in private service, business and government service constituted 11.1%, 7.9% and 2.1%, respectively. Out of 280 respondents, only 4.3% respondents' families are not engaged in any occupation.

It is seen that maximum (44%) of the respondents' spouses are engaged in cultivation as occupation.

It clearly shows that half of the respondents' families are from the low-income group.

4.2.7 Occupation of Respondents

Table No. 7 Occupation of Respondents

Occupation of ASHA	Frequency	Percent
Cultivator (Large farmer)	2	0.7
Cultivator (Small/Marginal farmer)	18	6.4
Agriculture Labour	28	10.0
Non-Agricultural Labour	11	3.9
Private Service	5	1.8
Business	7	2.5
Self-Employment	30	10.7
Home-based worker	1	0.4
None	178	63.6
Total	280	100.0

Table No. 7 explains the primary occupations of the respondents. The occupations of the respondents are classified into eight groups: cultivator (large farmer), cultivator (small/marginal farmer), agricultural labour, non-agriculture labour, government service, private service, business, and self-employment.

Maximum respondents do not have any other occupation as a primary occupation (63.6%). Self-employment is reported by 10.7%. 10% of respondents are engaged in agricultural labour. Self-employment and agricultural labour are two main categories in which respondents are engaged. The remaining 15.7% respondents are engaged in cultivation, private service, non-agricultural labour and business.

It is clearly seen that a large number of respondents are not engaged in any occupation as primary occupation. It means their livelihood is based on income they get from working as ASHAs.

4.2.8 Type of House of Respondents

Table No. 8 House Type of Respondents

House Type	Frequency	Percent
Kutccha	141	50.4
Semi-Pucca	92	32.9
Pucca	47	16.8
Total	280	100.0

Table No. 8 speaks about the types of houses of respondents. It has been classified into three groups: Kutccha, pucca and semi-pucca.

From the data, it is seen that about half of the respondent families (50.4%) have kutccha type houses. Some have pucca and semi-pucca houses, at 16.8% and 32.9%, respectively.

Out of 280 respondents, half of them stay in kutccha houses. It is evident from the above figures that they are from economically poor sections of society. Half of the respondents are from the lower economic strata.

4.2.9 Type of Family of Respondents

Table No. 9 Type of Family of Respondents

Family Type	Frequency	Percent
Single person	17	6.1
Nuclear family	152	54.3
Joint/Extended family	111	39.6
Total	280	100.0

Table No. 9 explains the family status of respondents. They were asked about their family status. 54.3 percent respondents said they were staying in nuclear families, 39.6 percent said they were staying in joint/extended families, and 6.1 percent said they were staying single.

From the above figures, it is clear that majority (54.3%) of ASHAs are staying in nuclear families. It is also observed that the trend of nuclear families has increased in rural areas irrespective of economic status. The researcher observed that women who are staying single are either widowed or separated/deserted. As they are working as ASHAs and getting some income every month, it has made them economically independent. This is a positive sign of women empowerment.

4.2.10 Facilities Available at Home

Table No. 10 Facilities at Home

Facilities at Home	Yes	No	Total
Piped water supply	199 (71.1%)	81 (28.9%)	280 (100.0%)
Electricity	249 (88.9%)	31 (11.1%)	280 (100.0%)
Separate kitchen	185 (66.1%)	95 (33.9%)	280 (100.0%)
Toilet	221 (78.9%)	59 (21.1%)	280 (100.0%)

Table No. 10 gives details of piped water, electricity and separate kitchen facilities at the respondents' homes. The 280 respondents were asked 'yes or no' type questions about whether they had water, electricity and separate kitchen facilities at home.

71.1 percent respondents reported that they have water facility at home. It means that despite more than 50 percent respondents staying in kutccha houses, it has not affected their access to water.

About 88.9 percent respondents reported that they have electricity facility in their homes. In spite of more than 88.9 percent respondents staying in kutcccha houses, it has not affected their access to electricity.

About 66.1 percent of respondents reported that they have separate kitchen at home. It shows that in spite of more than 66.1 percent respondents staying in kutccha houses, they have a room for separate kitchen.

78.9 percent respondents reported that they have toilet facility at home.

From the above data, it is clear that though half of the respondents stayed in kutccha homes, more than 50 percent of them have basic facilities of water, electricity, separate kitchen and toilet at home. Even though more than 66.1 percent respondents stay in kutccha houses, they have attached toilets at home, indicating their concern for health and environmental hygiene.

4.2.11 Family Size of Respondents

Table No 11 Family Size of Respondents

Family Size	Frequency	Percent
Single	2	0.7
2 members	6	2.1
3 to 5 members	186	66.5
More than 5 members	86	30.7
Total	280	100.0

Table No. 11 explains the size of the families of respondents. All 280 respondents in both Shahada and Miraj blocks of Nandurbar and Sangli districts, respectively, were asked whether there were single, two, 3-5 or more than 5 members in their families.

It was found that the family size of respondents ranged from one to nine persons in a family. More than half (66.5%) of the respondents are seen to have 3 to 5 persons in their families. The second greatest number of respondents (30.7%) reported having more than 5 persons in their families. Very few reported having single (6 respondents) and two members (2 respondents) in their families.

It is observed from the data that respondents having more than four members in their families may be staying in joint families with in-laws.

4.2.12 Number of Male Members in the Family

Table No 12 Number of Male Members in the Family

Males in Family	Frequency	Percent
No male member	6	2.1
1 member	35	12.5
2 members	119	42.5
3 members	90	32.1
4 members	26	9.3
5 members	3	1.1
6 members	1	0.4
Total	280	100.0

Table No. 12 depicts the number of male members in the family of respondents. The researcher asked all 280 respondents in Shahada and Miraj blocks of Nandurbar and Sangli districts, respectively, about the number of male members in their families.

Out of 280 respondents, 12.55 percent of them said they had only one male member in the family. Most respondents (42.5%) reported having two male members in their families, followed by 32.1 percent reporting three male members, 9.3 percent reporting four male members, 1.1 percent five male members, and 0.4 percent reporting six male members. However, 2.1 percent respondents reported not having any male member in the family.

The above table clearly indicates that majority (42.5%) of respondents have two male members in their families, whereas 2.1 percent do not have any male member in their family.

4.2.13 Number of Female Members in the Family

Table No 13 Number of Female members in the Family

Female Members	Frequency	Percent
1 member	49	17.5
2 members	104	37.1
3 members	73	26.1
4 members	41	14.6
5 members	10	3.6
6 members	3	1.1
Total	280	100.0

Table No. 13 explains about the number of females members in the family of the respondents. The researcher asked respondents how many female members were there in their families.

17.5 percent respondents said there was only one female member in their families. Maximum respondents (37.1%) reported having two females in their families. 26.1 percent respondents have three females in their families, 14.6 percent have four females, 3.6 percent have five females, and 1.1 percent have six females in their families.

From the data, it is clear that maximum (37%) respondents have two female members in their families; whereas 17.5% respondents have one female member in their families.

4.2.14 Number of Dependants

Table No 14 Total Number of Dependants

Dependants	Frequency	Percent
No dependant	21	7.5
1 member	38	13.6
2 members	136	48.6
3 members	56	20.0
4 members	20	7.1
5 members	8	2.9
7 members	1	0.4
Total	280	100.0

Table No. 14 shows the total number of dependants in the families of the respondents. The researcher asked all 280 respondents from Shahada and Miraj blocks of Nandurbar and Sangli districts, respectively, about the number of dependants in their families.

It was found that 48.6 percent respondents had two dependant members in their families, followed by 20.0 percent respondents with three dependants, 7.5 percent without any dependants, 7.1 percent with four dependants, 2.9 percent with five dependants, and 0.4 percent with seven dependants.

The data in the above table shows that most respondents have two dependants in their families. It means that both the respondents and their spouses need to work to earn their bread, even if there are only two dependants.

4.2.15 Selection Process of ASHAs

Table No. 15 Selection Process of ASHAs

Selection Process of ASHAs	Frequency	Percent
Grampanchayt	261	93.2
Village Health Committee	3	1.1
ANM/MPW	10	3.6
Sarpanch/Pradhan	1	0.4
ASHA supervisor	1	0.4
Anganwadi	3	1.1
Medical officer	1	0.4
Total	280	100.0

Table No. 15 explains the selection process of ASHAs. All 280 respondents were asked if they were selected through the Grampanchayat, Village Health Committee, ANM/MPW, Sarpanch/Pradhan, ASHA supervisor, Anganwadi, or Medical Officer.

93.2 percent respondents said the selection process was through the Grampanchayat. Only 6.8 percent respondents cited other sources of selection.

The researcher found during interviews with ASHAs that though some of them were appointed at the initial stage of the programme in 2007, their candidature was also sent through the Grampanchayat. Later, this practice was changed and selection was made in the Gramsabha and the list of selected candidates was sent to the taluka health officer (THO). The taluka health officer finalised the list and sent it to the district health officer (DHO), from whom ASHAs got their appointment letters. It was observed that the selection process was transparent.

4.2.16 Length of Service as ASHA

Table No. 16 Length of Service as ASHA

Length of Service as ASHA	Frequency	Percent
Up to one year	27	9.6
1 to 5 years	40	14.3
More than 5 years	213	76.1
Total	280	100.0

Table No. 16 shows the length of service of respondents appointed as ASHAs.

The researcher listed the length of service of ASHAs under three broad categories of up to one year, one to five years and more than five years. The 280 respondents were from both the districts of the selected blocks.

It is seen that 76.1 percent of the respondents reported serving as ASHAs for more than five years; 14 percent for one to five years and 10 percent for less than one year.

It is clearly indicated that 76.1% ASHAs have a long experience of more than five years. It shows their dedication and commitment towards their work as ASHAs.

4.2.17 Availability of ASHA Kit

Table No. 17 Received ASHA Kit

Received ASHA Kit	Frequency	Percent
Yes	253	90.4
No	27	9.6
Total	280	100.0

Table No. 17 depicts the number of ASHAs who received medical kits. The researcher asked yes-no question to all 280 respondents.

Majority 90.4 percent of ASHAs said they received medical kits. Only 9.6 percent of ASHAs reported not receiving medical kits.

After successful completion of induction training, all ASHAs are given medical kits containing basic medicine for first aid and some minor ailments. The above data shows that majority of ASHAs received medical kits. The researcher gathered from discussions during field work that some ASHAs did not receive medical kits as they may have recently joined as ASHAs, or may not have completed their induction training.

4.2.18 Available Compulsory/Additional Items Included in Kit

Table No. 18a Compulsory Items Included in Kit

Compulsory Items in Kit	Frequency	Percent
Yes	253	90.4
NA	27	9.6
Total	280	100

Table No.18b Additional Items Included in Kit

Additional Items in Kit	Frequency	Percent
No	253	90.4
NA	27	9.6
Total	280	100

The researcher made two categories of this question. One is about essential medicines in the kit and the second is about additional medicines in the kit. Though majority of ASHAs (90.4%) received essential medicines in the kit, it was not being replenished from time to time.

Table No. 18a relates to ASHAs who were supplied medical kits. The question was asked only to those ASHAs who had responded with 'yes' to the previous question on whether they had received ASHA kit. As per the guidelines, ASHAs are supplied medical kits containing 29 types of medicines, including oral rehydration salts, Paracetamol tablets, Syrup Paracetamol, IFA tablets (including iron syrup), tablet Punarvadu Mandur, Vitamin A, tablet Dyclomin, tablet Zinc, Tetracycline ointment tube, G.V. Paint, Cotrimoxazole syrup, Paediatric Cotrimoxazole tablets, spirit, soap, sterilised cotton, bandages, antiseptic solution, Nischay kit, oral pills, emergency contraceptive pills, condom, Co-trimoxazole kit, water testing kit, salt testing kit, rapid test kit for malaria, disposable delivery kit, IEC material (posters, leaflets, handbills, etc...) and ASHA guidelines in local language.

Similarly, Table No. 18b shows additional items available in the kit. Majority of ASHAs (90.4%) did not receive additional items in the kit. Most of the items listed in the kit are not required by ASHAs as they do not perform the jobs for which they are needed. Instead, they are performed by ANMs, or other health workers. Therefore, it is felt that the list of medicines in the kit given to ASHAs needs to be shortened.

4.2.19 Serving Population against Geographical Area

Table No. 19 Serving Population against Geographical Area

Serving Population	District Name		Total
	Nandurbar	Sangli	
Up to 1000 persons	45 (32.1%)	44 (31.4%)	89 (31.8%)
1000 persons	27 (19.3%)	27 (19.3%)	54 (19.3%)
1001 to 1499 persons	42 (30.0%)	64 (45.7%)	106 (37.9%)
1500 persons	10 (7.1%)	3 (2.1%)	13 (4.6%)
More than 1500 persons	16 (11.4%)	2 (1.4%)	18 (6.4%)
Total	140 (100.0%)	140 (100.0%)	280 (100.0%)

Table No. 19 shows the population served by ASHAs. The population an ASHA serves is divided into categories of population upto 1000, 1000, 1001 to 1499, 1500, and more than 1500.

As per the norms, ASHAs in tribal areas are supposed to serve a population of 1000 and in areas other than tribal they are supposed to serve a population of 1500.

Nearly half of the respondents (48.5%) in Nandurbar district are seen to serve more than 1000 population. Only two respondents served more than 1500 population in Sangli district.

The table shows that around 50 percent of ASHAs serve a population of more than 1000 in Nandurbar (tribal) district. However, this may put unnecessary pressure on them and lower their performance. ASHAs serving a population less than 1000 get less incentives. Meanwhile, only five ASHAs were found serving a population of 1500 and more. In Sangli district, almost all respondents (96.5%) served population less than 1500. Only 3.5 percent respondents served more than 1500 population.

4.2.20 Households Served by ASHAs

Table No. 20 Households Served

HHs Served	Frequency	Percent
Up to 150	40	14.3
151 to 200	80	28.6
200 +	160	57.1
Total	280	100.0

Table No.20 explains the number of households served by ASHA respondents. Three broad categories are made: upto 150 households, 151 to 200 households, and more than 200 households.

About 57.1 percent respondents are seen serving more than 200 households. One fourth of the respondents (28.6%) serve 151 to 200 households, and 14.3 percent serve 150 households.

From the above table, it can be seen that ASHAs are overburdened as more than 50 percent of them serve 200 plus households.

4.2.21 Distance of Farthest HH from ASHA's Residence

Table No. 21 Distance of Farthest HH from ASHA's Residence

Farthest HH from ASHA's Residence	Frequency	Percent
Less than 1 km	129	46.1
Upto 1km	51	18.2
1 to 2 km	37	13.2
2 to 3 km	31	11.1
3 to 4 km	12	4.3
More than 4 km	20	7.1
Total	280	100.0

Table No.21 depicts the distance respondents travel to render their services as ASHAs. This question was asked to all 280 respondents from Shahada and Miraj blocks of Nandurbar and Sangli, respectively.

The six broad categories of distance from the respondents' residence are: less than 1 km, upto 1 km, 1 to 2 km, 2 to 3 km, 3 to 4 km, and more than 4 km.

The table shows that maximum respondents work within 1 km from their place of residence (46.1%), followed by 18.2 percent within upto 1 km from place of residence, 13.2 percent within 1 to 2 km from place of residence, 11.1 percent within 2 to 3 km from place of residence, 4.3 percent within 4 km from place of residence, and 7.1 percent more than 4 km from place of residence.

The data indicates that maximum number of ASHAs work within the proximity of their place of residence.

4.2.22 Time Taken in Minutes to Farthest HH from ASHA's Residence

Table No. 22 Time Taken in Minutes to Farthest HH from ASHA's Residence

Time Taken in Minutes	Frequency	Percent
Up to 10 minutes	78	27.9
11 to 20 minutes	83	29.6
21 to 30 minutes	66	23.6
More than 30 minutes	53	18.9
Total	280	100.0

Table No.22 shows the time taken by respondents to reach beneficiaries' houses on foot. The 280 respondents from the Shahada and Miraj blocks of Nandurbar and Sangli districts, respectively, were given four travel time categories to choose from: upto 10 minutes, 11 to 20 minutes; 21 to 30 minutes, and more than 30 minutes.

It was seen that maximum ASHAs (29.6%) took 11 to 20 minutes to reach beneficiaries, followed by 27.9% ASHAs who said it took them 10 minutes, 23.6% reporting 21 to 30 minutes, and 18.9% reporting it took them more than 30 minutes to reach beneficiaries.

Data from the above table shows that most respondents required 11 to 20 minutes to reach the houses of beneficiaries.

4.3 TRAINING OF ASHAs

As per the guidelines in the mission document, ASHAs are given 23 days' training over a period of one year, distributed in five slots. It would be continued with periodic re-training for two days every alternate month.

Induction training is the core of training given to ASHAs. In this training, they are introduced to their role as ASHAs in the community. The researcher interviewed 280 ASHAs from the two districts. All of them have received induction training.

4.3.1 Duration of Induction Training

Table No. 23 Duration of Induction Training

Induction Training Duration	Frequency	Percent
5 days	27	9.6
7 days	253	90.4
Total	280	100.0

Table No. 23 shows the duration of induction training received by ASHAs. Most respondents (90.4%) said they received induction training of seven days; whereas, 9.6 respondents said they received training of five days.

Thus, it can be seen that all appointed ASHAs are given induction training. It was also observed that some of them could not recall exactly whether they had received five or seven days of training. But all of them reported receiving induction training.

4.3.2 Last Training Held

Table No. 24 Last Training Held

Last Training Held	Frequency	Percent
Before 1 month	12	4.3
Before 2 months	77	27.5
Before 3 months	25	8.9
Before 4 months	113	40.4
Before more than 4 months	53	18.9
Total	280	100.0

Table No. 24 shows when respondents received their last training from the date of this survey.

Respondents were asked if they received their last training before one, two, three, four, or more than four months from the date of this survey.

Maximum respondents (40.4%) reported receiving their last training before four months from the date of this survey. 27.5 percent said they received their last training before more than two months, 18.9 percent said they received training before more than four months, 8.9 percent said they received before more than three months, and 4.3 percent said they received before one month.

It is seen from the table that a few respondents received training very recently (before one month) from the date they were interviewed by the researcher. Most of them reported receiving training between before two and before four months. The training was given as and when appointments of ASHAs were made and also depending on the workload and availability of the trainers.

4.3.3 Number of Trainings Obtained

Table No. 25 Number of Trainings Obtained

Number of Trainings	Frequency	Percent
Up to 4 trainings	19	6.8
5 to 7 trainings	201	71.8
More than 7 trainings	60	21.4
Total	280	100.0

Table No. 25 is about the number of training sessions held for respondents during the period of their service.

The researcher listed them in three broad categories for the purpose of analysis: upto 4 training sessions, 5 to 7, and more than 7 sessions.

Most respondents (71.8%) said they had 5 to 7 training sessions during the period of their service, followed by 21.4 percent saying they had more than seven sessions, and 6.8 percent saying they had upto four sessions.

As seen in the above table, most ASHAs (71.8%) received 5 to 7 training sessions. It shows that training is given to ASHAs as per the guidelines stipulated in the mission document.

4.3.4 Received Training Allowance

Table No. 26 Received Training Allowance

Training Allowance	Frequency	Percent
Not received	28	10.0
Rs 150	183	65.4
Rs 300	15	5.4
Rs 750	54	19.3
Total	280	100.0

Table No. 26 depicts the training allowance received by respondents. Most respondents (65.4%) said they received Rs 150 allowance per day for one day. 10 percent respondents reported not receiving any allowance. This may be because of transition, as all payments are made through PFMS (Public Finance Management System). 19.3 percent respondents received Rs750 as allowance for training. Only 5.4 respondents received Rs300.

It is seen that guidelines are followed for giving incentives to ASHAs for attending training. The amount varies from Rs 150, Rs 300, to Rs 750. Most ASHAs have reported receiving Rs 150 and Rs 750, which is multiplied by the number of days of training.

4.3.5 Usefulness of Training

Table No. 27 Usefulness of Training

Usefulness of Training	Frequency	Percent
Best	116	41.4
Better	125	44.6
Very good	19	6.8
Good	20	7.1
Total	280	100.0

Table No. 27 explains about the usefulness of the last training held.

Maximum respondents (44.6%) said the training was better; 41.4 percent said it was the best, 7.1 percent said it was good, and 6.8 percent said it was very good.

The data shows that most ASHAs found the training was better.

4.3.6 Issued ID and Kit

Table No. 28 Issued ID and Kit

Issued ID and Kit	Yes	No	Total
Issued ID	241 (86.1%)	39 (13.9%)	280 (100.0%)
Issued ASHA kit	253 (90.4%)	27 (9.6%)	280 (100.0%)

Table No. 28 gives details of the percentage of ASHAs who received the identity card and the ASHA kit. Out of 280 respondents, 86.1% respondents were issued identity cards and 90.4% respondents were issued the ASHA kits to provide better service.

From the data, it is seen that most ASHAs have received identity cards and ASHA kits.

4.4 ASHAs' KNOWLEDGE

4.4.1 Awareness about Steps to Prevent Diarrhoea

Table No.29 Awareness about Steps to Prevent Diarrhoea

Awareness about Steps to Prevent Diarrhoea	Responses		Percent of Cases
	Nos	Percent	
Hand washing practices	253	39.2%	90.4%
Use of safe drinking water	263	40.7%	93.9%
Use of covered containers	129	20.0%	46.1%
Total	645	100.0%	230.4%

Table No. 29 shows ASHAs' awareness about steps to be taken for prevention of diarrhoea. As this is a multiple-choice question, responses exceed the number of respondents, i.e., 280.

Most ASHAs (93.9%) reported being aware about use of safe drinking water as a step to prevent diarrhoea. Similarly, a high number of respondents, above 90 percent, reported they were aware about hand washing as a step to prevent diarrhoea, and 46.1 percent showed awareness about using covered containers to keep food as a step for preventing diarrhoea.

Though the table shows that maximum ASHAs are aware about ways to prevent diarrhoea, it is also seen that training is required to increase their knowledge.

4.4.2 Awareness of Time to Initiate Breastfeeding after Delivery

Table No.30 Awareness of Time to Initiate Breastfeeding after Delivery

Awareness of Time to Initiate Breastfeeding	Frequency	Percent
Within 1 hour of delivery	275	98.2
Within 6 hours of delivery	1	0.4
Within 24 hours of delivery	2	0.7
After the child has been given water, honey, ghutti, etc.	1	0.4
After 24 hours	1	0.4
Total	280	100.0

Table No. 30 shows respondents' knowledge regarding when to start breast feeding after delivery.

Most ASHAs (98.2%) said breastfeeding should start within one hour of delivery. Only 1.9 percent respondents are not aware about the right time to initiate breastfeeding.

This indicates that almost all ASHAs are very well aware about the right time for initiation of breastfeeding.

4.4.3 Awareness of Symptoms of Acute Respiratory Infections (ARIs)

Table No. 31 Awareness of Symptoms of Acute Respiratory Infections

Awareness of Symptoms of ARIs	Responses		Percent of Cases
	N	Percent	
Increased breathing	244	31.7%	89.1%
In-drawing of chest	183	23.8%	66.8%
Blue color of the child	72	9.4%	26.3%
Vomiting	68	8.8%	24.8%
Fever	95	12.4%	34.7%
Inability to drink/suck	104	13.5%	38.0%
Weight loss	1	0.1%	0.4%
Pulse rate	2	0.3%	0.7%
Total	769	100.0%	280.7%

Table No. 31 shows ASHAs' awareness of symptoms of Acute Respiratory Infections (ARIs). As this is a multiple-choice question, responses exceed the number of respondents, i.e., 280.

A high majority of respondents (89%) cited increased breathing as one of the symptoms of ARI; whereas, 66.8% respondents said in-drawing of the chest is one of the symptoms. About 72 respondents (26%) said the child turning blue is one of the symptoms of ARIs. About 24% said vomiting was a symptom, 34% respondents said fever was a symptom, and 38% said inability to drink/suck was a symptom.

Data shows that not all respondents are well aware about all the symptoms of ARIs, though they are given training in these matters and are expected to know all the symptoms. Therefore, they need further training in this area.

4.4.4 Level of Awareness About Free Any Transport Service Available for Pregnant Women

Table No.32 Level of Awareness About Free Transport Service Available for Pregnant Women

Level of Awareness About Aware Free Transport Availability	Frequency	Percent
Yes	275	98.2
No	5	1.8
Total	280	100.0

Table No 32 shows respondents' awareness about free transport service provided for pregnant women. Under the Janani Shishu Suraksha Karyakram, free transport is provided to pick women from their residence on a government vehicle to the nearest health facility and drop them back at their residence after 78 hours of delivery.

Almost 98.2 percent of respondents said they knew about the provision of free transport service for pregnant women. Only 1.8 percent respondents said they did not know about the facility.

It clearly indicates that awareness about the provision of free transport among ASHAs is quite high.

4.4.5 Information about Janani Suraksha Yojna (JSY)

Table No.33 Information about JSY

Heard about JSY	Frequency	Percent
Yes	275	98.2
No	5	1.8
Total	280	100.0

Table No. 33 shows the respondents' knowledge of Janani Suraksha Yojna (JSY), under which pregnant women of SC/ST and BPL category get cash incentive for institutional delivery as well as for home delivery.

The question was asked in yes-no format. Most respondents (98.2%) said they had heard about JSY. Only 1.8 were seen to be unaware about it.

It is a very good indication that most ASHAs are well aware about the various schemes related to their job profile.

4.4.6 Cash Incentives Given under JSY for Home Delivery

Table No.34Cash Incentives Given under JSY for Home Delivery

JSY Benefits for Home Delivery	Frequency	Percent
Rs 300	2	0.7
Rs 400	2	0.7
Rs 500	133	47.5
Rs 600	1	0.4
Rs 700	7	2.5
No benefit	123	43.9
Don't know	7	2.5
NA	5	1.8
Total	280	100.0

Table No. 34 shows the cash incentives JSY beneficiaries get for home delivery. Maximum (47.5%) respondents said Rs500 was given to JSY beneficiaries for home delivery, while 43.9 percent said no cash incentives were given for home delivery. Only 2.5 percent said they didn't know about the incentives, and 2.5 percent said Rs 700 cash incentive was given.

As per the guidelines issued by the Government of India, incentive to mothers for home delivery isRs500. Almost half of the ASHAs are well aware about the incentive being given for home delivery, and almost the same number of ASHAs did not know about incentives being given for home delivery.

4.4.7 Cash Incentives under JSY for Institutional Delivery

Table No.35Cash Incentives under JSY for Institutional Delivery

Institutional Delivery	Frequency	Percent
Rs 600	29	10.4
Rs 700	237	84.6
Rs 1000	2	0.7
Rs 2000	1	0.4
Rs 2200	1	0.4
Rs 4000	2	0.7
Rs 7000	1	0.4
Don't know	1	0.4
Can't say	1	0.4
NA	5	1.8
Total	280	100.0

Table No. 35 gives details of cash incentives to JSY beneficiaries for institutional delivery. For this question, no codes were given. The researcher recorded the responses as respondents gave them. Most respondents (84.6%) said Rs700 cash incentive was given to JSY beneficiaries for institutional delivery and a much smaller 10.4 percent said Rs 600 incentive was given. A small number of respondents reported they didn't know and couldn't say. Another few reported Rs 2000, 2200 and Rs 7000 given as incentive. 0.7 percent respondents reported beneficiaries receiving Rs 1000 incentive and Rs 4000.

As per the guidelines issued by the Government of India, incentives are given to mothers for institutional delivery. Almost 85 percent of ASHAs are well aware about incentives being given for institutional delivery. At the same time, about 15 percent of them do not have proper information about incentives for institutional delivery. This could be because they may not have handled any case of institutional delivery. Similarly, ASHAs also get incentives for promotion of institutional delivery of non-BPL and non-SC/ST categories. The researcher feels that there is problem with the policy of paying incentives for promotion of institutional delivery, as it is given to ASHAs whose cases are either BPL category or SC/ ST beneficiaries. Therefore, half of the ASHAs do not know incentive is given for home delivery.

4.4.8 Cash Incentive to JSY Beneficiaries for C-Section

Table No.36 Cash Incentive to JSY Beneficiaries for C-Section

JSY Benefits for C-Section	Frequency	Percent
Rs 600	2	0.7
Rs 700	1	0.4
Rs 1200	8	2.9
Rs 1500	127	45.4
Rs 2000	1	0.4
Rs 2100	2	0.7
Rs 2200	123	43.9
Don't know	10	3.6
Can't say	1	0.4
NA	5	1.8
Total	280	100.0

Table No. 36 explains about cash incentives to JSY beneficiaries for C-section delivery. To ask this question, no codes were made. The researcher recorded the responses of respondents as it is.

Most respondents (45%) said beneficiaries of JSY were getting Rs 1500 cash incentive for C-section delivery. 3.6 percent respondents reported they didn't know. Only one respondent said she couldn't say. 2.9 percent reported beneficiaries got Rs 1200; 0.7 percent said Rs600, and 0.4 percent each said Rs700 and Rs2000.

It indicates that only 45 percent of ASHAs have proper knowledge about cash incentives to JSY beneficiaries for C-section delivery.

4.4.9 ASHAs' Knowledge of Major Features of NRHM

Table No. 37 ASHAs' Knowledge of Major Features of NRHM

Knowledge of Major Features of NRHM	Responses		Percent of Cases
	N	Percent	
Funds available under NRHM for health facility maintenance	97	12.5%	38.8%
There is community support for ASHA workers	105	13.5%	42.0%
Funds and facilities are available under JSY/JSSK	126	16.2%	50.4%
Better infrastructure developed	130	16.7%	52.0%
Better services available for patients	195	25.1%	78.0%
Referral services improved	109	14.0%	43.6%
Reduction of MMR & IMR	15	1.9%	6.0%
Total	777	100.0%	310.8%

Table No. 37 shows the major features of NRHM as cited by respondents. All respondents were asked about the major features of NRHM. As this is a multiple-choice question, responses exceed the number of respondents, i.e., 280.

Most respondents (78%) said better services are available for patients under NRHM, followed by 52% respondents who said better infrastructure was developed under NRHM, 50.4% who said funds and facilities were available under JSY/JSSK, 43.6% who said referral services had improved due to NRHM, 42% who said community support was there for ASHA workers, and 38% who said funds are made available for maintenance of health facilities because of NRHM.

The data reveals that most respondents feel patients are getting good health services under NRHM.

4.5 ASHAs' PERFORMANCE AND AWARENESS

To assess ASHAs' knowledge about their roles and responsibilities, the researcher asked them to list their roles and responsibilities. All ASHAs are seen to be very well aware about their roles and responsibilities.

4.5.1 Services Provided by ASHAs During Last One Year

Table No. 38 Services Provided by ASHAs During Last One Year

Activity	Yes	%	No	%	Total	%
Gave oral rehydration salts (ORS) to children with diarrhea	251	89.6	29	10.4	280	100
Accompanied institutional deliveries	256	91.4	24	8.6	280	100
Distributed oral pill cycles	241	86.1	39	13.9	280	100
Distributed condoms	256	91.4	24	8.6	280	100
Gave drugs to malaria patients	49	17.5	231	82.5	280	100
Identified New pregnancies	263	93.9	17	6.1	280	100
Provided DOTS for tuberculosis (TB) cases	161	57.5	119	42.5	280	100
Arranged group meetings like Mahila Mandals	230	82.1	50	17.9	280	100
Organised health & nutrition days	248	88.6	32	11.4	280	100
Attended/Conducted immunisation sessions	268	95.7	12	4.3	280	100
Any other activity listed in your job (Specify)	66	23.6	214	76.4	280	100

Table No. 38 shows the duties ASHAs performed during the last one year from the date of survey (April 2017 to March 2018). The researcher listed 10 responsibilities of ASHAs and asked them yes-no questions. It is seen that majority of respondents (95.70%) have attended/conducted immunisation sessions. 93.9 percent have identified new pregnant women. 91.4 percent respondents have accompanied pregnant women for institutional deliveries as well as distributed condoms. 89.6 percent of respondents have distributed ORS to children with diarrhoea. 88.6 percent have organised health and nutrition day in the village. 57.5 percent respondents have provided medicines (DOTS) to TB patients. It was found that percentage distribution of drugs for malaria and TB is somewhat low, which may be because patients of this particular ailment in the given population are less.

4.6 ROLES AND RESPONSIBILITIES OF ASHAs

4.6.1 Perception about Roles and Responsibilities from Nandurbar

The following table shows ASHAs' perceptions about their roles and responsibilities, from samples from Nandurbar district. The researcher took the opinions on a scale of five: 5 (Extremely important), 4 (Important), 3 (Average), 2 (Less important), and 1 (Not at all important). Mean and Standard Deviation has been used for the analysis.

Table No. 39 ASHAs' Perceptions about Roles and Responsibilities from Nandurbar

(n=140)			
Sr.	Activities	Mean	S.D.
1.	Provided services during pregnancy under JSY(Rs300)	4.71	0.45
2.	Motivate pregnant women for institutional delivery (Rs 300)	4.57	0.50
3.	Provided services during pregnancy and escort women for delivery under JSY (Rs 300)	4.57	0.50
4.	Death details of 15-49 age group women (Rs 200)	3.36	0.60
5.	Motivated women for Tubectomy treatment (Rs 150)	4.24	0.91
6.	Motivated beneficiary for vasectomy (Rs 200)	1.00	0.00
7.	Distributed condom packets (Rs 1)	1.00	0.00
8.	Distributed contraceptive medicine cycles (Rs 1)	2.84	0.99
9.	Distributed emergency contraceptive pills (Rs 2)	2.00	0.00
10.	ASHA Mobility - Reimbursement of travel expenses (Rs 150)	4.00	0.00
11.	ASHA Mobility - Reimbursement of travel expenses (Rs 225)	4.00	0.00
12.	HBNC - (Rs 250) More than 5 home visits	5.00	0.00
13.	HBNC - (Rs 125) Less than 5 home visits	5.00	0.00
14.	Incentive for follow up of LBW babies Rs5 (Rs - 50)	2.34	0.76
15.	Incentive to ASHAs for follow-up of SNCU discharge (Rs 50)	2.13	0.49
16.	Referral of SAM cases to NRCs (per referral) (Rs 150)	2.29	0.45
17.	Discharged children from NRC 3rd visit @ 50(Rs 150)	1.16	0.37
18.	Incentive under MAA (Mother Absolute Affect (Rs 100)	3.59	0.49
19.	Incentive for ASHAs work on National De-worming Day (Rs 100)	3.82	0.38
20.	IDCF incentive for prophylactic distribution (Rs 100)	3.00	0.00
21.	ASHA PPIUCD incentive for motivation of beneficiaries for spacing (Rs 150)	2.64	0.48
22.	ASHA PPIUCD incentive for accompanying beneficiaries (Rs 150)	1.20	0.60
23.	ASHA incentive under ensuring spacing in births (Rs 500)	2.08	0.86
24.	Incentive for selection of peer educator (Rs 100)	1.67	0.47
25.	Arranged adolescence girls' monthly meeting (Rs 50)	3.01	1.41
26.	Incentive for mobilising sick children for referral and follow up (6 to 59 months) for immunisation (Rs 100)	3.09	0.96
27.	VHNSC monthly meeting (Rs 150)	1.00	0.00
28.	ASHA monthly meeting (Rs 150)	4.39	0.49
29.	Incentive for record update and support to a ASHAs' (Rs 500)	4.39	0.49
30.	Control of epidemic (outbreak) (Rs 100)	1.39	0.49

Sr.	Activities	Mean	S.D.
31.	Control of epidemic (dehydrated) cases (Rs 50)	1.39	0.49
32.	Confirming HIV-positive status of pregnant women (Rs 100)	4.39	0.49
33.	MMU incentives (Rs 150)	1.44	0.50
34.	NCD incentive to ASHAs' home visits for NCD (Rs 10)	1.00	0.00
35.	Mobilising on screening day Rs50(Rs 50)	1.00	0.00
36.	Follow-up of patients (twice in a year) (Rs 50)	1.00	0.00
37.	Sickle cell - To motivate self-help groups (Rs 40)	1.42	0.50
38.	Sickle Cell - Incentive to be given (Rs 300)	1.06	0.25
39.	Sickle Cell - Red and yellow card distribution (Rs 10)	1.66	0.48
40.	Sickle Cell- Incentive for home visits (Rs 10)	1.00	0.00
41.	Palliative Care programme- Patients' register (Rs 50)	1.00	0.00
42.	Palliative Care programme- After confirmation (Rs 50)	1.00	0.00
43.	Palliative Care programme- Weekly follow-up (Rs 25)	1.00	0.00
44.	Mahar Ghar Yojana - ASHAs motivate pregnant women (Rs - 200)	1.45	1.08
45.	Selling of sanitary napkin - (Rs - 1)	1.00	0.00
46.	Quarterly meeting of ASHA on immunisation (Rs 75)	3.27	0.97
47.	Per month immunisation at village level - S - (Rs 25)	1.00	0.00
48.	Per month immunisation at village level - S - (Rs 150)	4.00	0.00
49.	Per month immunisation at village level - S - (Rs 75)	4.00	0.00
50.	Per month immunisation at village level - S - (Rs 50)	1.39	1.01

Above table shows perception of ASHAs about their roles and responsibilities.

- Providing services to pregnant women during her pregnancy under JSY scheme mean score is (4.71)
- Motivating pregnant women for institutional delivery under JSY scheme mean score is (4.57)
- Provided services during pregnancy and escorted women for delivery under JSY mean score is (4.57)
- Death details of 15-49 age group women mean score is (3.36)
- Motivated women for Tubectomy treatment mean score is (4.24)
- Motivated beneficiaries for vasectomy mean score is (1.00)
- Distributed condom packets mean score is (1.00)
- Distributed contraceptive medicine cycles mean score is (2.84)
- Distributed emergency contraceptive pills mean score is (2.00)
- ASHA Mobility - Reimbursement of travel expenses mean score is (4.00)
- ASHA Mobility - Reimbursement of travel expenses mean score is (4.00)
- HBNC - (Rs 250) More than 5 home visits mean score is (5.00)
- HBNC - (Rs 125) Less than 5 home visits mean score is (5.00)
- Incentive for follow up of LBW babies mean score is (2.34)

- Incentive to ASHAs for follow-up of SNCU discharge (Rs 50) mean score is (2.13)
- Referral of SAM cases to NRCs (per referral) (Rs 150) mean score is (2.29)
- Discharged children from NRC 3rd visit @ 50(Rs 150) mean score is (1.16)
- Incentive under MAA (Mother Absolute Affect (Rs 100) mean score is (3.59)
- Incentive for ASHAs work on National De-worming Day (Rs 100) mean score is (3.82)
- IDCF incentive for prophylactic distribution (Rs 100) mean score is (3.00)
- ASHA PPIUCD incentive for motivation of beneficiaries for spacing (Rs 150) mean score is (2.64)
- ASHA PPIUCD incentive for accompanying beneficiaries (Rs 150) mean score is (1.20)
- ASHA incentive under ensuring spacing in births (Rs 500) mean score is (2.08)
- Incentive for selection of peer educator (Rs 100) mean score is (1.67)
- Arranged adolescence girls' monthly meeting (Rs 50) mean score is (3.01)
- Incentive for mobilising children (6 to 59 months) (Rs 100) mean score is (3.09)
- VHNSC monthly meeting (Rs 150) mean score is (1.00)
- ASHA monthly meeting (Rs 150) mean score is (4.39)
- Incentive for record update and support to a ASHAs' (Rs 500) mean score is (4.39)
- Control of epidemic (outbreak) (Rs 100) mean score is (1.39)
- Control of epidemic (dehydrated) cases (Rs 50) mean score is (1.39)
- Confirming HIV-positive status of pregnant women (Rs 100) mean score is (4.39)
- MMU incentives (Rs 150) mean score is (1.44)
- NCD incentive to ASHAs' home visits for NCD (Rs 10) mean score is (1.00)
- Mobilising on screening day Rs50 mean score is (1.00)
- Follow-up of patients (twice in a year) (Rs 50) mean score is (1.00)
- Sickle cell - To motivating self-help groups (Rs 40) mean score is (1.06)
- Sickle Cell - Incentive to be given (Rs 300) mean score is (1.66)
- Sickle Cell- Incentive for home visits (Rs 10) mean score is (1.00)
- Palliative Care programme- Patients' register (Rs 50) mean score is (1.00)
- Palliative Care programme- After confirmation (Rs 50) mean score is (1.00)
- Palliative Care programme- Weekly follow-up (Rs 25) mean score is (1.00)

- Maher Ghar Yojana - ASHAs motivate pregnant women (Rs - 200) mean score is (1.45)
- Selling of sanitary napkin - (Rs - 1) mean score is (1.00)
- Quarterly meeting of ASHA on immunisation (Rs 75) mean score is (3.75)
- Per month immunisation at village level - S - (Rs 25) mean score is (1.00)
- Per month immunisation at village level - S - (Rs 150) mean score is (4.00)
- Per month immunisation at village level - S - (Rs 75) mean score is (4.00)
- Per month immunisation at village level - S - (Rs 50) mean score is (1.39)

In Nandurbar district, maximum mean score is 5.00 for Home Based Neonatal Care visits, and minimum mean score is 1.00 incentives for sickle cell follow up; selling of sanitary napkin; palliative care; incentive of Rs. 25/- for attending immunisation session in the village; VHSNC meetings; distribution of condom and oral pills.

This clearly indicates that maximum ASHAs are giving preference to work of HBNC and incentives for sickle cell follow up; selling of sanitary napkin; palliative care; incentive of Rs. 25/- for attending immunisation session in the village; VHSNC meetings; distribution of condom and oral pills.

4.6.2 Perception about Roles and Responsibilities from Sangli

The following table shows ASHAs' perceptions about their roles and responsibilities, from samples of Sangli district. The researcher took the opinions on a scale of five: 5 (Extremely important), 4 (Important), 3 (Average), 2 (Less important), and 1 (Not at all important). Mean and Standard Deviation has been used for analysis.

Table No. 40 ASHAs Perception about Roles and Responsibilities from Sangli

(n=140)

Sr.	Activities	Mean	S.D.
1.	ASHAs provided services during pregnancy Under JSY (Rs 300)	5.00	0.00
2.	Motivated pregnant women for institutional delivery V (Rs 300)	2.44	0.50
3.	Provided services during pregnancy and escort women for delivery under JSY (Rs 300)	2.50	0.50
4.	15 to 49 age group women's death information (Rs 200)	5.00	0.00
5.	Motivation of women beneficiaries for Tubectomy (Rs 150)	2.48	0.50
6.	Motivation of any beneficiary for vasectomy (Rs 200)	5.00	0.00
7.	Distributed condom packets from ASHAs Rs1(Rs 1)	5.00	0.00
8.	Distributed contraceptive medicine cycles (Rs 1)	3.69	0.46
9.	Distributed emergency contraceptives pills (Rs 2)	1.93	0.70
10.	ASHA Mobility - Reimbursement of travel expenses (Rs 150)	2.14	0.84
11.	ASHA Mobility - Reimbursement of travel expenses (Rs 225)	3.00	0.00
12.	HBNC - (Rs 250) More than 5 home visits	4.66	0.48
13.	HBNC - (Rs 125) Less than 5 home visits	4.66	0.48
14.	Incentive for follow-up of LBW babies Rs5 (Rs 50)	3.13	0.62
15.	Incentive to ASHAs for follow-up of SNCU discharge (Rs 50)	1.52	0.50
16.	Referral of SAM cases to NRCs (for per referral (Rs 150)	2.14	0.74
17.	Discharge children from NRC 3rd visit @ 50(Rs 150)	1.32	0.47
18.	Incentive under MAA (Mother Absolute Affect (Rs 100)	3.51	0.50
19.	Incentive for ASHA on National De-worming Day (Rs 100)	3.01	0.91
20.	IDCF incentive for prophylactic distribution (Rs 100)	3.34	0.47
21.	ASHA PPIUCD incentive for motivating beneficiaries (Rs 150)	2.00	0.82
22.	ASHA PPIUCD incentive for accompanying –beneficiaries (Rs 150)	1.74	0.72
23.	ASHA incentive under ensuring spacing of births (Rs 500)	2.03	0.75
25.	Incentive for selection of peer educator by (Rs 100)	1.39	0.49
26.	Arrange adolescence girls' monthly meeting (Rs 50)	3.19	0.79
27.	Incentive for mobilising sick children for referral and follow up (6 to 59 months) for immunisation (Rs 100)	4.45	0.50
28.	VHNSC monthly meeting (Rs 150)	4.79	0.41
29.	ASHA monthly meeting (Rs 150)	4.62	0.49
30.	Incentive for record update and support to a ASHAs' (Rs 500)	4.68	0.47
31.	Control of epidemic (outbreak) (Rs 100)	1.99	0.65
32.	Control of epidemic (dehydrated) cases (Rs 50)	1.54	0.50

Sr.	Activities	Mean	S.D.
33.	Confirming HIV-positive status of pregnant women (Rs 100)	4.48	0.50
34.	MMU incentives (Rs 150)	1.21	0.41
35.	NCD incentive to ASHAs for home visits for NCD (Rs 10)	1.00	0.00
36.	Mobilising on screening day Rs50(Rs 50)	1.84	0.82
37.	Follow-up of patient Rs50(twice in a year) (Rs - 50)	1.18	0.38
38.	Sickle cell - To motivates self-help groups (Rs 40)	1.00	0.00
39.	Sickle cell - Incentive to be given for bring beneficiary for test - (Rs 200)	1.00	0.00
40.	Sickle cell - Red and yellow card distribution (Rs 10)	1.00	0.00
41.	Sickle cell- Incentive for home visits (Rs 10)	1.00	0.00
42.	Palliative care programme – Patients’ register (Rs 50)	1.00	0.00
43.	Palliative care programme- After confirmation (Rs 50)	1.00	0.00
44.	Palliative care programme- Weekly follow-up (Rs 25)	1.00	0.00
46.	Selling of sanitary napkins (Rs 1)	1.00	0.00
47.	Quarterly meeting of ASHA on immunisation (Rs 75)	2.00	0.00
48.	Per month immunisation at village level - S - (Rs 25)	4.45	0.50
49.	Per month immunisation at village level - S - (Rs 150)	4.21	0.73
50.	Per month immunisation at village level - S - (Rs 75)	3.76	0.43
51.	Per month immunisation at village level - S - (Rs 50)	3.66	0.47

Above table shows perception of ASHAs about their roles and responsibilities.

- Providing services to pregnant women during her pregnancy under JSY scheme: mean score is (5.00).
- Motivating pregnant women for institutional delivery under JSY scheme: mean score is (2.44).
- Provided services during pregnancy and escorted women for delivery under JSY: mean score is (2.50).
- Death details of 15-49 age group women: mean score is (5.00).
- Motivated women for tubectomy treatment: mean score is (2.48).
- Motivated beneficiaries for vasectomy: mean score is (5.00).
- Distributed condom packets: mean score is (5.00).
- Distributed contraceptive medicine cycles: mean score is (3.69).
- Distributed emergency contraceptive pills: mean score is (1.93).
- ASHA Mobility – Reimbursement of travel expenses: mean score is (2.14).
- ASHA Mobility – Reimbursement of travel expenses: mean score is (3.00).
- HBNC – (Rs 250) – More than 5 home visits: mean score is (4.66).
- HBNC – (Rs 125) – Less than 5 home visits: mean score is (4.66).

- Incentive for follow up of LBW babies: mean score is (3.13).
- Incentive to ASHAs for follow-up of SNCU discharge (Rs 50): mean score is (1.52).
- Referral of SAM cases to NRCs (per referral) (Rs 150): mean score is (2.14).
- Discharged children from NRC 3rd visit @ 50 (Rs 150): mean score is (1.32).
- Incentive under MAA (Mother Absolute Affect) (Rs 100): mean score is (3.51).
- Incentive for ASHAs' work on National De-worming Day (Rs 100): mean score is (3.01).
- IDCF incentive for prophylactic distribution (Rs 100): mean score is (3.34).
- ASHA PPIUCD incentive for motivation of beneficiaries for spacing (Rs 150): mean score is (2.00).
- ASHA PPIUCD incentive for accompanying beneficiaries (Rs 150): mean score is (1.74).
- ASHA incentive under ensuring spacing in births (Rs 500): mean score is (2.03).
- Incentive for selection of peer educator (Rs 100): mean score is (1.39).
- Arranged adolescence girls' monthly meeting (Rs 50): mean score is (3.19).
- Incentive for mobilising children (6 to 59 months) (Rs 100): mean score is (4.45)
- VHNSC monthly meeting (Rs 150): mean score is (4.79).
- ASHA monthly meeting (Rs 150): mean score is (4.62).
- Incentive for record update and support to a ASHAs' (Rs 500) mean score is (4.68).
- Control of epidemic (outbreak) (Rs 100): mean score is (1.99).
- Control of epidemic (dehydrated) cases (Rs 50): mean score is (1.54).
- Confirming HIV-positive status of pregnant women (Rs 100): mean score is (4.48).
- MMU incentives (Rs 150): mean score is (1.21).
- NCD incentive to ASHAs' home visits for NCD (Rs 10): mean score is (1.00).
- Mobilising on screening day Rs 50: mean score is (1.84).
- Follow-up of patients (twice in a year) (Rs 50): mean score is (1.18).
- Sickle cell – Motivating self-help groups (Rs 40): mean score is (1.00).
- Sickle Cell – Incentive to be given (Rs 300): mean score is (1.00).
- Sickle Cell – Incentive for home visits (Rs 10): mean score is (1.00).
- Palliative Care programme – Patients' register (Rs 50): mean score is (1.00).
- Palliative Care programme – After confirmation (Rs 50): mean score is (1.00).

- Palliative Care programme – Weekly follow-up (Rs 25): mean score is (1.00).
- Selling of sanitary napkin – (Rs 1): mean score is (1.00).
- Quarterly meeting of ASHA on immunisation (Rs 75): mean score is (2.00).
- Per month immunisation at village level - S - (Rs 25): mean score is (4.45).
- Per month immunisation at village level - S - (Rs 150): mean score is (4.21).
- Per month immunisation at village level - S - (Rs 75): mean score is (3.76).
- Per month immunisation at village level - S - (Rs 50): mean score is (3.66).

This clearly indicates that maximum ASHAs are giving preference to work of ASHAs providing services during pregnancy under JSY; incentive under spacing in birth; reporting of death of women of age 15-49; distribution of condoms; motivating beneficiaries for vasectomy and least preference to selling of sanitary napkins; Mother Absolut effect; incentive for selection of peer educator; incentive under IDCF; incentive for ASHAs' for working on national de worming day and distribution of oral pills.

From Table 39 and 40, it is clearly seen that the perception of ASHAs about their roles and responsibilities differ with geographic area.

4.6.3 Provider of TB Medicine

Table No.41 Information About Provider of TB Medicine

Provider of TB medicine	Frequency	Percent
Yes	175	62.5
No	105	37.5
Total	280	100.0

Table No.41 explains whether respondents perform their role as providers of medicines to TB patients. The researcher asked the question in yes-no format. Most respondents (62.5%) answered in the affirmative; 37.5% answered in the negative.

The table shows that though more than 50 percentage of ASHAs are well aware about their role and act accordingly, carrying out their responsibility as providers of medicines to TB patients. A fewer but large number of ASHAs do not perform according to their role. Ideally, all of them must know their role in the treatment of TB patients. However, this may also be because they have not come across any TB patients during the reference period, or they need more inputs through training.

4.6.4 JSY Cases Registered Last Year

Table No. 42 JSY Cases Registered Last Year

JSY Cases Registered	Frequency	Percent
Not registered any	32	11.4
1 to 5	84	30.0
6 to 10	59	21.1
11 to 15	24	8.6
More than 15	81	28.9
Total	280	100.0

Table No. 42 shows how many cases were registered by respondents during the last one year. This question was asked to respondents without giving them any response options. The researcher recorded the responses of respondents as it is and distributed it in five broad categories for the purpose of analysis. The categories are: Not registered any; Registered 1 to 5; Registered 6 to 10; Registered 11 to 15; and Registered more than 15 cases. Maximum (30%) respondents registered 1 to 5 cases during the last one year; followed by 28.9 percent respondents registering more than 15 cases; 21.1 percent registering 6 to 10 cases; and 8.6 percent registering 11 to 15 cases during the reference period. Meanwhile, 11.4 percent respondents have not registered any case under JSY. This may be due to the population they are serving.

During the field visit to Nandurbar and Sangli, the researcher observed that many of the ASHAs serve smaller population, which does not fit the JSY criteria for benefits.

4.6.5 JSY Cases Taken for Institutional Delivery

Table No. 43 JSY Cases Taken for Institutional Delivery

JSY Cases Taken for Institutional Delivery	Frequency	Percent
No institutional delivery	53	18.9
1 to 5	81	28.9
6 to 10	62	22.1
11 to 15	27	9.6
More than 15	57	20.4
Total	280	100.0

Table No.43 shows the number of JSY beneficiaries respondents accompanied to hospital for delivery.

Maximum (28.9%) respondents reported accompanying JSY beneficiaries to hospital for delivery. While 22.1 percent respondents reported accompanying 6 to 10 JSY beneficiaries to hospital, 20.4 percent reported accompanying more than 15 beneficiaries, and 9.6 percent reported accompanying 11 to 15 beneficiaries. 18.9 percent respondents did not accompany any beneficiary to hospital for delivery, as the deliveries were at home.

It is strange that almost 19 percent ASHAs were not able to motivate JSY beneficiaries to go to hospital for delivery, though they get additional incentives for motivating JSY beneficiaries for institutional delivery.

4.6.6 Preferred Place to Take JSY Beneficiaries for Delivery

Table No. 44 Where Respondents Prefer to Take JSY Beneficiaries for Delivery

Preferred Place to take Respondents JSY Beneficiaries for delivery	Frequency	Percent
Government hospital	58	20.7
CHC	16	5.7
PHC	114	40.7
Sub-centre	90	32.1
Private hospital	2	.7
Total	280	100.0

Table No.44 explains respondents' preference of health facilities where they take JSY beneficiaries. Maximum (40.7%) respondents took JSY beneficiaries to PHCs for delivery. 32.1 percent took them to sub-centres, 20.7 percent to government hospitals, and 5.7 percent to CHCs.

From the above table, it is clear that maximum respondents (41%) take JSY beneficiaries for delivery to PHCs.

4.6.7 Getting Incentives for Promotion of Institutional Delivery

Table No.45 Getting Incentives for Promotion of Institutional Delivery

Incentives for Promotion of Institutional Delivery	Frequency	Percent
Yes	197	70.4
No	83	29.6
Total	280	100.0

Table No.45 shows the percentage of respondents getting incentives for promotion of institutional delivery.

This question was asked in yes-no format. Most respondents (70.4%) said they were getting incentives for promotion of institutional delivery, and 29.6 percent reported they were not getting incentives.

4.6.8 Reason for not Receiving Incentive

Table No 46 Reason for not Receiving Incentive

Reason for not Receiving Incentive	Frequency	Percent
Open category	61	21.8
Non BPL	22	7.9
NA	197	70.4
Total	280	100.0

Table No. 46 explains the reasons for respondents not getting incentives to promote institutional delivery.

From the above table, 29.6 percent of beneficiaries are seen to report that they are not getting incentives for promotion of institutional delivery. The researcher asked the reasons for not getting incentives. About 21.8 percent of respondents are not getting incentives for promotion of institutional delivery as their beneficiaries are from the Open category; 7.9 percent said their beneficiaries are not from the below poverty line category.

Though this is as per the policy of the government, it leads to de-motivation among respondents who have a larger population of non-beneficiaries of JSY. Nevertheless, ASHAs get incentives for promotion of institutional delivery. So, they may be least bothered to motivate pregnant women of the Open category for institutional delivery. This also leads to dissatisfaction among Open category beneficiaries.

4.6.9 Distance in Km to Nearest Facility Where Beneficiaries are Taken

Table No. 47 Distance in Km to Nearest Facility Where Beneficiaries are Taken

Distance in km	Frequency	Percent
Up to 1 km	108	38.6
1.1 km to 3 km	64	22.9
3.1 km to 5 km	29	10.4
More than 5 km	79	28.2
Total	280	100.0

Table No. 47 shows distance to the nearest facility where respondents take beneficiaries for delivery. Four broad categories are made from the responses received from respondents. Most respondents (38.6%) take beneficiaries to facilities within 1 km. 22.9 percent of respondents take them to facilities 1.1 to 3 km away. 10.4 percent respondents take them to facilities 3.1 to 5 km away, and 28.2 percent take them to facilities more than 5 km away.

From the above data, it is clearly seen that most respondents have the nearest health facility within 1 km from the beneficiary community.

4.6.10 Time Taken to Reach to the Preferred Facility

Table No. 48 Time Taken to Reach to the Preferred Facility

Time Taken to Reach to the Preferred Facility	Frequency	Percent
Up to 10 minutes	44	15.7
30 minutes	186	66.4
60 minutes	39	13.9
More than 60 minutes	11	3.9
Total	280	100.0

Table No. 48 shows the average time taken to reach the nearest facility. The researcher asked this question to all 280 respondents from both the districts.

Maximum respondents (66.4 percent) reported that they took 30 minutes to reach the nearest facility. 15.7 percent respondents reached within 10 minutes. 13.9 percent respondents took 60 minutes to reach the facility and 3.9 percent required more than 60 minutes to reach the facility.

From the above table, it is seen that maximum respondents need 30 minutes to reach the nearest facility.

4.6.11 Most Preferred Transport to Reach Facility

Table No. 49 Most Preferred Transport to Reach Facility

Most Preferred Transport to Reach Facility	Frequency	Percent
102 ambulance	60	21.4
108 ambulance	162	57.9
Public transport	6	2.1
Private jeep/vehicle	40	14.3
PHC jeep	3	1.1
By walk	9	3.2
Total	280	100.0

Table No. 49 shows how respondents take pregnant women to the nearest facility. Maximum respondents (57.9%) use 108 ambulance to reach the nearest facility, followed by 102 ambulance (21.4%). Private jeep is used by 14.3 percent of respondents. 2.1 percent use public transport. 1.1 percent use PHC vehicle and 3.2 percent respondent's goon foot with their beneficiaries.

When the researcher discussed with respondents who went on foot, it was found that the facility was within the village for them.

From the above table, it is clearly seen that maximum respondents (58%) take their beneficiaries by 108 ambulance to the health facility.

4.6.12 Reasons for Home Delivery

Table No. 50 Reasons for Home Delivery

Reasons for Home Delivery	Responses		Percent of Cases
	N	Percent	
Appropriate health facility is not available nearby	69	14.1%	28.6%
No transport available when required	105	21.5%	43.6%
More expensive than home delivery	60	12.3%	24.9%
Behaviour of staff is not appropriate	22	4.5%	9.1%
Family/Cultural reasons	75	15.3%	31.1%
Because of stitches/fear of caesarean	110	22.5%	45.6%
Unaware about the JSY scheme	19	3.9%	7.9%
Blind faith	9	1.8%	3.7%
Too late at night	2	0.4%	0.8%
Illiteracy	13	2.7%	5.4%
Anxiety about hospital	2	0.4%	0.8%
Fear of injection, saline	1	0.2%	0.4%
Problems at home due to 3-day stay at hospital	2	0.4%	0.8%
Total	489	100.0%	202.9%

Table No. 50 shows the reason why beneficiaries go for home delivery, according to the respondents. As this is a multiple-choice question, the number of responses exceed the total 280 respondents. Maximum respondents (45.6%) reported beneficiaries' fear of caesarean and stitches as one of the reasons for home delivery. According to 43.6 percent respondents, lack of transport facility is one of the reasons for home delivery. 31.8 percent respondents gave family culture as a reason for home delivery. 28.6 percent respondents cited non-availability of appropriate health facilities nearby as a reason for home delivery; while 24.9 percent respondent said institutional delivery was more expensive than home delivery. Only 9.1 percent respondents reported behaviour of women staff as a reason for home delivery. 7.9 percent respondents reported lack of awareness of the JSY scheme as a reason for home delivery and 0.8 percent respondents cited labour pains developing late at night, prejudice about health facility, and having nobody at home to take care of the rest of the family during the three-day stay for institutional delivery as reasons for beneficiaries opting for home delivery. A small 0.4 percent respondents gave phobia of injection and saline as reason.

From the data, it is seen that 46 percent of women do not go for institutional delivery because of fear of caesarian and stitches. It seems there is lack of proper information among the community about institutional delivery.

4.7 CASH INCENTIVES OF ASHAs

4.7.1 Average Incentives Received Per Month

Table No. 51 Average Incentives Received Per Month

Incentives Received Per Month	Frequency	Percent
Up to Rs 1000	40	14.3
Rs 1001 to Rs 3000	213	76.1
Rs 3001 to 5000	24	8.6
More than Rs 5000	3	1.1
Total	280	100.0

Table No.51 shows the average incentive received by respondents every month. Four broad categories are made for the purpose of analysis.

It shows that majority of respondents (76%) get incentive between Rs 1001 to Rs 3000. About 14.3 percent respondents get incentive up to Rs 1000. 8.6 percent get incentive between Rs 3001 to Rs 5000. Just 1 percent of them reported getting incentive more than Rs 5000 per month.

4.7.2 Getting Incentive in Time

Table No.52 Getting Incentive in Time

Getting Incentive in Time	Frequency	Percent
Yes	268	95.7
No	12	4.3
Total	280	100.0

Table No. 52 explains whether respondents get incentives in time. Total 280 respondents were asked the question in yes-no format.

About 95.7 percent of respondents said they got remuneration in time. Only 4.3 percent respondents reported not getting incentive in time.

The above table indicates clearly that most respondents get incentive in time.

4.7.3 Period of Delay

Table No.53 Period of Delay

Period of Delay	Frequency	Percent
Up to 1 month	2	0.7
1 month to 2 months	6	2.1
More than 2 months	4	1.4
NA	268	95.7
Total	280	100.0

Table No.53 explains if there is any delay in getting incentive. About 2.1 percent respondents said that there is delay of 1 to 2 months in getting incentive. About 1.4 percent reported more than 2 months' delay in getting incentive. Only 0.7 percent reported delay upto one month in getting incentive.

The researcher discussed the matter with respondents as well as with supervising authorities. They said that those who faced delay in getting incentive had some or the other problem in their documentation, such as account not linked with AADHAR or lack of KYC compliance.

All 280 respondents said they got incentive through the Public Finance Management System (PFMS) and didn't have any problem in getting incentive through PFMS.

4.7.4 Level of Satisfied with Incentive

Table No. 54 Satisfied with Incentive

Satisfied with Incentive	Frequency	Percent
Yes	44	15.7
No	236	84.3
Total	280	100.0

Table No. 54 shows if respondents are satisfied with the incentive they are getting. The respondents were asked the question in yes-no format. A significant 84.3 percent said they were not satisfied with the incentive. Only 15.7 percent respondents are satisfied with the incentive they are paid.

From the above table it is clear that maximum respondents (84.3%) are not satisfied with the incentive they are receiving every month.

4.7.5 Reasons for Dissatisfaction with Incentive

Table No 55 Reasons for Dissatisfaction with Incentive

Reasons for Dissatisfaction	Responses		Percent of Cases
	N	Percent	
Heavy work load	198	35.3%	83.9%
Payment is quite less	215	38.3%	91.1%
Odd working hours	88	15.7%	37.3%
Community does not value their efforts	27	4.8%	11.4%
Lack of respect	16	2.9%	6.8%
Regular salary is not paid	17	3.1%	7.2%
Total	561	100.0%	237.7%

Table No. 55 lays out reasons for respondents' dissatisfaction with the remuneration paid. This question was asked to all the respondents in continuation of the previous question. About 84.3 percent respondents were not satisfied with the remuneration pattern. The researcher would then ask the reason for the dissatisfaction. As this is a multiple-choice question, the number of responses exceeds 280. Almost all (91.1%) respondents reported less payment as one of the reasons for dissatisfaction. According to 83.9 percent respondents, heavy work load was a reason for their dissatisfaction. About 37.3 percent respondents cited odd working hours as reason. About 11.4 percent respondents reported non-recognition in the community as a reason for their being dissatisfied. About 6.8 percent said they were not getting respect and regular salary, and 0.4 percent respondents said there should be salary for the work they do.

When the researcher asked respondents if they were in favour of a fixed salary every month, all 280 of them from Shahada and Miraj blocks of Nandurbar and Sangli districts said they were in favour of having fix salary every month.

4.7.6 Expectation of Salary Amount

Table No. 56 Expectation of Salary Amount

Amount	Frequency	Percent
Rs 1001 to 3000	12	4.3
Rs 3001 to 5000	120	42.9
Rs 5001 to 8000	92	32.9
Rs 8001 to 10000	56	20.0
Total	280	100.0

Table No. 56 explains the expectations of respondents about fixed salary. All 280 respondents were asked their opinion about fixed salary and the expected salary amount was listed in four broad categories: Rs 1001 to 3001, Rs 3001 to 5000, Rs 5001 to 8000 and Rs 8001 to 10000. Maximum (42.9%) respondents said they were expecting Rs3001 to 5000 per month as fixed salary; 32.9 percent said they expected Rs5001 to 8000 salary per month; 20 percent expected Rs8001 to 10000. Only 4.3 percent respondents said they expected Rs 1001 to 3000 as fixed salary per month.

The data clearly indicates that though all of them are in favour of fixed salary per month, their expectations are not that high. Most of them said they would be happy with a salary between Rs 3000 to 5000 per month, followed by a smaller yet significant number of respondents expecting Rs 5000 to 8000 per month.

4.8 PROBLEMS FACED BY ASHAs

4.8.1 Difficulties Faced by ASHAs and Expected Support to Effectively Implement Programmes

In this section, one of the questions asked was what difficulties are faced by respondents in implementing programme activities under NRHM.

Some respondents said *“many times, there is the problem of connectivity/network, which creates problems in contacting 108/102 ambulance”*. Some pointed out that the *“distance of the beneficiary is too far from the residence of the respondent”*. A few ASHAs faced the problem of work pressure. They said *“there is pressure of work, which is not listed in job responsibility”* and *“there is no recognition from the community”*. Customs and traditions in tribal areas are different. Due to lack of education and knowledge among the tribes, ASHAs are facing many problems, as *“due to their customs and traditions, people do not trust others easily. Also, respondents said there were “no fixed timings and work goes beyond the usual hours, many times late into the night”*.

ASHAs accompany pregnant women for delivery to the health facility. During that period, they have to stay there and there is no accommodation facility for ASHAs. They have to spend money out of their pocket and it is reimbursed later. As they do not have money most of the time such a situation arises, they do not even take food for themselves.

Many times, people talk to ASHAs in abusive language and vent their frustration on them.

On what support they required to enable them to effectively implement the programmes, ASHAs said they needed support from PRI members while carrying out their duties. They also expect support from healthcare providers. They want their dignity to be respected, especially from ANM, doctors and other service providers. They said there should be provision of travelling allowance, fixed salary, and some space at PHCs.

The respondents said they should be provided smartphones as they have to stay connected with beneficiaries, and would also help them in reporting.

They said there should be image-building campaign for ASHAs, because when they go into the community, people see them as not having any authority, or giving any direct benefit.

Many of them have to travel a lot in their service areas, which takes a lot of their time. Also, they have to come to PHCs to report for meetings. But there is no proper transport facility in rural areas. So, they have to spend time waiting for transport. If vehicle is provided to ASHAs, it would reduce the time and energy thus spent, and can use the time in a better way.

4.8.2 Working as ASHAs Enhanced Their Status

Table No. 57 Working as ASHAs Enhanced Their Status

Enhanced Status	Yes	No	Partial	Total
In community	257 (91.8%)	13 (4.6%)	10 (3.6%)	280 (100.0%)
In family	263 (93.9%)	13 (4.6%)	4 (1.4%)	280 (100.0%)

Table No. 57 shows if working as ASHAs enhanced their status in the community and family. Majority of respondents (91.8%) said working as ASHAs enhanced their status in community; 93.9 percent stated that it enhanced their status in family.

The above data clearly indicates enhancement of the status of respondents in society and family.

4.8.3 Family Support

Table No. 58 Family Support

Family Supports	Frequency	Percent
Yes	261	93.2
No	19	6.8
Total	280	100.0

Table No. 58 shows whether the respondents get family support in their work. Majority (93.2%) of ASHAs said they are getting family support in their work as ASHAs. Only 6.8 percent respondents reported they were not getting family support in their work as ASHAs.

The above data reveals that majority of respondents get support from their families.

4.8.4 Motivate Others for Job as ASHAs

Table No.59 Motivate Others for Job as ASHAs

Motivate Others for Job as ASHAs	Frequency	Percent
Yes	269	96.1
No	11	3.9
Total	280	100.0

Table No. 59 reveals if respondents motivate others to work as ASHAs. Almost all respondents (96.1%) said they would motivate others to work as ASHAs. Only 3.9 percent said that they would not motivate others to work as ASHAs.

This is a very good indication, even though majority of ASHAs are not satisfied by the incentive they are getting and feel they are not getting recognition from the community. In spite of this, they are in favour of motivating others for the job of ASHAs.

Among the reasons given by respondents for motivating others to work as ASHAs are that *“it’s an opportunity for social work, and accepting a job as ASHA would lead to gaining knowledge, personality development, job satisfaction, and by serving people they would get virtue (punya)”*.

4.9 PERCEPTION OF ASHAs

4.9.1 Awareness about Role as Community Mobilisers

Table No. 60Awareness about Role as Community Mobilisers

Awareness About Role as Community Mobiliser	Frequency	Percent
Yes	175	62.5
No	91	32.5
Can't Say	14	5.0
Total	280	100.0

Table No 60 shows respondents are aware about their role as community mobilisers. 62.5 percent of respondents said they know their role as community mobilisers. 32.5 percent do not know their role as community mobilisers. Only 5 percent said they couldn't say.

In continuation of the above table, respondents were asked about their role as community mobilisers. Among the roles they cited were “*promotion of toilet construction, rapport building, understanding problems of community and helping them to resolve them, organising people to solve their health problems, and organising women to solve their health problems*”.

From the above data, it is seen that 63 percent of respondents are aware about their role as community mobilisers.

4.9.2 If Ever Mobilised Community to Solve Any Health Issues

Table No. 61 If Ever Mobilised Community to Solve Any Health Issues

If Mobilised Community to Solve Health Issues	Frequency	Percent
Yes	235	83.9
No	39	13.9
Can't say	6	2.1
Total	280	100.0

Table No. 61 shows if respondents have ever mobilised the community to solve any health issues. 83.9 percent respondents said they have mobilised the community to solve health issues. Only 13.9 percent respondents reported having never mobilised the community to solve health issues. 2.1 percent said they couldn't say.

In continuation of the above, respondents reported *organising community by counselling, organising community meetings, explaining the importance of health, hygiene and cleanliness, motivating community to use clean drinking water, and creating awareness*”..

Majority of respondents are seen to have mobilised the community to solve health issues.

4.9.3 If Faced Difficulties in Mobilising Community

Table No. 62 If Faced Difficulties in Mobilising Community

If Faced Difficulties in Mobilising Community	Frequency	Percent
Yes	123	43.9
No	112	40.0
NA	45	16.1
Total	280	100.0

Table No.62 explains the difficulties faced by respondents in mobilising the community. 43.9 percent respondents said they faced difficulties in mobilising the community, and 40 percent respondents said they did not face any difficulty in mobilising the community.

In continuation of the above, they were asked what type of difficulties they faced in mobilising the community. To this, they reported difficulties like non-availability of people due to their routine work, non-cooperation of people and gender discrimination.

ASHAs overcome the above mentioned difficulties by consistent follow-up, sometimes taking help of PRI members, and meeting people as per their convenience.

From the above data, it is clearly seen that most respondents faced difficulty in mobilising the community.

4.9.4 Knowledge about Programme Implementation Plan

Table No. 63 Knowledge about Programme Implementation Plan

Knowledge About PIP	Frequency	Percent
Yes	164	58.6
No	116	41.4
Total	280	100.0

Table No. 63 explains the respondents' knowledge of Programme Implementation Plan (PIP). More than half (58.6%) of the respondents said they had knowledge about PIP, whereas 41.4 percent did not have knowledge of PIP.

In continuation of the above question, they were asked how they prepared for PIP.

Almost all those who had said 'yes' reported sensitizing the community to understand health related problems.

From the above table, it is clearly seen that most respondents have knowledge of PIP.

4.9.5 Scope for Community in Preparation of PIP

Table No. 64 Scope for Community in Preparation of PIP

Scope for Community in Preparation of PIP	Frequency	Percent
Yes	152	54.3
No	12	4.3
NA	116	41.4
Total	280	100.0

Table No. 64 speaks about the opinion of respondents regarding the role of community in preparation of PIP. More than half (54.3%) of the respondents reported there was scope for community in preparation of PIP. Very few (4.3%) respondents said there was no any scope for community in preparation of PIP.

Almost all respondents are of the opinion that PIP should be prepared as per the need of the community. People have to come forward to report their health problems.

4.9.6 Help Communities to Identify Their Health Needs

Table No. 65 Help Communities to Identify Their Health Needs

Help Community to Identify Health Needs	Frequency	Percent
Yes	264	94.3
Can't say	16	5.7
Total	280	100.0

Table No. 65 explains whether respondents help community in identifying their health problems. Almost all respondents (94.3%) help the community in identifying their health problems. Only 5.7 percent respondents said they couldn't say.

Almost all respondents help the community to identify their health problems by asking them to maintain cleanliness, by counselling, giving health information, motivating people through home visits, explaining preventive measures in epidemic scenarios, proper treatment, and creating awareness through posters and rallies.

4.9.7 Rate Support of Community for ASHAs' Work

Table No. 66 Rate Support of Community for ASHAs' Work

Community Support	Frequency	Percent
Excellent	42	15.0
Very good	118	42.1
Good	103	36.8
Fair	10	3.6
Poor	7	2.5
Total	280	100.0

Table No. 66 rates the support of the community with regard to ASHAs' work. Out of 280 respondents, majority (118; 42.1%) gave 'very good' rating for community support in their work, followed by 36.8% rating 'good', 15.0 percent rating excellent, and very few (3.6% and 2.5%) rating 'fair' and 'poor', respectively.

At the end of the interview, the researcher asked all selected ASHAs about suggestions regarding their functioning. The following suggestions were made:

- Increase salary, supply of medicine
- Timely delivery of health services
- In time payment
- Training for performing delivery, as often there is very less time with the women; if they are given the training which was earlier being given to Dais, it would be very helpful in ensuring safe deliveries.
- Personal protective equipment should be given.
- There should be some fixed salary, besides incentives.
- JSY benefits should be extended to all pregnant women, irrespective of SC/ST/BPL.
- There should be some pattern of working hours.
- Transport facility should be made available; mopeds could be given to the ASHAs on loan and the amount can be later deducted from their payment; some part of the cost may be borne by the government.
- ASHAs should not be given additional work other than responsibilities bestowed to them.
- Cash advance may be given as ASHAs have to travel a lot to take patients to health facilities, right from PHC to district hospital. In such instances, they have to spend from their pocket. Though it is reimbursed later, it gets delayed, which

creates financial crunch at their domestic end.

- There should be some career advancement for those who have put in more than 10 years of service as ASHAs.

PART B. Qualitative analysis:

1. INTERACTION WITH SUPERVISORS

During the field work, the researcher interacted with some health service providers supervising work of ASHAs, i.e., medical officer of some PHCs selected for the study, some block facilitators, block community mobilisers, and district community mobilisers from Nandurbar and Sangli districts.

From each district, three medical officers, one district community mobiliser, one block community mobiliser and four block facilitators from selected PHCs were interviewed.

All of them are well aware about the initiation of the ASHA scheme in the state as well in the district. All of them are well aware about the NRHM goals. Except for one block facilitator, all others know the selection criteria of the ASHAs and their role in the community. One medical officer suggested increasing the educational qualification for appointment of ASHAs. He said minimum education qualification should be Std12. One medical officer suggested that ASHAs should be given training to perform deliveries, so that they can assist the ANM at the sub-centre. Further, he suggested that ASHAs should be given training in injecting TT, Gentamycin and other injections which are given intra muscular. He felt that there is a lot of reporting to do, and that it should be reduced. There should be one data entry operator for reporting every after 20 ASHAs. All respondents are of the opinion that the trust of the community has increased due to ASHAs. Now, people are coming to public facilities. Institutional deliveries have increased because ASHAs are continuously in touch with families and pregnant women, and constantly counsel them about the importance of institutional delivery. ASHAs accompanying pregnant women to hospitals for delivery has had a very positive impact in the increase in institutional deliveries. Due to ASHAs, there is increase in community awareness about health services, health facilities and health problems. Some of them suggested that ASHAs should be involved in preparation of PIP and through ASHAs, the community should

be involved in preparation of PIP. One medical officer gave credit to ASHAs for the decline in IMR and MMR. She also feels that because of ASHAs, they are able to get in touch with the community and get immediate information of any problems in the community. ASHAs are very useful during emergency situations and in efforts to control epidemics. Because of ASHAs, health service has reached the doorstep of vulnerable groups. ASHAs are getting incentive for motivating SC, ST and BPL women for institutional delivery. In cases of other categories, too, ASHAs get incentive for doing the same work. Here, it should be made irrespective of caste category, and BPL criteria ASHAs should be given incentive for motivating women for institutional deliveries. ASHAs are very helpful in implementation of the national programme. ASHAs should be given smartphones for their day-to-day reporting. Most of them are in favor of increasing incentives as there is no change in incentive in the last six years. Some vehicle should be given to ASHAs. All of them are of the opinion that fixed salary should be given to ASHAs, in the range of Rs6000to 10,000per month, and incentive should be given for some of the activities.

Analysis of Focus Group Discussions (FGDs)

The following are the results of the focus group discussions. The purpose behind the FGDs was to get a deeper insight into the problems.

➤ Perception of ASHAs regarding their job and responsibilities

From the FGDs with the respondents, it clearly comes up that most of the ASHAs are well aware of their role in maternal and child health care services. They are very well aware about referral services to be given to beneficiaries, including escorting pregnant women for delivery to any government health facility, which may be a sub-centre, primary health centre, community health centre, sub-district hospital, or district hospital.

➤ Village Health and Sanitation Committee

Most of the ASHAs cited non-response of the committee members in holding regular meetings in the village to overcome health issues of villagers. They are seen to expect more support from these members in mobilising the community, too. Most of the ASHAs stated that when there is any awareness programme on health issues, i.e., for prevention of dengue, malaria, etc., VHSNC members should take the initiative along with the ASHAs. However, ASHAs get support from VHSNC.

➤ Problems faced by ASHAs

As one of their responsibilities, ASHAs are supposed to escort pregnant women for delivery to government health facilities. Many a time, they have to go with the beneficiaries late at night. They often have to escort pregnant women for delivery to district hospitals, which could be about 50 kms from the village of the beneficiaries. Sometimes, they get ambulance service to reach the hospital, but sometimes they don't. In such instances, they have to spend for transport cost from their pocket. There is no mechanism to get the amount reimbursed. Sometimes, ASHAs have to stay for two or more days in the health facility with beneficiaries. In such instances they face a lot of difficulties, as there is no place in the health facility, like washroom and security, where ASHAs could stay.

ASHAs get incentives for promotion of institutional deliveries of scheduled castes, scheduled tribes and below poverty line women. While working in the community, ASHAs do not discriminate among SC, ST, BPL and non-BPL or open category women in providing healthcare services. But due to the government policy under the Janani Suraksha Scheme, non-BPL, SC and ST women are not entitled to cash benefits for institutional delivery. This leads to anger among this category against the government. ASHAs have to face this anger for their not getting cash benefits, and have to hear unsavory arguments from such beneficiaries whenever they face them. This happens with all the ASHAs. As a result of this, ASHAs get frustrated and leads to demotivation with regard to the work they do.

➤ **Non-availability of medicines**

Though all ASHAs are provided medicine kits, it is not replenished. As a result, ASHAs are not able to provide medicines to the villagers. It gives a wrong impression about ASHAs, and leads to non-cooperation from the community.

➤ **Recognition as healthcare service provider**

Most ASHAs replied that they are getting recognition from the community. But most of them are not satisfied with the treatment they get from other healthcare service providers, i.e. ANMs, MOs and MPWs. ASHAs are treated by most healthcare service providers as common persons. They do not get any priority in treatment at government health facilities. Therefore, ASHAs expect respect from other healthcare service providers.

➤ **Preparation of reports and stationery**

Most ASHAs face difficulties in preparing their reports and getting stationery. Formats of reports are not provided to them. So, they have to make photocopies of the

reports. This is a financial burden on ASHAs.

➤ **Conclusion**

From the above results of the FGDs, similarities are observed in responses collected through interview schedules. It provides a strong and justifiable base for the data collected from the respondents.

CHAPTER V

MAJOR FINDINGS, SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

The major findings of the study are presented in this chapter, based on the analyses and interpretations. They have been presented after studying various factors related to ASHAs in providing health services and community awareness under NRHM. It is presented according to the objectives of the study for easy understanding.

5.2 KEY FINDINGS

5.2.1 SOCIO-ECONOMIC BACKGROUND OF ASHAs

- More than half of the respondents (53.2%) are from in the age group of 31 to 40.
- Majority of the respondents (87.5%) are married; 9.6% are widows and 2.8% are divorced and deserted.
- More than 59.6% of respondents studied up to secondary school, followed by 29.3% with higher secondary qualification.
- In terms of the religion of the respondents, majority of them (87.9%) are from the Hindu religion, followed by 4.3% following Animist belief systems (tribal religion).
- With regard to caste categories, majority of respondents (26.1%) are from the ST category, followed by 25.4% from the SC category and 21.4% from other categories.
- Occupation of the majority of spouses of respondents (24.3%) is agriculture.
- Majority of respondents (63.6%) are not engaged in any other occupation, other than ASHA work.
- Almost half of the respondents (50.4%) reside in kutcha houses.
- Two thirds of respondents (71.1%) have piped water supply facility.
- Majority of respondents (88.9%) have electricity at their residence.
- Majority of them (66.1%) have separate kitchen at their home.
- Almost two thirds of the respondents (78.9%) have toilet facility at their residence.
- Majority of respondents (54.3%) stay in nuclear families.

- One third of respondents (30.4%) have four members in the family.
- Majority of respondents (42.5%) have two male members in the family.
- About 37.1% respondents have two female members in the family.
- About half of the respondents (48.2%) have two dependants in the family.
- Almost all respondents (93.2%) were selected as ASHAs through Grampanchayat.
- Two thirds of respondents (76.1%) put in more than five years of service.
- Almost all respondents (90.4%) have received ASHA kits.
- Majority of respondents (90.4%) received compulsory medicine in the kit.
- Almost half of the respondents (48.5%) in Nandurbar district serve a population of more than 1000. On the other hand, only five serve a population of 1500 and more. Almost all (96.5%) respondents serve a population of less than 1500 in Sangli district.
- More than half of the respondents (57.1%) serve more than 200 households.
- The residence of about half of the respondents (46.1%) is less than 1 km from the households of beneficiaries.
- Two thirds of respondents (29.6) take up to 20 minutes to reach the farthest beneficiary household from their residence.

5.2.2 TRAINING OF ASHAs

- All respondents (100%) have received induction training.
- Maximum respondents (90.4%) received 7 days' induction training.
- Two thirds of the respondents (71.8%) have received 5 to 7 training sessions during their service.
- Maximum respondents (40.4%) got their last training four months before the date of this survey.
- Two thirds of the respondents (70%) reported duration of their last training was one day.
- More than half of the respondents (65.4%) received Rs 150 per day as training allowance.
- Majority (44.6%) of respondents rated the last training as 'better'.
- Majority of respondents (86.1%) received identity cards.

5.2.3 OVERALL KNOWLEDGE OF THE ASHAs ABOUT HEALTH CARE SERVICES

Almost all respondents (98.2%) know breastfeeding should be initiated within one hour of birth.

- All respondents (100%) have knowledge of how long the baby should be given exclusive breastfeeding.
- Almost all respondents (98.2%) are aware of free transport facility provided to pregnant women.
- Almost all respondents (98.2%) have knowledge of JSY scheme.
- Almost half of the respondents (47.5%) are aware of the amount of incentive for home delivery; and 84.6% and 45% know the exact amount for institutional delivery and C-section delivery, respectively.

5.2.4 PERFORMANCE AND AWARENESS OF ASHAs

During the period from April, 2017 to March, 2018, the following jobs were performed by the respondents:

- More than half of the respondents (89.6%) treated children for diarrhoea by giving ORS.
- Almost all (91.4%) respondents have accompanied pregnant women for institutional delivery.
- Two thirds of the respondents (86.1%) distributed oral pill cycles.
- Majority of respondents (91.4%) distributed condom packets.
- Less than one fourth of the respondents (17.5%) have given drugs to malaria patients.
- Almost all respondents (93.9%) have identified new pregnancies.
- More than half of the respondents (57.5%) have provided DOTS medicine to TB patients.
- Majority respondents (82.1%) have arranged meetings of Mahila Mandals.
- Most respondents (88.6%) have organised health and nutrition day activities.
- Almost all respondents (95.7%) attended immunisation sessions.
- One fourth respondents (23.6%) have carried out work other than the listed job responsibilities.
- All respondents (100%) are well aware about their roles and responsibilities.

5.2.5 ROLES AND RESPONSIBILITIES OF ASHAs

- Almost all respondents (100%) spend two hours daily on mother and child health care.
- For home visits and counselling, they spend one hour daily.
- In case of referral services, they spend 30 minutes in the village daily; but when they accompany pregnant women for delivery to any health facility, they have to spend more than 24 hours there. Such instances happen at least once in a month.
- Majority of respondents (88.6%) have registered JSY cases from their jurisdiction.
- Almost all respondents (91.1%) took pregnant women for institutional delivery.
- Almost all respondents (99.3%) have taken cases to government facilities for delivery.
- Two thirds of respondents (70.4%) are getting incentive for promotion of institutional delivery.
- Majority of respondents (38.6%) travel less than one km to take pregnant women for delivery.
- It takes majority of respondents (66.4%) 30 minutes to reach the health facility.
- Majority 57.9 percent of respondents are using 108 ambulance as mode of transport to reach nearest health facility.
- Majority (76%) respondents get between Rs1001 to Rs3000.
- About 95.7 percent of respondents are getting remuneration in time.
- ASHAs get incentives through the Public Finance Management System (PFMS).
- About 84.3 percent respondents are not satisfied with incentives they are getting.
- 100 percent respondents are in favor of fixed salary.
- Majority (42.9%) respondents expect Rs3001 to 5000 per month as fixed salary.

5.2.6 PROBLEMS FACED BY ASHAs

- Majority (93.9%) respondents have enhanced their status because they are working as ASHA.
- About 93.2 percent of ASHAs get family support in their work as ASHAs.
- Almost all (96.1%) respondents said they would motivate others to work as ASHAs.

5.2.7 PERCEPTION OF ASHAs

- More than half (62.5%) of the respondents are aware about their role as community mobilisers.
- Majority (83.9%) of the respondents said they have mobilised the community to solve health issues.
- A little less than half (43.9%) of the respondents are facing difficulties while mobilizing the community.
- More than half (58.6%) of the respondents are aware about PIP; but the researcher strongly feels they know just the term PIP, not more than that.
- About 54.3 percent of respondents are of the opinion of that there is scope for community role in preparation of PIP.
- Almost all (94.3%) respondents help the community identify their health problems.
- Maximum (42.1%) respondents gave very good rating for community support in their work.

5.3 HYPOTHESES TESTING

Hypothesis 1

H₀- There is no difference in the perception of ASHAs about their roles and responsibilities as per geographical area.

H₁- There is a difference in the perception of ASHAs about their roles and responsibilities as per geographical area.

Table No.5.3.1.1: Correlation between geographical area of ASHAs and their perception about providing services during pregnancy under Janani Suraksha Yojana (JSY):

	Geographical area of ASHA workers	ASHAs providing services during pregnancy under Janani Suraksha Yojana. Rs 300	
Geographical area of ASHA workers	Pearson Correlation	1	-.408**
	Sig. (2-tailed)		.000
	N	280	280
ASHAs providing services during pregnancy under Janani Suraksha Yojana. Rs 300	Pearson Correlation	-.408**	1
	Sig. (2-tailed)	.000	
	N	280	280

****Correlation is significant at the 0.01 level (2-tailed).**

Association between “there is a difference in perception of ASHAs about their roles and responsibilities as per geographical area and services provided and motivating women for institutional delivery during pregnancy under JSY scheme:

To assess the association between these two variables “there is a difference in perception of ASHAs about their roles and responsibilities as per geographical area” and “services provided and motivating women for institutional delivery during pregnancy under JSY scheme”, the Pearson Co-efficient co-relation (two-tailed) test has been administered. The result shows that there is association between the two variables, namely, “there is a difference in perception of ASHAs about their roles and

responsibilities as per geographical area” and “services provided and motivating women for institutional delivery during pregnancy under JSY scheme”, and they are **statistically significant (P=0.01)**.

It concludes that the alternative hypothesis, “there is a difference in perception of ASHAs about their roles and responsibilities as per geographical area”, is accepted and significantly associated.

Table No.5.3.1.2: Correlation between “geographical area of ASHAs and their perception about providing services during pregnancy, motivating and escorting for institutional delivery under Janani Suraksha Yojana”:

	Geographical area of ASHA workers	ASHAs motivate women for institutional delivery during pregnancy and escort her for institutional delivery under JSY scheme Rs 300
Geographical area of ASHA workers	Pearson Correlation	1
	Sig. (2-tailed)	.901**
	Sum of Squares and Cross-products	70.000
	Co-variance	.251
	N	280
ASHAs motivate women for institutional delivery during pregnancy and escort her for institutional delivery under JSY scheme. Rs 600	Pearson Correlation	.901**
	Sig. (2-tailed)	1
	Sum of Squares and Cross-products	145.000
	Co-variance	.520
	N	280

**** . Correlation is significant at the 0.01 level (2-tailed).**

Association between “there is a difference in perception of ASHAs about their roles and responsibilities as per geographical area and services provided, motivating women for institutional delivery during pregnancy and escorting her for institutional delivery under JSY scheme”.

To assess the association between the two variables, “there is a difference in perception of ASHAs about their roles and responsibilities as per geographical area and services provided, motivating women for institutional delivery” and “escorting her during pregnancy under JSY scheme”, the Pearson Co-efficient co-relation (two tailed) test has been administered. The result shows that there is association between the two variables, namely, “there is a difference in perception of ASHAs about their roles and responsibilities as per geographical area” and “services provided and motivating women for institutional delivery and escorting her during pregnancy under JSY scheme,” and they are statistically significant (P=0.01).

It concludes that the alternative hypothesis, “there is a difference in perception of ASHAs about their roles and responsibilities as per geographical area”, is accepted and significantly associated.

Table No.5.3.1.3: Correlation between geographical area of ASHAs and their perception about motivation of beneficiaries for Tubectomy:

		Geographical area of ASHA workers	Motivation of beneficiary for Tubectomy
Geographical area of ASHA workers	Pearson Correlation	1	.768**
	Sig. (2-tailed)		.000
	N	280	280
Motivation of beneficiary for Tubectomy	Pearson Correlation	.768**	1
	Sig. (2-tailed)	.000	
	N	280	280

****.** Correlation is significant at the 0.01 level (2-tailed).

Association between “there is a difference in perception of ASHAs about their roles and responsibilities as per geographical area” and “motivation of beneficiaries

for Tubectomy”:

To assess the association between the two variables, “there is a difference in perception of ASHAs about their roles and responsibilities as per geographical area” and “motivation of beneficiaries for Tubectomy”, the Pearson Co-efficient co-relation (two tiled) test has been administered. The result shows that there is association between the two variables, namely, “there is a difference in perception of ASHAs about their roles and responsibilities as per geographical area” and “services provided and motivation of beneficiaries for Tubectomy”, and they **are statistically significant (P=0.01)**.

It concludes that the alternative hypothesis, “there is a difference in perception of ASHAs about their roles and responsibilities as per geographical area” is accepted and significantly associated.

Hypothesis 2

H₀- ASHA workers are neutral about their satisfaction level on incentives received.

H₁- ASHA workers are dissatisfied about the incentive received.

Table No.5.3.2.1: Correlation between “level of satisfaction of ASHA workers about incentives” and “providing services during pregnancy under Janani Suraksha Yojana”:

		ASHAs provide services during pregnancy under Janani Suraksha Yojana. Rs 300	Level of satisfaction of ASHA workers about incentives
ASHAs provide services during pregnancy under Janani Suraksha Yojana. Rs. 300	Pearson Correlation	1	-.220 ^{**}
	Sig. (2-tailed)		.000
	Sum of Squares and Cross-products	34.286	-27.571
	Co-variance	.123	-.099
	N	280	280
Level of satisfaction of ASHA workers about incentives	Pearson Correlation	-.220 ^{**}	1
	Sig. (2-tailed)	.000	
	Sum of Squares and Cross-products	-27.571	456.343
	Co-variance	-.099	1.636
	N	280	280

**** Correlation is significant at the 0.01 level (two-tailed).**

Association between “level of satisfaction of ASHA workers about incentives” and “providing services during pregnancy under Janani Suraksha Yojana”:

To assess the association between the two variables, “level of satisfaction of ASHA workers about incentives” and “providing services during pregnancy under Janani Suraksha Yojana”, the Pearson Co-efficient co-relation (two-tailed) test has been administered. The result shows that there is association between the two variables, namely, “there is a difference in the level of satisfaction of ASHA workers about incentives” and “providing services during pregnancy under Janani Suraksha Yojana”,

and they are **statistically significant (P=0.01)**.

It concludes that the alternative hypothesis, “ASHA workers are dissatisfied about the incentive they receive”, is accepted and significantly associated.

Table No.5.3.2.2: Correlation between “level of satisfaction of ASHA workers about incentives” and “providing services during pregnancy, motivating and escorting for institutional delivery Under Janani Suraksha Yojana”:

		ASHAs motivate women for institutional delivery during pregnancy and escort her for institutional delivery under JSY. Rs 300	Level of satisfaction of ASHA workers about incentives
ASHAs motivate women for institutional delivery during pregnancy and escort her for institutional delivery under JSY. Rs 300	Pearson Correlation	1	.502 ^{**}
	Sig. (2-tailed)		.000
	Sum of Squares and Cross-products	369.643	206.143
	Co-variance	1.325	.739
	N	280	280
Level of satisfaction of ASHA workers about incentives	Pearson Correlation	.502 ^{**}	1
	Sig. (2-tailed)	.000	
	Sum of Squares and Cross-products	206.143	456.343
	Co-variance	.739	1.636
	N	280	280

****Correlation is significant at the 0.01 level (2-tailed).**

Association between “level of satisfaction of ASHA workers about incentives” and “providing services during pregnancy under Janani Suraksha Yojana”:

To assess the association between the two variables, “level of satisfaction of ASHA workers about incentives” and “ASHAs motivating women for institutional delivery

during pregnancy and escorting her for institutional delivery under JSY scheme”, the Pearson Co-efficient co-relation (two-tailed) test has been administered. The result shows that there is association between the two variables, namely, “level of satisfaction of ASHA workers about incentives” and “ASHAs motivating women for institutional delivery during pregnancy and escorting her for institutional delivery under JSY”, and “there is a difference in level of satisfaction of ASHA workers about incentives” and “ASHAs motivating women for institutional delivery during pregnancy and escorting her for institutional delivery under JSY scheme”, and they are **statistically significant** (P=0.01).

It concluded that the alternative hypothesis, “ASHA workers are dissatisfied about the incentive they receive”, is accepted and significantly associated.

Table No. 5.3.2.3: Correlation between “level of satisfaction of ASHA workers about incentives” and “motivating beneficiaries for Tubectomy”:

Correlations			
		Level of Satisfaction of ASHA workers about incentives	Motivation of beneficiary for Tubectomy
Level of satisfaction of ASHA workers about incentives	Pearson Correlation	1	.436**
	Sig. (2-tailed)		.000
	Sum of Squares and Cross-products	456.343	178.429
	Co-variance	1.636	.640
	N	280	280
Motivation of beneficiary for Tubectomy	Pearson Correlation	.436**	1
	Sig. (2-tailed)	.000	
	Sum of Squares and Cross-products	178.429	366.286
	Co-variance	.640	1.313
	N	280	280

****.** Correlation is significant at the 0.01 level (two-tailed).

Association between “level of satisfaction of ASHA workers about incentives” and

“motivating beneficiaries for Tubectomy”:

To assess the association between the two variables, “level of satisfaction of ASHA workers about incentives” and “motivating beneficiaries for Tubectomy”, the Pearson Co-efficient co-relation (two-tailed) test has been administered. The result shows that there is association between the two variables, namely, “level of satisfaction of ASHA workers about incentives” and “motivating beneficiaries for Tubectomy”.

There is a difference in the “level of satisfaction of ASHA workers about incentives” and “motivating beneficiaries for Tubectomy”, and they are **statistically significant (P=0.01)**.

It concludes that the alternative hypothesis, “ASHA workers are dissatisfied about the incentive they receive”, is accepted and significantly associated.

5.4 SUMMARY

This study of the evaluation of the Accredited Social Health Activist programme of the National Rural Health Mission (NRHM) in two blocks from the two districts of Maharashtra state finds that the primary occupation of almost all ASHAs is as an ASHA worker. Also, almost all spouses of ASHAs are working as farmers. They do not have any other occupation for their livelihood. Three fourths of ASHAs have put in five years of service as ASHAs. 90.4 percent of ASHAs have received medical kit as per NRHM guidelines (NRHM Mission Document, 2005-12). But the kits do not get replenished from time to time and do not contain all the listed medicines. About half of the ASHAs serve a population of more than 1000.

All ASHAs have undergone all types of training. All of them know their roles and responsibilities. Though all the respondents have received induction training, the researcher observed during field work that ASHAs do not possess updated knowledge of health services. It is understood from the study that ASHAs are aware about the schemes, but they do not have detailed information about them.

Majority of ASHAs are married. Inclusion of widowed and divorced/deserted women is 12 percent. Representation of widows and deserted women in the selection of ASHAs is not satisfactory.

Only one ASHA from Nandurbar district was found illiterate. She was selected as an ASHA in 2007 when the scheme had just initiated.

As there is lack of awareness in the community about the health programmes, tribal women are not coming forward to work as ASHAs.

As per guidelines issued by the Government of India, an incentive to mother for

institutional delivery is Rs 700. Almost 85 percent of ASHAs are well aware about incentives being given for institutional delivery. At the same time, about 15 percent of ASHAs do not have proper information of incentives for institutional delivery. This may be because the respondents in the study may not have handled any case of institutional delivery. ASHAs also get incentives for promotion of institutional delivery. But the researcher feels the current incentive policy for promotion of institutional delivery is a problem. This is because incentives are given to ASHAs for promoting institutional delivery among the BPL or Scheduled Caste/Scheduled Tribe categories. This could be one of the reasons for some respondents not being aware about incentives for institutional deliveries. This may also be a cause for non-promotion of institutional delivery among non-BPL and of Open category women by ASHAs.

During field visits to the study areas, the researcher observed that many ASHAs do not have a population which fits in the JSY criteria to get benefits. They neither have people from the BPL population, nor from the SC/ST community in their working population. ASHAs do not get incentives for helping a pregnant woman from the Open category for institutional delivery, or if a woman they helped for institutional delivery is not from BPL/SC/ST category. This affects ASHAs' performance.

Though more than half of the ASHAs are of the opinion that they are aware about their role as community mobilisers, the researcher strongly feels that they just know the term community mobiliser. Actually, they do not actively discharge their duties as community mobilisers.

To examine the support and acceptance of ASHAs in the community, the researcher asked ASHA respondents questions regarding the problems they faced while working in the community. Majority of ASHAs reported they faced problems while working in the community. The most common problem is with regard to connectivity/network, which creates difficulties while trying to contact for ambulance transport in times of need. Though the ASHAs reported that they faced many problems while working in the community, the researcher asked them to rate the support of the community in their work. 118 of 280 ASHAs gave "very good" rating for community support in their work.

RELEVANCE OF THE PRESENT STUDY TO THEORIES OF EVALUATION OF ASHA WORKERS

In the present study, the majority (53.2%) ASHAs are from the age group of 31 to 40 years, and 29.3% are from the age group of 21 to 30 years. Similar findings are reported by Dr. Rajendra Meena et al in their study conducted in Uttar Pradesh. In this study, it is also found that most of the ASHAs studied up to secondary school. Similar results were found in the present study. This is also supported by the study conducted by Garg Pⁱ et al. It shows that the selection criteria of ASHAs are followed as per the norms laid down in the NRHM guidelines. In the present study, it is found that 90.4% of ASHAs have received ASHA kit (drug kit). It is similar to findings of other studies done by Garg P et. In the present study, it is found that 83.9% ASHAs are overburdened. Similar findings are presented by Swathi Seth et al in their study conducted in the state of Karnataka.

In the study, “AN EVALUATION OF ASHA WORKER’S AWARENESS AND PRACTICE OF THEIR RESPONSIBILITIES IN RURAL HARYANA”, P. K. Garg et al have studied that most (84.76%) ASHA workers were Hindus; whereas, in the present study, a slightly higher 87.9% ASHAs are Hindu. With regard to marital status, 88.57% ASHAs are married, and it is almost similar to the present study (87.5%). Majority of the ASHAs (71.66%) were not satisfied with their incentives; whereas, in the present study, 84.7% ASHAs are not satisfied with the incentive they are getting. This finding is supported with regard to obtaining training before joining. The study done by Swathi Shetⁱⁱ et al has revealed that 97.14% ASHAs are trained before they start working as ASHAs; whereas, in the present study, it is found that 100% ASHAs have received training before they started working as ASHAs. All ASHA workers are satisfied with the training they have received. In the present study, it is found that ASHAs ranked the utility of the training as Best (41.1%), Better (44.6%), Very Good (6.8%) and Good (7.1%). The study by Mayadhar Pandaⁱⁱⁱ et al also supported the present study findings about training.

From the study conducted in Jaipur city of Rajasthan state by Dr. Rajendra Meena^{iv} et al, it is seen that 69.77% ASHAs knew about creating awareness in the community on health, hygiene, and nutrition; whereas, the present study conducted in the two districts of Maharashtra rural areas found awareness about role of community mobiliser at 62.5%. Other studies also supported the present study findings. The study by Shukla et al (2012) in Uttarakhand showed that 79.2% reported spreading health

awareness as one of their job responsibilities; the study by Saraswati Swain et al (2008) in Orissa showed that 48% of ASHAs knew about creating community awareness about various health determinants.

In the present study, 91.1 % of ASHAs reported escorting pregnant women to hospital for institutional delivery; whereas, Sarswati Swain et al, in their study conducted in 2008 in the state of Orissa, reported that 83% of ASHAs escorted pregnant women to hospital for institutional delivery. The study by Kohli C. et al (2015) also reported that 89.1% ASHAs escorted pregnant women for delivery.

The present study deals with various aspects of the ASHA scheme i.e. knowledge of ASHAs about child health (89%), which is more than what was seen in the study done by Swati Seth et al (2018) in Udupi district of Karnataka state (65%).

With regard to the education of ASHAs, there are state-specific criteria. The present study revealed that 59.6% ASHAs have completed their secondary school education; whereas 1.4% studied up to primary, and 0.4% are illiterate. This is due to the unavailability of ASHA workers in a particular area. Similar results are seen in the study done by Jain et al in the state of Uttar Pradesh.

ASHAs' selection criterion is 10th class, but in certain circumstances it is reduced due to non-availability of candidates and taking into account the need of the hour. Similar results are also seen by a study done by Jain^v et al.

It is seen that ASHA workers have good knowledge of ANC and PNC. Similar findings are seen in the study by Fathima F.N.^{vi} et al and Garg P. et al. It is also found that many were lacking in knowledge other than maternal and child health and this is supported by Gosavi et al.

Hence, we can say that all the objectives of the study have been achieved.

5.5 CONCLUSION

NRHM entitles Panchayati Raj institutions from the village to the district level to be given ownership of the public health delivery system in their respective jurisdictions. The Accredited Social Health Activist is a health activism initiative within communities. It seeks to create awareness on health and its social determinants, and mobilises the community towards local health planning and increased utilisation of and accountability for existing health services provided by the government. ASHA also provides a minimum package of curative care as appropriate and feasible for that

level and makes timely referrals. Under the National Rural Health Mission, the government has envisaged appointment of a female as ASHA in every village to act as an interface between ANMs and the village and to be accountable to the Panchayat. The ASHAs would get performance-based compensation for promoting universal immunisation, referral and escort services for RCH, construction of household toilets and other healthcare delivery programmes. Though the Central government makes general guidelines for appointment of ASHAs, various states are free to follow their own models based on the requirements of the respective states. As per NRHM goals, one of the steps is appointing ASHAs to provide health services to vulnerable groups in society.

The present study concludes that, as per norms stipulated for the selection of ASHAs, almost all guidelines are being followed in the process of selection of ASHAs, i.e., age, qualification, marital status, etc. Satisfactory representation of socially backward groups is observed. The selection of ASHAs was made by the Grampanchayat/ Gramsabha.

Development of individual skills is very important to support and strengthen health services. Therefore, every ASHA is given appropriate training to develop their individual skills for better service to community.

ASHAs are aware about the Programme Implementation Plan (PIP), so there is a need to involve ASHAs in preparation of PIP and, through ASHAs, the community should be involved in PIP preparation.

There is no difference in perception of ASHAs about their roles and responsibilities across geographical areas. ASHA workers are dissatisfied about the incentives they receive, and favor fixed salary for their work.

In the opinion of health supervisors, because of ASHAs, there is increasing trust in the community about health programmes. Continuous follow-up, appropriate communication with pregnant women and families, and accompanying pregnant women to hospital for delivery have made a very positive impact on increasing institutional deliveries. Because of ASHAs, health service has reached the doorstep of vulnerable groups.

5.6 RECOMMENDATIONS

5.6.1 SOCIO-ECONOMIC BACKGROUND OF RESPONDENTS

- Most of the respondents are married. The percentage of divorced and widowed together is 11.8%. Therefore, it is strongly recommended that preference should be given to divorced and widowed women in the selection of ASHAs.
- Besides setting secondary school education as a selection criterion for ASHAs, preference should be given to those who have earlier worked as Dai, as the government has invested a lot in their training.
- Spouses of most respondents, and most of the respondents themselves, are engaged in agriculture. Majority of respondents do not have any other occupation, other than being ASHAs. It means there is no fixed income for the spouses and the respondents themselves. Therefore, it is strongly recommended that they should be given some fixed salary every month, which may improve their standard of living and help them concentrate on their job better.
- Though half of the respondents reside in kutcha houses, most of them have toilets attached to their homes. However, there should be some kind of support to upgrade their houses into pucca ones. This can be done by integration of other schemes, like the Pradhanmantri Awas Yojana. While choosing beneficiaries for these benefits, those who have toilets attached to their homes may be chosen first. It may also promote construction of toilets among ASHAs.
- It is felt that ASHAs are given preference for government benefit schemes, which enhances the status of ASHAs in society and more women come forward to work as ASHAs.
- Regarding the period of service put in by an ASHA, it is found that 76.1 percent respondents have more than five years of experience working as ASHAs. It shows that most ASHAs have long enough experience. Also, there should be some additional incentive to ASHAs who have more than five years of experience, considering that in all service sectors employees get either promotion or cash benefits. If ASHAs also get similar incentives, it will be a motivating factor. Also, in the mission document, it is suggested that experienced ASHAs can be promoted

or given preference for the post of ANM as per their qualification. As they have good knowledge of health services and because the government has invested a lot of money to train them, they can be utilised more efficiently.

- It is necessary to replenish medical kits from time to time and provide all listed items because many a times, ASHAs are unable to provide medicines to beneficiaries due to unavailability of medicines.

5.6.2 TRAINING GIVEN TO RESPONDENTS

- All respondents have received induction training. But the researcher observed that most of them are not able to recall what type of training they had got, particularly, in community mobilisation. Therefore, it is felt that emphasis should be given to training in mobilising community, which is one of the major roles of ASHAs.

5.6.3 KNOWLEDGE LEVEL OF ASHAs

- Promotion of institutional deliveries is one of the key responsibilities of ASHAs under the JSY scheme, and incentives are provided to both ASHAs and pregnant women beneficiaries from SC, ST and BPL categories. Only half of the respondents are seen to have proper knowledge of incentives paid to pregnant women under the JSY scheme. Hence, it is strongly recommended that they should be given refresher training pertaining to cash benefit schemes.

5.6.4 ROLES AND RESPONSIBILITIES OF ASHAs

- It was very difficult to calculate the time spent by ASHAs on every activity performed by them every day. But, on an average, they work four hours a day. In case of referral services, they spend 30 minutes in the village daily. But when they accompany pregnant women for delivery to a health facility, they have to spend more than 24 hour there. This time increases if they go to the district hospital. Such instances come at least once in a month. They are not provided accommodation or food at the health facility where they have to spend extra time. Most of the time, they also do not have enough money with them. Therefore, it is felt that there should be one 10x10 room at every health facility (PHC, CHC, or DH), especially for ASHAs who accompany pregnant women for delivery. Data shows that 91 percent of ASHAs accompany pregnant women for institutional

delivery. In such instances, the ASHAs have to spend from their pockets and get it reimbursed later. This puts additional financial burden on them. Most of the time, they do not feed themselves as they do not have money. So, it is felt that some advance may be given to ASHAs, which can be settled in due course.

- Most of the time, it is difficult to connect to call centres to get 102 and 108 ambulance services. So, coverage of these ambulance services needs to be increased.

5.6.5 ASHAs RECEIVING CASH INCENTIVE FOR JOBS DONE

- Looking at the pains taken by ASHAs in their job, it is felt that they should be given fixed salary per month. Two thirds of ASHAs get remuneration of Rs1000 to 3000per month. This is a very small amount. Therefore, it is felt that remuneration of ASHAs should be revised.
- Remuneration for ASHAs is based on their performance. Sometimes, looking at the figures, it is assumed that their performance is low. But it is far from the truth. As the researcher had mentioned earlier, there is ambiguity in the policy. ASHAs get incentive for promotion of institutional delivery of SC,ST and BPL category women. Whereas, they work to promote institutional delivery irrespective of the categories. That is, they also serve the Open category. But their effort in this direction goes waste, as they do not get incentives for serving other categories. Similarly, women from other categories also do not get incentives. In that case, beneficiaries of other categories blame ASHAs for their not getting incentives. Therefore, irrespective of SC, ST and BPL criteria, incentive should be given to all pregnant women and also to ASHAs for providing services to pregnant women during pregnancy and for motivating them for institutional delivery.

5.6.6 PROBLEMS FACED BY AHSAs WHILE PERFORMING DUTIES

- Under the JSSK scheme, pregnant women get free transport service from home to hospital and back. There are two types of ambulance services made available on call basis. But many a time, they face network/connectivity problems and cannot reach the service they seek. In that case, ASHAs need to take beneficiaries either by public transport or by private vehicle. Therefore, there should be some alternate facility. In the early stages of the JSSK scheme, some paneled vehicles were made available at the village level and a fixed amount for transport was

given to them. It can be started again where there is problem of connectivity, especially in tribal areas.

- Some ASHAs need to go far from their place of residence to the beneficiaries' residence. Often they have to reach there on foot, which takes more time than otherwise. So, they should be given bicycles. This can save their time and reduce effort and delays.

Almost all respondents require the following support:

- Though there are VHSNCs in the villages to support and facilitate community mobilisation, PRI members should support ASHAs in carrying out their duties, especially in community mobilisation. Some guidelines and training should be given to PRI members.
- ASHAs expect their dignity to be maintained, especially in terms of how ANMs, doctors and other service providers view and treat them. So, healthcare providers should support ASHAs.
- There should be provision for travel advance amount to ASHAs, as they often have to spend from their pockets and get it reimbursed later. This is a financial burden on them.
- As ASHAs need to go to PHCs frequently for various reasons like accompanying patients and for monthly meetings, they have to wait in common areas of the health facility. This puts them in an awkward situation. Therefore, some office space should be made available to ASHAs at PHCs.
- ASHAs should be given smart phones to help them report and to stay connected with beneficiaries. If needed, they can make a video call to a higher facility for consultation and show the patient to them.
- Image-building of ASHAs is needed as they spend time in the community. People do not give cognisance to them and think that ASHAs do not have any authority, or bring them any direct benefit. Most of the time, ASHAs do not even have basic medicines with them, which is also one of the reasons why the community does accord them due recognition. Therefore, it is felt that medicines should be supplied in time to ASHAs. Also, if some of the cash benefits given to beneficiaries under schemes like JSY and Pradhan Mantri Maturtva Vandana Yojana are routed through ASHAs, there could be positive change in people's outlook towards ASHAs.

- It is seen that all respondents need to travel a lot in their respective service areas. In some areas, the population is scattered. So, they have to spend more time travelling from home to their service areas. They frequently have to come to PHCs along with patients for reporting and meetings. There is no proper transport facility in rural areas. Even if there is, it does not suit their time. ASHAs have to spend a lot of time waiting for transport. Hence, it is felt that if a vehicle like moped is provided to them on loan basis, it would save their time and energy, which can be used in a better way.
- ASHAs do not get printed stationery for reporting. Buying it is an additional financial burden for them. Therefore, all printed stationery should be supplied from the respective PHCs to ASHAs.

5.6.7 PERCEPTION OF ASHAs

- Almost all respondents feel that community mobilisation means promoting construction of toilets, building rapport, understanding problems faced by communities and helping them resolve them, and organising the community to resolve their health problems. It is a constraint of every study that the researcher has to take the opinion of the respondents as it is. Here, the researcher has made his observations from field visits and interviewing respondents. Though they say they understand their role as community mobilisers, the researcher observed that they do not know about community mobilisation. This is a weak area, and is totally neglected. Therefore, it is strongly recommended that more training be given on community mobilisation to both ASHAs and their supervisory cadre. It is observed that the supervisory cadre, too, are not very conversant with the community mobilisation component. The supervisory cadre should be able to give ASHAs more inputs about community mobilisation.
- PIP should be prepared as per the need of the community. There should be involvement of ASHAs of the concerned village in its preparation. Involvement of community is also needed in the process of preparing PIP.
- There should be awareness creation campaign in community about the roles and responsibilities of ASHAs.

5.7 PROPOSED AREAS OF SOCIAL WORK INTERVENTION

5.7.1 Implications and Relevance for Social Work Profession

Social work is a profession and academic discipline that helps improve the quality of life and well-being of individuals, groups and communities through teaching, direct practice, policy development, interventions, developing pressure groups, creating role models, mobilising/organising communities for social action, crisis management, and intervention. In India, the social work profession is one of the key contributors in community development, especially in the rural development sector. Health is a key component in the life of a human being. During the journey from birth to death, humans face several challenges. Being a responsible stakeholder in society, the social work professional needs to play a vital role in creating a more resilient society and address various health issues. Based on the findings of the study, it may be said that the social work professional can and needs to respond more effectively and efficiently in facilitating new concepts in the area of health services and healthcare.

5.7.2 Perspective-building about Health Care

Various courses are available under professional social work, including from certificate courses, to graduation, post-graduation, post-graduation and diploma on development issues. There are several steps and processes to equip students with skills in the various aspects related to development. Students can be educated on topics such as mortality, morbidity, IMR, MMR, life expectancy, RMNCHA (Reproductive Maternal Newborn Health and Adolescent Health), National Health Programme, health systems and primary, secondary and tertiary healthcare systems. This can be achieved by effecting changes in the syllabus, organising special guest lectures, seminars and group discussions, debate competitions and role plays. It will help build the perspective of students towards health issues.

5.7.3 Assessment and Analysis of Various Health Programmes in the Country

As part of their curriculum, social work students have to do field work in various areas. It is expected of students to get exposure to ground realities and try to understand them. Assessment and analysis is an important aspect of professional social work teaching, and it is the first step to finding solutions to problems.

5.7.4 Promotion of Research Projects on Health Issues

As a part of the curriculum, social work students have to undertake research dissertation related to health topics. Research projects related to health issues need to be encouraged. Students should be encouraged to write papers on health issues and attend national and international conferences. Social work colleges should more actively participate in action and intervention projects. Social work colleges should develop a separate department to conduct studies on health issues. The government conducts various health related research studies, like DLHS(District Level Household Survey and NFHS(National Family Health Survey). Such studies or surveys are conducted every three to four years. This helps the government device health policies. Such activities can give more insight to students, boost their professional skills, and could be treated as on-the-job training.

5.7.5 Facilitation for Access and Mobilising

As part of the MSW (Master of Social Work) course curriculum, students have to do field work, and undergo summer placement training (SPT) and block placement training (BPT). If the colleges place students for field work in government hospitals, including in district hospitals, community health centres, sub-divisional hospitals, PHCs and sub-centres, they can closely understand the entire health service delivery system. This may help them when they go on to work as professionals in community. Similarly, medical students are placed for one-year internship. Here, students can be taught to mobilise the community to understand their health needs and motivate them to take care of their health needs. The community can monitor the health schemes implemented in their villages/communities. This can be imparted in the Social Work syllabus.

5.7.6 Capacity-building of Social Work Teachers and Professors

Professors and teachers are the backbone of the social work profession. They facilitate knowledge and skills to students. Before launching any scheme of public interest, the government should orient social work professors and teachers by arranging workshops and seminars for them. Similarly, NGOs working in the areas of health should be involved in the implementation of any innovative health scheme.

5.8 LIMITATIONS OF THE STUDY

The ASHA scheme is implemented in all 33 districts of Maharashtra. But due to limited time and resources, the researcher could not include all districts in the study. Nandurbar and Sangli districts were selected for the study. Hence, the results and conclusions may be considered keeping in mind the limited coverage of the study. Nevertheless, despite the limitations, the paper presents exhaustive research on the study topic and could be a valuable resource for policy making and future research.

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ANNEXURE: I

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ANNEXURE: 2
INTERVIEW SCHEDULE

Schedule No. _____

Tilak Maharashtra Vidyapeeth, Pune
Interview schedule for the Ph.D. course in the subject of Social Work

**AN EVALUATION STUDY OF 'ASHA' IN PROVIDING ACCESS TO
HEALTH SERVICES AND COMMUNITY AWARENESS UNDER THE
NATIONAL RURAL HEALTH MISSION: WITH REFERENCE TO STATE
OF MAHARSHTRA**

Dr. Chandrakant Puri
(Research Guide)

Akram Khan
(Research Scholar)

Interview Schedule for Accredited Social Health Activist (ASHA)

SECTION I: IDENTIFICATION DETAILS

Name of the ASHA आशाचेनाव	:	
Name of the Village गाव	:	
Name of the Grampanchayat ग्रामपंचायत	:	
Name of PHC प्राथमिक आरोग्य केंद्र	:	
Name of Sub Center उपकेंद्र	:	
Name of Taluka/Block तालुका	:	
Name of District जिल्हा	:	

1.1) How old are you? तुमचे वय किती आहे? AGE IN COMPLETED YEARS वय पूर्ण वर्षात

1.2) What is your current marital status? सध्याची वैवाहिक स्थिती

1	Unmarried अविवाहित	
2	Married विवाहित	
3	Widow विधवा	

4	Deserted परितक्त्या	
5	Divorced/Separated घटस्फोटीता	

1.3) What is the highest level of schooling you have completed? तुमचे शिक्षण

Completed years of Schooling किती वर्षे शिक्षण

1.4) What is your Caste? आपली जात/समाज कोणता? _____

1.5) What is your religion? आपला धर्म कोणता?

1	Hindu हिंदू	
2	Muslim मुस्लीम	
3	Christian ख्रिश्चन	
4	Sikh शीख	
5	Buddhist/Neo Buddhist बौद्ध/ नव बौद्ध	

6	Jain जैन	
7	Animism (Tribal Religion) आदिवासी	
8	No Religion धर्मातीत	
9	Other इतर (Specify) _____	

1.6) What is your category? जातीचा प्रवर्ग?

1	SC एससी	
2	ST एस टी	
3	OBC ओबीसी	

4	Open ओपन	
5	SBC एस बी सी	
6	VJ/NT/DNT/SNT विमुक्त भटके	

1.7) What is your family occupation? तुमच्या कुटुंबाचा व्यवसाय कोणता?

1	Cultivator (Large Farmer) सधन शेतकरी		6	Private Service खाजगी नोकरी	
2	Cultivator (Small/Marginal Farmer) लहान शेतकरी		7	Business व्यवसाय	
3	Agricultural Labourer शेतमजूर		8	Self-Employment स्वयंरोजगार	
4	Non-Agricultural Labourer बिगर शेती मजूर		9	None	
5	Government Service शासकीय नोकरी		10	Others Specify) _____	

1.8) Do you engage in any other occupation than ASHA? तुम्ही आशा व्यतिरिक्त दुसरे एखादे काम करता का?

1	Cultivator (Large Farmer) सधन शेतकरी		6	Private Service खाजगी नोकरी	
2	Cultivator (Small/Marginal Farmer) लहान शेतकरी		7	Business व्यवसाय	
3	Agricultural Labourer शेतमजूर		8	Self-Employment स्वयंरोजगार	
4	Non-Agricultural Labourer बिगर शेती मजूर		9	None	
5	Government Service शासकीय नोकरी		10	Others Specify) _____	

1.9) What kind of house do you live in? तुम्ही राहत असलेला घराचा प्रकार

1	Kutcha कच्चे	
2	Semi Pucca अर्धे पक्के	

3	Pucca पक्के	
4	Other इतर	

1.10) Type of Family कुटुंबाचा प्रकार

1	Single Person एकल	
2	Nuclear Family विभक्त	

3	Joint/Extended family एकत्रित	
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1.11) Does your house have following facilities? तुमच्याघरात खालील सोयी आहेत का?

A	Water Supply-Piped नळ कनेक्शन	
B	Electricity वीज	

C	Separate Kitchen स्वतंत्र स्वयंपाक खोली	
D	Toilet संडास	

1.12) Family Roster कौटुंबिक माहिती (कुटुंब प्रमुख कोण?) -

No.	Name नाव	Relationship to the head of the HH कुटुंब प्रमुखाशी नाते	Ageवय	Sex M/F लिंग	Marital Status वैवाहिक स्थिती	Education शिक्षण (Highest years of education)	Occupation* व्यवसाय
						(Record only for HH member aged 7 and above)	
1							
2							
3							
4							
5							
6							
7							
8							

*Codes for Occupation: 1. Cultivator (large farmer); 2. Cultivator (small/marginal farmer); 3. Agricultural Labourer; 4. Non-agricultural Labourer; 5. Government Service; 6. Private Service; 7. Business; 8. Self-employed; 9. Housewife; 10. Home-based Worker; 11. Education 12. None 13. Others (Specify)

1.13) What was the process of your selection as an ASHA? तुमची आशा म्हणून निवड कशी झाली?

1	Grampanchayat/Gramsabha ग्रामपंचायत/ग्रामसभा	4	Pradhan/Sarpanch प्रधान/सरपंच
2	Village Health Committee ग्रामआरोग्य समिती	5	Community समुदाय
3	ANM नर्स	6	Other (Specify) _____

1.14) How long have you been working as ASHA? किती वर्षांपासून आशा म्हणून काम करीत आहात?

Duration in months कालावधी महिन्यांमध्ये

1.15) Population served by you? तुमच्याकडेकामासाठी किती लोकसंख्या आहे?

1.16) Number of households served by you काम करण्यासाठी तुमच्याकडे किती घर आहेत?

1.17) a.) Distance of the farthest household/village served by you from your residence

तुमच्याघरापासूनकामाच्यासर्वात लांबच्याघराचे अंतर? _____

1	Less than one KM एक किमी पेक्षा कमी	4	Two to Three KM दोनते तीन किमी
2	Up to one KM एक किमी एवढे	5	Three to Four KM तीन ते चार किमी
3	One to two KM एक किमी तेदोन किमी	6	More than Four KM चारकिमी पेक्षा अधिक

b.) Time taken (in hours) शेवटच्या घरापर्यंत जाण्यासाठी किती वेळ लागतो _____

SECTION II: TRAINING

2.1) Have you undergone ASHA induction training programme? तुम्हाला आशा प्रशिक्षण दिले आहे का?

1	Yes होय		2	No नाही(Skip to Q. 2.9)	
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2.2) If yes, how many days? प्रशिक्षणाचा कालावधी? _____

2.3) On which modules were you trained? कोणत्या प्रकारचे प्रशिक्षण दिले आहे?

A	Module 1 Reading Material for ASHA आशासाठी वाचन साहित्य		D	Module 4 National Health Programmes AYUSH & Management of Minor Ailments राष्ट्रीय कार्यक्रम किरकोळ आजारांची हाताळणी, आयुष	
B	Module 2 Maternal and Child Health माता व बाल संगोपन		E	Module 5 Reading Material for ASHA आशासाठी वाचन साहित्य	
C	Module 3 Family Planning, RTI/STI, and HIV/AIDS and ARSH कुटुंब कल्याण प्रजनन व लैंगिक मार्ग, कुमारवयीन लैंगिक आरोग्य, संक्रमण एचआयव्ही/एड्स		F	Module 6 & 7 Skills that Saves Lives जीवरक्षक कौशल्ये	

2.4) How many trainings have you obtained? तुम्ही
एकूण किती प्रशिक्षण घेतली?

No. of Trainings प्रशिक्षणसंख्या	
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2.5) When was the last training held, and which? शेवटचे प्रशिक्षण केव्हा झाले आणि कोणते?

Months महिने		कोणते प्रशिक्षण	
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2.6) What was the duration of the last training you have attended? शेवटच्या प्रशिक्षणाचा कालावधी
किती होता?

No. of Days दिवस	
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2.7) How much allowance do you have received from attaining last training? प्रशिक्षणाचा
उपस्थिती भत्ता किती मिळाला?

Allowance in Rs किती भत्ता				
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2.8) Did you find last training was useful? प्रशिक्षण किती उपयोगी होते?

1	Best सर्वोत्कृष्ट		4	Good छान	
2	Better चांगले		5	Fair वाजवी	
3	Very Good खूप छान		6	No Use काही उपयोग नाही	

2.9) Have you been issued Special uniform तुम्हाला गणवेश दिला आहे का?

1	Yes होय		2	No नाही	
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2.10) Have you been issued Identity Card? तुम्हाला ओळख पत्र दिले आहे का?

1	Yes होय		2	No नाही	
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2.11) Have you been issued any ASHA kit? आशा कीट मिळाले आहे का?

1	Yes होय		2	No नाही	
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2.12	Name of the Item with ASHA	Item Available		If No: Problem in getting
		Yes	No	
	a. ASHA guidelines (in local language) आशा मार्गदर्शिका			
	b. Oral rehydration salts (ORS) ओआरएस			
	c. Tablet Paracetamol पॅरासिटॅमोल गोळ्या (तापासाठी)			
	d. Syrup Paracetamol पॅरासिटॅमोल सिरप (तापासाठी)			
	e. IFA tablets, including iron syrup लोह गोळ्या व सिरप			
	f. Tablet Punarvadu Mandur (ISM preparation for IRON AYUSH drugs) पुन्वाडू मंडूर गोळ्या (रक्तवाढीसाठी)			
	g. Vitamin A अ जीवनसत्व (रात आंधळे पण टाळण्यासाठी)			
	h. Tablet Dyclomin डायक्लोमीन (गोळ्यापोट दुखी साठी)			
	i. Tablet Zinc झिंक गोळ्या (अतिसारामुळे झालेली झीज भरून काढण्यासाठी)			
	j. Tetracycline Ointment Tube टेट्रासायक्लीन मलम			
	k. G. V. Paint जी व्ही पेंट			
	l. Cotrimoxazole Syrup कॉट्रीमोक्झाझोल सिरप (प्रतिजैविके, अँटीबायोटिक)			
	m. Pediatric Cotrimoxazole tablets लहान मुलांची कॉट्रीमोक्झाझोल (प्रतिजैविके)			
	n. Spirit स्पिरीट			
	o. Soap साबण			
	p. Sterilized Cotton निर्जंतुक कापूस			
	q. Bandages बँडेज			
	r. Antiseptic solution एन्टीसेप्टिक द्रावण			
	s. Nischay Kit निश्चय कीट			
	t. Oral Pills ओरल पिल्स			
	u. Emergency contraceptive pills गर्भनिरोधक गोळ्या			
	v. Condom कंडोम/निरोध			
	w. Co-trimoxazole kit को-ट्रायमोक्झाझोल कीट (प्रतिजैविके)			
	x. Water testing kit पाणी तपासणी कीट ओटी kit			
	y. Salt testing kit मीठतपासणीकीट (iodine kit)			
	z. Rapid test kit for malaria जलदमलेरिया तपासणी कीट			

aa. Disposable delivery kit डिस्पोजेबल डिलिव्हरी कीट			
ab. IEC material (posters, leaflets, handbills etc...) आयईसी			
ac. Other (Specify) _____			

SECTION III: ASHA'S KNOWLEDGE

3.1) What are the important steps for prevention of diarrhoea? अतिसारापासून बचाव करण्यासाठी महत्वाचे प्रतिबंधक उपाय काय आहेत?

A	Hand washing practices हात धुण्याची सवय	
B	Use of safe drinking water पिण्यासाठी स्वच्छ पानी वापरणे	

C	Use of covered containers संरक्षित कंटेनरचा वापर	
D	Other (specify) इतर _____	
E	Don't Know माहित नाही	

3.2) When should the breast feeding be initiated after delivery? बाळ जन्मल्यानंतर किती वेळाने स्तनपानास सुरुवात करायला हवी?

1	Within 1 hour of delivery प्रसूती नंतर एक तासाच्या आत	
2	Within 6 hours of delivery प्रसूती नंतरसहा तासाच्या आत	
3	Within 24 hours of delivery प्रसूती नंतरचोवीस तासाच्या आत	

4	After the child has been given water, honey, Ghutti etc... बाळाला पाणी, मध, घुट्टी इत्यादी दिल्यानंतर	
5	Other (specify) इतर _____	
6	Don't Know माहित नाही	

3.3) Till what age should the child be exclusively breastfed? बाळाला किती दिवस फक्त स्तनपान दिले जावे?

Months महिने

3.4) How do you identify a case of Acute Respiratory Infections (ARIs)/Pneumonia? श्वसनदाह आजार कसा ओळखता ?

A	Increased breathing वाढलेला श्वासोच्छ्वास	
B	In-drawing of chest छाती भरणे	
C	Blue colour of the child बाळाचा रंगनिळसर होणे	
D	Vomiting उलटी	

E	Fever ताप	
F	Inability to drink/suck शोषणे आणि पिण्याची क्षमता नसणे	
G	Other (specify) इतर _____	
H	Don't Know माहित नाही	

3.5) Are you aware about free transport made available from home to hospital for pregnant women? गरोदर मातेला प्रसूतीसाठी संस्थेत जाण्यासाठी वाहनाची सोय आहे हे तुम्हाला माहित आहे का?

1 Yes होय 2 No नाही

3.6) Have you Heard about Janani Suraksha Yojana? तुम्ही जननी सुरक्षा योजनेबद्दल ऐकले आहे का?

1 Yes होय 2 No नाही

3.7) What is the amount of cash incentive given to the JSY beneficiary per case (in rupees)? जननी सुरक्षा योजने अंतर्गत महिलांना आर्थिक लाभ किती दिला जातो?

A. HOME DELIVERY B. INSTITUTIONAL DELIVERY C. C-SECTION

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3.8) According to you what are the **major** features of the NRHM? तुमच्या मते NRHM चे वैशीष्ट काय?

	Features of NRHM	
A	Funds are available under NRHM for the maintenance of health facilities आरोग्यसुविधाचांगल्याराखण्यासाठीएनआरएचएमअंतर्गतनिधीउपलब्धआहे	
B	Community support is there for ASHA workers समुदायाकडून आशांसाठीआधारआहे	
C	Funds and facilities are available under JSY/JSSK निधीआणिसुविधाजेएसवाय/जेएसएसकेअंतर्गतउपलब्धआहेत	
D	Better infrastructure has developed उत्तमपायाभूतसुविधाविकसितकेलीआहे	
E	Better services available for patients रूग्णांसाठीउत्तमसेवाउपलब्ध	
F	Referral services has improved रेफरलसेवासुधारितआहेत	
G	Other (Specify) इतर _____	

SECTION IV: ASHA'S PERFORMANCE AND AWARENESS

Have you performed the following duties during the period of last one year?

(Reference period one year prior from the date of survey) (If some records like diary is available the interviewer to verify, otherwise indicate not available)			
Q. No.	Particulars	Number	If no, why?
4.1	Children with diarrhea given oral rehydration salts (ORS) जुलाबझालेल्यामुलांनाओरलरीहायड्रेशनसॉल्टदेण्यातयेतात (ओआरएस)		
4.2	Accompanied institutional deliveries cases संस्थार्गतप्रसूतीच्याप्रकरणात सोबत		
4.3	Number of oral pills cycles distributed वितरित केलेल्यातोंडावाटेघ्यायच्यागोळ्यांचीसंख्या		
4.4	Number of condom distributed वाटप केलेल्या कंडोमची संख्या (पाकिटे)		
4.5	Number of malaria patients given drugsमलेरिया रुग्ण		
4.6	Number of new pregnancies identified नवीनशोधलेल्या गर्भधारणा		
4.7	Number of tuberculosis (TB) cases provided DOTS क्षयरोग/टीबीचे रुग्ण		
4.8	Number of group meetings like Mahila Mandals arranged महिला मंडळ सारख्या गटवैठकांचे आयोजन		
4.9	Number of health & nutrition days organized आरोग्य आणि पोषण दिवसांचे आयोजन		
4.10	Number of immunisation sessions attended/conducted उपस्थित/आयोजित केलेल्या लसीकरण सत्रांची संख्या		
4.11	Any other activity listed in your job (Specify)आपल्यानोकरीमध्येसूचीबद्धकेलेलाकोणताही इतरउपक्रम		

4.12) a.) Are you aware about roles and responsibilities of ASHA? तुम्हाला आशाची कामेआणि जबाबदाऱ्या माहित आहेत काय?

1	Yes होय	2	No नाही
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4.12) b.) If yes, can you list your major responsibilities? कामाची यादी सांगा.

1. _____ 2. _____

SECTION V: ROLES AND RESPONSIBILITIES

5.1)

Sr.	Activities	Extremely Important	Important	Average	Less Important	Not at all Important
1.	ASHAs Provided Services During Pregnancy Under JSY scheme(Rs 300)					
2.	Motivate For Pregnant Women For Institution (Rs 300)					
3.	ASHAs Provided the Services During Pregnancy and escort women for delivery under JSY scheme(Rs 600)					
4.	15 to 49 Age Group Women's Death Information (Rs 200)					
5.	Motivated women for Tubectomy treatment (Rs 150)					
6.	Motivation of any Beneficiary for Vasectomy (Rs 200)					
7.	Distributed Condom Packets from ASHAs Rs 1 (Rs 1)					
8.	Distributed Contraceptive Medicine Cycles (Rs 1)					
9.	Distributed Emergency Contraceptive Pills (Rs 2)					
10.	ASHA Mobility Reimbursement of Travel Expenses (Rs 150)					
11.	ASHA Mobility Reimbursement of Travel Expenses (Rs 225)					
12.	HBNC (Rs 250) More than 5 Home Visits					
13.	HBNC (Rs 125) Less than 5 Home Visits					
14.	Incentive for Follow-up of LBW Babies Rs 5 (Rs 50)					
15.	Incentive to ASHA for Follow-up of SNCU dis. (Rs 50)					
16.	Referral of SAM Cases to NRCs (for Per Reference (Rs 150)					
17.	Discharge Children from NRC 3rd Visit @ 50 (Rs 150)					
18.	Incentive under MAA (MOTHER ABSOLUTE AFFECT (Rs 100)					
19.	Incentive for ASHA in National Deworming Day (Rs 100)					
20.	IDCF Incentive for Prophylactic Distribution (Rs 100)					
21.	ASHA PPIUCD incentive for motivation of beneficiaries for spacing (Rs 150)					
22.	ASHA PAIUCD Incentive for Accompanying beneficiaries (Rs 150)					
23.	ASHA Incentive under Ensuring Spacing in Births (Rs 500)					
24.	Incentive for Selection of Peer Educator (Rs 100)					

Sr.	Activities	Extremely Important	Important	Average	Less Important	Not at all Important
25.	Arranging Adolescent Girls' Monthly Meeting (Rs 50)					
26.	Incentive for mobilising sick children for referral and follow up (6 to 59 months) for immunisation (Rs 100)					
27.	VHNSC Monthly Meeting (Rs 150)					
28.	ASHA Monthly Meeting (Rs - 150)					
29.	ASHA for Record Update and Support (Rs 500)					
30.	Control of Epidemic (Outbreak) (Rs 100)					
31.	Control of Epidemic (dehydrated) Cases (Rs 50)					
32.	Confirming HIV positive status of pregnant (Rs 100)					
33.	MMU Incentives (Rs 150)					
34.	NCD Incentive to ASHAs Home visits for NCD (Rs 10)					
35.	Mobilising on screening day Rs 50 (Rs 50)					
36.	Follow-up of patient Rs 50 (twice in a year (Rs 50)					
37.	Sickle Cell - To motivate Self-help groups (Rs 40)					
38.	Sickle Cell - Incentive to be given for bri - (Rs 300)					
39.	Sickle Cell Red And Yellow card distribution (Rs 10)					
40.	Sickle Cell- Incentive for Home Visit Per Month (Rs 10)					
41.	Palliative Care programme- Patients register (Rs 50)					
42.	Palliative Care Programme - after confirmation (Rs 50)					
43.	Palliative Care Programme - weekly follow up (Rs 25)					
44.	Maher Ghar Yojana - ASHAs Motivate and rogi (Rs 200)					
45.	Selling of Sanitary Napkin (Rs 1)					
46.	Quarterly Meeting of ASHA on Immunisation (Rs 75)					
47.	Per Month Immunisation at Village Level - S (Rs 25)					
48.	Per Month Immunisation at Village Level - S (Rs 150)					
49.	Per Month Immunisation at Village Level - S (Rs 75)					
50.	Per Month Immunisation at Village Level - S (Rs 50)					

5.2) How much time you spend on following activities? Please state in percent...

Sr. No.	Activity उपक्रम	Hrs. तास
1	Mothers health- Care of mother during pregnancy, delivery, and post-partum मातांचेआरोग्य – गर्भधारणेदरम्यान, प्रसूतीदरम्यानआणिप्रसूतीनंतरआईचीकाळजीघेणे	
2	Child Health - Exclusive breast feeding, immunisation, growth monitoring, complementary feeding बालकांचेआरोग्य- केवळ स्तनपान, लसीकरण, वाढदेखभाल, पूरक आहार	
3	Counselling- Health issues, small family, contraception समुपदेशन- आरोग्यसमस्या, लहानकुटुंब, संततिनियमन	
4	Referrals- Institutional delivery, treatment of infants and children, Sterilisation, any medical and surgical emergencies रेफरल- संस्थात्मकप्रसूती, अर्भकआणिमुलांचेउपचार, निर्जंतुकीकरण, कोणतीहीवैद्यकीयआणिशस्त्रक्रियेबाबत आणीबाणी	
5	Depot holder- Contraceptives, DOTS, Chloroquine, DDK, ORS डेपोधारक- गर्भनिरोधक, डॉट्स, क्लोरोक्वीन, डीडीके, ओआरएस	
6	Basic Medical care- First aid and referral बेसिकमेडिकलकेअर- फर्स्टएडआणिरेफरल	
7	Facilitation in Development of Village Health Committee ग्रामआरोग्यसमिती तयार करण्यासाठीचीमदत	
8	Organising village health and sanitation day ग्रामीणआरोग्यआणिस्वच्छतादिवसआयोजितकरणे	
9	Ensure community participation in developing village health plan ग्रामीणआरोग्ययोजना/आराखडा बनविण्यामध्ये समुदायसहभागनिश्चितकरणे	

5.3) Are you a provider of TB medicine? तुम्ही टी. बी ची औषधे वाटप करता का?

1	Yes होय	2	No नाही
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5.4) a.) During last year how many JSY cases have you registered? मागील एका वर्षात जननी सुरक्षा योजने अंतर्गत किती महिलांची नोंद केली?

Registered नोंदणी केलेल्या महिलांची संख्या	
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5.5) b.) During last year how many JSY cases have you taken for institutional delivery? मागील एका वर्षात जननी सुरक्षा योजने अंतर्गत किती महिलांना रुग्णालयात प्रसूती साठी घेऊन गेलात?

Institutional Delivery रुग्णालयात प्रसूतीसाठी घेऊन गेलेल्या महिलांची संख्या	
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5	Private Hospital खाजगी दवाखाना	
6	NGO Clinic एनजीओचिकित्सालय	
7	No Case Till Now	

5.6) Where do you **mostly** prefer to take women for delivery? प्रसूती साठी शक्यतो महिलांना कोणत्या रुग्णालयात घेऊन जाता?

आजतागायतएकही केस नाही	
-----------------------	--

1	Government Hospital शासकीय दवाखाना	
2	CHC सामुदायिक आरोग्य केंद्र	
3	PHC प्राथमिक आरोग्य केंद्र	
4	Sub-centre उपकेंद्र	

5.7) Do you get incentive for promotion of institutional delivery/accompany pregnant women to hospital? गरोदर मातेला संस्थार्गतप्रसूती साठी प्रवृत्त केल्याबद्दल आणिमातेसोबत संस्थेमध्ये राहण्यासाठी मानधन

मिळते का?

1	Yes होय		2	No नाही	
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5.8) If No, what is the reason for non-payment? जर मानधन मिळत नसेल तर त्याची कारणे?

A	Open Category खुला प्रवर्ग		C	Other इतर (specify)_____	
B	Non BPL दारिद्रेषेमध्ये नाही				

5.9) Do you think there will be some changes required in paying of incentive for promotion of institutional delivery/ accompany pregnant women to hospital? गरोदरमातेला संस्थेमध्ये प्रसूती साठी प्रवृत्त केल्याबद्दल अथवा तिच्या सोबत राहण्यासाठी मानधन दिले जावेअसेतुम्हाला वाटते का?

5.10) What is the distance /time taken to reach the **most preferred** facility? रुग्णालयात पोहोचण्यासाठी लागणारा वेळ (if less than one km or hour write '00')

a.) Distance in kms अंतर किमी b.) Time Taken (in Hours)लागणारा वेळ

5.11) What are the different modes of transport available to reach the **most preferred** facility? रुग्णालयात पोहोचण्यासाठी कोणत्या वाहनाचा उपयोग करता?

1	102 Ambulance १०२रुग्णवाहिका		4	Private Jeep/Vehicle खाजगी जीप/वाहन	
2	108 Ambulance १०८रुग्णवाहिका		5	Other इतर (Specify)_____	
3	Public Transportation सार्वजनिकवाहतूक				

5.11)a.) Other than first two option, ask the reason? वरीलप्रश्नातपहिल्या दोन पर्यायावतिरिक्त पर्याय निवडल्यास त्याचे कारण विचारा?

5.12) According to you, what are the reasons for women to deliver at home? तुमच्या मते घरी प्रसूती होण्याची कारणे

A	Appropriate facility is not available nearby जवळपास योग्यसुविधाउपलब्धनाही	
B	No transport available when required आवश्यकताअसल्यासकोणतेहीवाहतूकीचे साधन उपलब्ध नाही	

C	More expensive than home delivery घरगुती प्रसूतीपेक्षा अधिक महाग	
D	Behaviour of staff is not appropriate कर्मचारी वर्तणूक योग्य नाही	

E	Family/ Cultural reasons कौटुंबिक / सांस्कृतिक कारणे	
F	Because of stitches/fear of caesarean टाक्यामुळे / सीझरच्या भीतीमुळे	
G	Unaware about the JSY scheme जेएसवाय योजनेबद्दल माहिती नाही	
H	Other इतर (Specify) _____	

SECTION VI: CASH INCENTIVES

6.1) How much money on an average are you getting per month (approximately) (in rupees)? दरमहा तुम्हाला साधारण किती मानधन मिळते? (IF NO MONEY RECEIVED CODE "0000")

Rupees मानधन

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6.2) How much incentive did you receive in **last 3 months**? तुम्हाला मिळणारे मानधन कोणत्या कामासाठी मिळाले हे सांगता येईल का?

Sr. No.	Activity उपक्रम	Amount मानधन
1		
2		
3		

6.3) Do you **usually** receive incentive money in time? तुम्हाला मिळणारे मानधन वेळेवर मिळते का?

1	Yes होय	2	No नाही	3	If no what is the period of delay?	
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6.4) How do you **usually** get incentive money? मानधन तुम्हाला कसे मिळते?

1	In Cash रोख (Skip to 6.7)	2	Public Finance Management System	
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6.5) If money received by PFMS, do you face **any** difficulty in the same? जर मानधन PFMS द्वारे मिळत असेल तर ते पैसे जमा होण्यात काही अडचण येते का?

1	Yes होय	2	No नाही	
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6.6) What are the problems you face in getting money through PFMS enashing the cheque? कोणत्या प्रकारच्या अडचणी येतात?

A	AADHAR is not available आधारकार्ड नाही	
B	PAN is not available पॅन नाही	
C	Bank is too far बँक खूप लांब आहे	

D	Banks not cooperating in opening of account खाते उघडण्यासाठी बँक सहकार्य करत नाही	
E	Banks asking to maintain minimum balance कमीत कमी शिल्लक राखून ठेवण्यासाठी बँक विचारणा करते	
F	Other इतर (Specify) _____	

6.7) Who usually gives you the **incentive** money? मानधन तुम्हाला कोणाकडून मिळते?

1	ANM नर्स	
2	Doctor डॉक्टर	
3	The Institution (Place of Delivery) प्रसूतीझालेल्या संस्थेकडून	

4	MO CHC/PHC आरोग्य अधिकारी	
5	Accountant/Clerk हिशेबनीस/लिपिक	
6	Other इतर (Specify) _____	

6.8) Are you satisfied with the incentives you are getting? तुम्हाला मिळणाऱ्या मानधनाविषयी तुम्ही समाधानी आहात काय?

1	Yes होय		2	No नाही	
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Satisfied	Somewhat	Average	Less satisfied	Not at all

6.9) If not, what are the reasons of dissatisfaction? समाधानी नसाल तर कारणे?

A	Heavy workload कामाचा अतिरिक्त भार	
B	Payment is quite less मानधन अतिशय कमी	
C	Odd working hours विचित्र कामाचे तास	

D	Community does not consider the efforts समाजकेलेल्या प्रयत्नांची दखल घेत नाही	
E	Respect is not there आदर नाही	
F	Regular salary is not being paid मानधन वेळेवर मिळत नाही	

6.10) Are you of this opinion that there should be some fix salary beside incentive? मानधना ऐवजी नियमित पगार असावा असे वाटते का?

1	Yes होय		2	No नाही	
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6.11) If yes, how much it should be? दरमहा पगार किती असावा?

SECTION VII: PROBLEMS FACED BY ASHAs

7.1) What are the difficulties faced by you in implementing programme activities under the NRHM? तुम्हाला आपले काम करताना कोणत्या अडचणी येतात?

7.2) What kind of support do you require that will enable you to effectively implementation of the programme? आपले काम प्रभावीपणे करण्यासाठी तुम्हाला कोणते सहाय्य लागेल?

7.3) Has your work as ASHA enhanced your status? तुम्ही आशा म्हणून काम करण्यामुळे तुमच्यादर्जा मध्ये काही फरक पडला का?समाजात /कुटुंबात काही फरक पडला का?

	Status at	Yes होय	No नाही	Partial अंशिक
A	In the Community समाजात			
B	In the Family कुटुंबात			

7.4) Are your family members supportive of your work towards the community? तुम्हाला तुमच्या कामामध्ये कुटुंबीयांकडून सहकार्य मिळते का?

1	Yes होय		2	No नाही	
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7.5) If no, why are your family members **not** supportive to your work as ASHA? कुटुंबीयांकडून सहकार्य मिळत नसेल तर त्याची काय कारणे असू शकतात?

	Reasons for not supporting कारणे	Y
A	Very less time is available for the family कुटुंबासाठीखूप कमी कालावधी उपलब्ध	
B	Payment is quite less मानधन अतिशय कमी	
C	Working at odd hours is also required विचित्र तासांमध्ये काम	
D	Community does not consider this as a respectable job समाज दखल घेत नाही	
E	Regular salary are not provided मानधन वेळेवरमिळत नाही	
F	Other इतर (Specify)_____	

7.6) Have you motivated others to become ASHA? तुम्ही इतरांना आशा होण्यासाठी प्रोत्साहन द्याल का?

1	Yes होय		2	No नाही	
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7.6) a.) Why? तुम्ही इतरांना आशा म्हणून काम करण्यास प्रवृत्त का करणार?का नाही करणार?

SECTION VIII: PERCEPTION

8.1) Are you aware about role as community mobiliser? तुम्हाला तुमच्या समुदाय संघटकाच्या भूमिकेविषयी माहिती आहे का?

1	Yes होय		2	No नाही		3	Can't Say सांगू शकत नाही	
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8.2) What according to you is your role as a community mobiliser? तुमच्या मते समुदाय संघटक म्हणून तुमची भूमिका काय आहे?

8.3) Have you ever mobilised community to solve any health related issues? तुम्ही समुदायाचे आरोग्य विषयक समस्या सोडविण्यासाठी, समुदायाला प्रेरित केले आहे का?

1	Yes होय		2	No नाही		3	Can't Say सांगू शकत नाही	
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8.4) If yes, what way? जर समुदायाला प्रेरित केले असेल तर कशा प्रकारे?

8.5) Do you face any difficulty in mobilising the community? समुदाय एकत्रित करण्या मध्ये काही समस्या?

1	Yes होय		2	No नाही	
---	---------	--	---	---------	--

8.6) What type of difficulties do you face in mobilising community? कोणत्या समस्या?

8.7) How do you overcome these difficulties? जर समस्या आल्या असतील तर त्या तुम्ही कशाप्रकारे सोडविल्या?

8.8) Are you aware about Programme Implementation Plan? तुम्हाला आरोग्य कार्यक्रम अमलबजावणी आराखडा विषयी माहिती आहे का?

1	Yes होय		2	No नाही	
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8.9) Do you have any role in preparation of Programme Implementation Plan? आरोग्यकार्यक्रम अमलबजावणी आराखडा बनविण्यात तुमची काही भूमिका असते का? असेल तर काय भूमिका असते?

8.10) In your opinion is there any scope for the community in preparation of Programme Implementation Plan? तुमच्या मते आरोग्यकार्यक्रम अमलबजावणी आराखडा बनविण्यामध्ये समुदाय भूमिका बजावू शकतो का?

1	Yes होय		2	No नाही		3	Can't Say सांगू शकत नाही	
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8.11) In your opinion what should be the role of community in preparation of Programme implementation plan of the village? आरोग्य आराखडा बनविण्यामध्ये समुदायाची काय भूमिका असावी असे वाटते?

8.12) Do you help community to identify their health needs? तुम्ही समुदायाला त्यांच्या आरोग्याविषयी समस्या समजण्यात मदत करता का?

1	Yesहोय		2	Noनाही	
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8.13) What way? कशा प्रकारे?

8.14) How will you rate the support of community in your work? तुम्ही, तुमच्या कामामध्ये समाजाकडून मिळणाऱ्या सहकार्यासाठी किती गुण द्याल? समाजाकडून मिळणारे सहकार्य कशाप्रकारे आहे?

	Support Rate	Tick \sqrt at appropriate option
1	Excellent सर्वोत्कृष्ट	
2	Very Good खूप छान	
3	Good छान	
4	Fair वाजवी	
5	Poor कमी	

8.15) If not, what is your opinion for not getting support? जर नसेल तर त्याची काय कारणे आहेत?

8.16) Any other remarks by ASHA regarding her functioning which have not been captured in the questions above but are relevant आशाच्या कामासंबंधित आशा कडून महत्वाचे इतर सूचना...

8.17) Any other remarks/observations by interviewer which have not been captured in the questions above but are relevant मुलाखातकारचे महत्वाचे इतर निरीक्षण/सूचना...

Date:

Name of the Interviewer:

ANNEXURE II
Tilak Maharashtra Vidyapeeth, Pune
Interview Guide for the Ph.D. course in the subject of Social Work

AN EVALUATION STUDY OF 'ASHA' IN PROVIDING ACCESS TO HEALTH SERVICES AND COMMUNITY AWARENESS UNDER THE NATIONAL RURAL HEALTH MISSION: WITH REFERENCE TO STATE OF MAHARSHTRA

INTERVIEW AND FOCUS GROUP DISCUSSION GUIDE FOR SERVICE PROVIDERS

- Name and designation of the person नाव आणि हुद्दा
- Name and type of the facility संस्थेचे नाव
- Name of the Taluka तालुका
- Name of the district जिल्हा
- Objectives of ASHA scheme आशा योजनेची उद्दिष्ट्ये
- Weather ASHA scheme is being implemented in your block and facility? आशा योजना आपल्या तालुक्यात आणि संस्थेमध्ये अंमलात आली आहे का?
- Can you please tell something about ASHA scheme? कृपया आपण आशा योजनेबद्दल थोडक्यात सांगू शकाल का?
- What are the services ASHA schemes in your facility? तुमच्या भागातील आशा योजनेतील सेवा कोण-कोणत्या आहेत?
- When was the ASHA scheme rolled out in your facility? तुमच्या भागामध्ये आशा योजना केव्हापासून चालू झाली?
- Can you please tell about the selection process? आशा निवडीच्या प्रक्रियेबाबत थोडक्यात सांगा
- Does the appointed number of ASHAs is adequate in your periphery? If no, what should be the number? तुमच्या भागात जेवढ्या आशांची नेमणूक झाली आहे ती संख्या पुरेशी आहे का? नसल्यास किती संख्या असायला पाहिजे
- Are you aware about the jobs assigned to ASHAs? If yes, can you please list some of them? आशांना नेमून दिलेल्या कामाबद्दल माहिती असल्यास काही कामांची यादी सांगा...
- Is there any training given to ASHAs? If yes, Can you please list some of them? If no, what type of training is required for the ASHAs? आशांना काही प्रशिक्षण दिले गेले आहेत का? प्रशिक्षणाची यादी... प्रशिक्षण दिले नसल्यास कोणत्या प्रकारचे प्रशिक्षण देणे गरजेचे आहे...

- How do you rate ASHAs performance as per guidelines? मार्गदर्शक तत्वानुसार आशांच्या कामगिरीस तुम्ही किती गुण द्याल?
- Is there any problem in paying incentives to the ASHAs? If yes, what are those? आशांना त्यांच्या कामाच्या बदल्यात दिले जाणारे मानधन याबाबत काही समस्या आहेत का? असल्यास काय?
- Are you of this opinion that there should be some fix salary to ASHAs? If yes, how much it should be? तुमच्या मते आशांना निश्चित पगार असायलाच पाहिजे का? जर हो तर किती असायला हवा?
- Is there any change in about health knowledge of the community because of ASHAs? आशांमुळे समाजामध्ये आरोग्य विषयक ज्ञानामध्ये वाढ झाली असे वाटते का? उदाहरण
- Do you think is there any scope for ASHAs in preparation of PIP of her respective village? If yes, Does ASHAs take part in preparation of PIP? What way? If no, why? तुमच्या मते आशा ला तिच्या कार्यक्षेत्रातील आरोग्य आराखडा बनविण्यामध्ये संधी मिळते? जर हो असेल तर आशा असा सहभाग घेतात का? जर नसेल तर का?
- Does ASHAs create awareness in community about health issues? If Yes, What way? If no, why? आरोग्य समस्यांबाबत समाजामध्ये जाणीव जागृती करण्याचे काम आशा करते का? कशाप्रकारे? नसल्यास कारणे...
- Do you think is there significant increase in institutional deliveries due to ASHAs presence in the community? तुमच्या मते आशांच्या समाजामधील सहभागामुळे संस्थात्मक प्रसूती संख्येमध्ये लक्षणीय वाढ झाली आहे असे वाटते का?
- Do you think is there any change in communities' perspective about health issues due to ASHAs presence? तुमच्या मते आशांमुळे समाजाचा आरोग्य समस्यांकडे पाहण्याचा दृष्टीकोन बदलला आहे असे वाटते का?
- Other than this do you like to give your remarks about ASHA scheme? इतर सूचना/शिफारशी/निरीक्षण