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The Changing Role of Auxiliary Nurse Midwife (ANM) in India: Implications for Maternal and Child Health (MCH)

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Abstract

The world's democracy and its second most populous country, India was the first developing country to have a national family planning program and has implemented countrywide reproductive health programs such as RCH I. India's primary health care and the family planning programs have come a long way after the independence in improving health indicators in general, yet it has high material and under five mortality rates. The country has developed an extensive network of primary health centers and sub- to provide basic medical care to huge (80%) rural population. In the rural health care system, the ANM is the key field level functionary who interacts directly with the community and has been the central focus of all the reproductive child health programs.

In contrast with resident ANM of sixties who was providing delivery and basic curative services to the community, today's commuting multi purpose worker is more involved in family planning and preventive services. This has implications on the implementation and outcomes of maternal health programs in rural India. The midwifery role of the ANM should be restored if the goal of decreasing maternal mortality has to be met. The priority will have to change from family planning immunization to comprehensive reproductive health including maternal and neonatal care. These changes will require sustained and careful planning/resource allocation. Increasing resources along with systemic reforms will improve health status for women and children who are the focus of Reproductive Child Health programs.

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The Changing Role of Auxiliary Nurse Midwife (ANM) in India: Implications for Maternal and Child Health (MCH)

**Dileep Mavalankar
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Background and Methodology

The world's largest democracy and its second most populous country, India was the first developing country to have a national family planning program and has implemented countrywide reproductive health programs such as Reproductive Child H I. One of the fastest developing economies, India boasts a large skilled work force and extensive health infrastructure. Yet, it has high maternal and under five mortality rates that have been stagnant since 90s. India's primary health care and the family planning programs have come a long way after the independence in improving health indicators in general. However, a lot of ground still needs to be covered to complete the demographic and epidemiological transition and improve maternal and child health indicators in a country which is as big as a continent.

Since independence in 1947 the country has developed an extensive network of primary health centers (PHC) and sub-centers (SC) staffed by doctors and Auxiliary Nurse Midwives (ANMs) as well as male health workers to provide basic medical care to huge (80 %) rural population. See table-1 for the government health infrastructure in a typical district of India.

Table-1
Health Infrastructure in a Typical Indian District

Level of Health Care Institution	Population Norm	Human Resource available
District Hospital	2 - 3 Million	Obstetrician, Anesthetist, Pathologist, Pediatrician, General doctors, nurses
First Referral Unit (FRU)	300,000 - 500,000	Obstetrician, General doctors, nurses
Community Health Center (CHC)	100,000 - 300,000	Any specialist, General doctors, nurses
Primary Health Center (PHC) (Old or Block level)	100,000	General doctors (2), nurses, LHVs, ANMs
PHC New	30,000	General doctor, nurse, LHV, ANM
Sub-center	5,000	ANM
Village Level Functionaries	1,000	ASHA

In the rural health care system, the ANM is the key field level functionary who interacts directly with the community and has been the central focus of all the reproductive child health programs. Over the years with changes in program priorities, the role and capacity of the ANM has changed substantially.ⁱ Today's multi purpose worker(MPW) is more involved in family planning and preventive services in contrast with ANM of sixties who was providing delivery and basic curative services to the community. In the overall job description of the ANM, the "M" the role of "Midwife" has been neglected.

This has implications on the implementation and outcomes of health programs in rural India. The overemphasis on family planning targets and the addition of infectious disease control programs in the ANM's already busy schedule has led to neglect of MCH. It is important to understand why the role of ANM changed from primarily a midwife to a preventive health worker with focus on family planning and immunization. There have been very few studies on ANMs such as Foundation for Research in Community Health study, Prakasammaⁱⁱ and chapters in book published by Population Council. All of them mention the shift in focus from comprehensive MCH services to family planning services and how it led to deterioration of MCH services at the field level.

In this chapter, we analyze the change in the role of ANM and its impact on the health care delivery system, especially with regard to MCH. The information for this paper has been derived from literature review, policy/program documents, national level data, state information system, personal experiences of authors and informal discussions with key stake holders. This range of data and experiences help us to explore and reflect upon the changes in policy and programs of maternal and child health over the years and how they have influenced grassroots level services with special focus on midwifery.

Change in the role of ANM

Historical aspects and Evolution of the ANM's role

In late 19th century many Christian missions related hospitals were started especially for women called "Zanana" hospitals in the Hindi speaking areas of north India. These hospitals were in the rural areas, mainly run by nurses where courses to train women in midwifery were also started. This cadre of ANMs was registered under the Mid India Nursing Council which was an autonomous body in 1934. They were then absorbed in special hospitals for women in India. Some also practiced as midwives in the community under an umbrella of NGO hospitalsⁱⁱⁱ. Auxiliary Nursing Service (ANS) was started in 1942 to provide nursing care in military hospitals in India.^{iv} Hence, originally auxiliary nurses functioned as hospital attendants, as the government rural health system was not yet set up.

After independence in 1947 rural health services were established over time with primary health units (PHU) staffed by a doctor, a nurse midwife, a health visitor, a sanitary inspector and a female attendant (Aya). Trained nurse midwives were posted in hospitals or PHU. Their role in PHUs was to conduct deliveries and visit a population of 10,000. Sub centers were established below PHUs to provide basic medical care and delivery care at the field level. To place trained personnel in this newly instituted health centers, temporary workers with preliminary education were trained for shorter time and recruited at sub centers. These workers were called "Auxiliary Nurse Midwife" Auxiliary workers are technical workers in a particular field with less than full qualifications (WHO 1961). Shetty committee suggested training auxiliary nurses and midwives for short time to

work under supervision for specific duties. Twelve training centers were established by 1954 to fulfill the requirements.^v Later on committees such as Bhore and Mudaliar suggested continuation of auxiliary cadre to provide basic health care at field level. Hence, ANMs gradually became permanent staff in public health system.

ANMs were posted in sub centers for maternal child health besides treatment of common illnesses and were viewed as replacement of professional cadre of midwives in PHC. Within maternal care the emphasis was on antenatal care (ANC) and delivery care. Most ANMs were required to stay at the sub center village and conduct deliveries. There were few private health facilities in rural areas. It was mandatory for an ANM to stay at the headquarter village. This requirement was strictly enforced by the medical officers and district health officers^{vi}.

In 1966, Mukerjee committee suggested target system to achieve family planning goals and fourth fifth plan^{vii} decided to integrate family planning with the MCH program. These two developments started the dilution of maternal health care services provision by ANMs. Finally in 1973, Kartar Singh committee suggested changing designation of ANM to “Multi Purpose Worker” who would provide range of services including family planning and MCH at the field level. As a result, today the ANM is no longer a nurse and midwife, but the “Multipurpose worker” who provides family planning, immunization, sanitation, infectious disease prevention/care and antenatal/delivery care in that order.

The immunization, family planning and infectious diseases prevention activities requires the field worker to travel to villages to cover the target population and has reduced the time she spends at the head quarters. Targets given for family planning and immunization led to improved accountability to these activities and neglect of emergency services such as delivery care. Her activities for maternal and child health are limited to distribution of iron folic acid tablets and immunization to mothers and children.

Implications and consequences of the changing role of ANMs on the MCH services

Reported data from Gujarat^{viii} indicates slowly rising trend of institutional deliveries but almost stagnant or somewhat declining trend of home deliveries by ANMs after sudden increase in 86-87. Study by Visaria in 1989 in four districts of Gujarat showed that only 5.3% of the deliveries were conducted by ANMs even though more than 70% of ANMs were living in the sub center villages^{ix}. Data from Multi Indicator Cluster Survey (MICS) from 7 districts of Gujarat show that out of all deliveries only 0-4.3% occurred at PHC or the sub-centers and health workers attended only 2-22% of deliveries in these districts. It is interesting to note that attendance by health workers was only 2% and 6% in two districts where all the sub centers were constructed with USAID help in 1980s. In one of these districts the survey showed no deliveries conducted in PHC or the sub-center^x. The purpose of constructing sub centers was to facilitate the ANMs to stay there and attend deliveries and other care. This does not seem to have happened.

As seen in table-2, Less than 25 percent of women are given antenatal care by ANM and although the percentage of deliveries conducted by skilled attendant has risen, deliveries conducted by ANM are stagnant. Proportions of deliveries conducted by doctors have increased from 22 percent in NFHS-1 to 35 percent in NFHS-3^{xi}. More than half of these institutional deliveries are in the private sector which has shown sharper rise (8 percent) than public sector (3 percent) between NFHS-1 to NFHS-3.

Table-2
Maternal Health Services by ANM in India^{xii}

Indicator in Percentage	NFHS-1 (1992-93)	NFHS-2 (1998-99)	NFHS-3 (2005-06)
Antenatal Care by ANM/LHV/Nurses	13	6	23
Deliveries conducted by ANM/LHV/Nurses	13	11	10
Deliveries Assisted by Skilled personnel	35	42	49
Post natal care	NA	NA	7.9

Data have not been systematically collected at national level for assessing what proportion of ARI and diarrhea are treated by ANMs, but some small studies in selected districts show that this proportion is low. For example data from MICS in 6 districts of Gujarat in 1995 showed that among children under five who had diarrhea 1.6% - 16.3% were treated by health workers^{xiii}. These statistics indicate changed role of the ANM from providing curative and delivery care to predominantly preventive care. Unfortunately data are not available at national level about the ANM's contribution to various health programs and how it has varied over the years.

At present the department of health in India has been facing the problem of non-resident ANMs. Only about 23% stay at the headquarters.^{xiv} Place of residence is the most important factor having a bearing on the reliability and availability of curative services provided by the staff. Service delivery is influenced by the place of residence of the ANM in two ways: quality of services and range of services. Those who stay at the headquarter are more likely to keep time of PHC/sub center and out patient work schedule because they save commuting time, and are less likely to take leave for personal work/ sickness in the family. Non-resident ANMs would not be able to provide 24 hours services such as delivery care.

Factors associated with the ANMs' changing role

It is important to understand why the role of ANM changed from primarily a midwife in 60s to a preventive health worker with focus on family planning and immunization. Changes in program priorities - emphasis on preventive services, lack of focus on curative/midwifery services, changes in monitoring mechanism, lack of supervision/training, weak management, neglect by international agencies and NGOs are major factors associated with this change.

1. Shifting program priorities from Maternal Health to FP and immunization

One of the major reasons for the change in the role of ANM is change in program priorities over past few decades. National programs have shifted the focus from

comprehensive reproductive health services to preventive services. In the mid 60s family planning was integrated with MCH activities and projected as a program deserving the highest priority (GOI, Planning Commission 1968). A separate department and structures of family planning were created at the central, state and district levels with the sole function of promoting family planning through the PHC staff. This created an impression that the staff funded by FP program was to restrict themselves to only FP activities whereas in theory all the Sub centers and PHC doctors had similar job descriptions which included MCH too. The new ANMs employed under the FP program did not feel the need to stay at SC Village since their work did not relate to any emergencies such as childbirth.

During mid 80s the immunization program called the Expanded Program for Immunization (EPI) for children below five years started to receive priority. The implementation of the program at field level was assigned to the ANM. EPI was followed by Universal Immunization Program (UIP), again supported by UNICEF.

2. Neglect of Maternal Health within Reproductive Health programming

The National Child Survival and Safe Motherhood Program (CSSM) developed by Government of India and supported by World Bank and UNICEF was to provide child survival and safe motherhood services through the PHC system in India. It started in 1992 as follow up to the Universal Immunization Program. There were eight goals of the program out of which one was for maternal health viz. Reduction of maternal mortality from 4 to 2 per 1000 births. Although the package specified care at birth as a service, the work plan of the ANM at the sub centre level did not specify conducting deliveries in the list of critical activities. Similarly this was missing from the module for planning MCH services at the PHC and SC level and the sample work plan of the ANM given in the workers' manual^{xv}. Unknowingly the program created a conceptual conflict through its fixed day schedule by giving more priority to routine preventive services compared to emergency services.

Reproductive Child Health-I (RCH-I) was implemented in 1997 had too many components and again ANM was key field level person for implementation. RCH-

I had maternal health as one of the priority areas but due to various reasons government failed to provide round the clock delivery care at the field level. One major reason was non availability of ANM at the sub center and lack of coordination between different components.

RCH-II has been planned with aim to provide basic emergency obstetric care (BEmOC) at sub centre and PHC and comprehensive EmOC at CHC and district hospital level.

Under National Rural Health Mission (NRHM), there is provision for additional ANM for sub center to provide delivery care and curative services. However, about 55% of the sub centers do not have own building and 78% do not have tap water^{xvi}, in absence of such basic facilities it is not possible to provide delivery care. Before increasing the number of field functionaries there is a need to improve management of human resources, logistics and infrastructure. Unless India learns from failures of past programs, it is not possible for ANM to revert to the role of comprehensive RCH service provider. The Government is increasing the density of ANMs from 1 to 2 per 5000 population in difficult areas. This would only help if it is ensured that this new ANM is staying in the SC village and has the confidence and competence to attend to deliveries and other emergencies. As seen in the past that in spite of the rapid increase in the number of ANMs in the last 30 years, the indicator on safe delivery does not show corresponding increase. Instead of increasing staff what is required is to improve the performance of the PHC system. Improving the skills of the ANM through training and support through supervision is equally important.

Table-3
PHC's role in delivery care then and now in one district of Gujarat, India

Situation in 1960-1970s	Situation in 2005
District with 7-12 Block level/old PHC covering 1, 00, 000 populations.	District has about 50 PHCs each covering about 30,000 populations.
1-2 doctors per PHC 3-6 sub-centers per PHC 1 ANM per sub-center. 30 - 50 Sub centers per district.	Each PHC has 1 doctor and 4-6 sub-centers. Each sub-center has 1 ANM. 300-450 sub centers per District. One SC for 5,000 populations.
Almost all doctor and ANMs were staying at PHC and sub center village. Deliveries were routinely conducted at PHC by the doctors and HV/ANM and SC village by ANM Most Sub-Centers did not have buildings Some PHCs were conducting about 600 deliveries per year. ANC clinic were regularly conducted at SC and doctors attended them once a week. Substantial numbers of deliveries were conducted by ANMs in Sub-center villages at home.	Most doctors and ANMs are not staying at their PHC or SC village. At most PHCs and SC no or only few deliveries take place. For example: Ahmedabad district has 48 PHCs of which 1-7 doctors are staying at PHC village. 351 Sub centers of which 124 have their own buildings. Total deliveries conducted in 48 PHCs and 351 SC is 837 in one year. In only 4 out of 351 Sub centers deliveries are conducted

2. Poor quality Monitoring and Evaluation

Excessive and overpowering focus on target oriented FP program led to the neglect of the MCH services, especially delivery related services. Researchers and program managers report that till recently all the monitoring of health programs was over shadowed by achievement of family planning targets. Most of the ANM's time is spent for motivating cases, attending duty on the day of the sterilization camp, accompanying the motivated cases to the camp, attending meetings at the PHC and paying follow up visits of the operated cases. Since

there are no specific targets for MCH and performance of ANM is not evaluated on the basis of provision of complete RCH package, MCH services are not reviewed critically. FP program has added its own registers and reports which takes substantial time. With the government's focus on two major programs being monitored through targets namely family planning and immunization, the monitoring of the midwifery activities of the ANM at the subcenter and home got neglected after 60s. The ANM's activities got limited to motivation for sterilization, insertion of IUD, giving pills and condoms and immunization which could be easily performed by the ANM through periodic visits to the village.

As the midwifery activities of the ANM are not monitored there seems no need for her to be available round the clock. Although the monitoring form collects information on number of domiciliary deliveries attended by ANM/LHV, this information is not used for monitoring. There is no insistence that the deliveries should be conducted by the ANMs. But at most places emphasis is put if at all on deliveries by trained TBAs. The LHV who is supposed to monitor and supervise the ANM is not trained for the same. Only six months training is given for the promotion and supportive supervision skills are not part of the training. The medical officer at the PHC is also not qualified to supervise the ANM for technical expertise as they themselves are not conducting deliveries or inserting IUDs. Hence, the supervision is limited to checking registers and there is no technical support available for the ANM in the field.

3. Inattention by international agencies

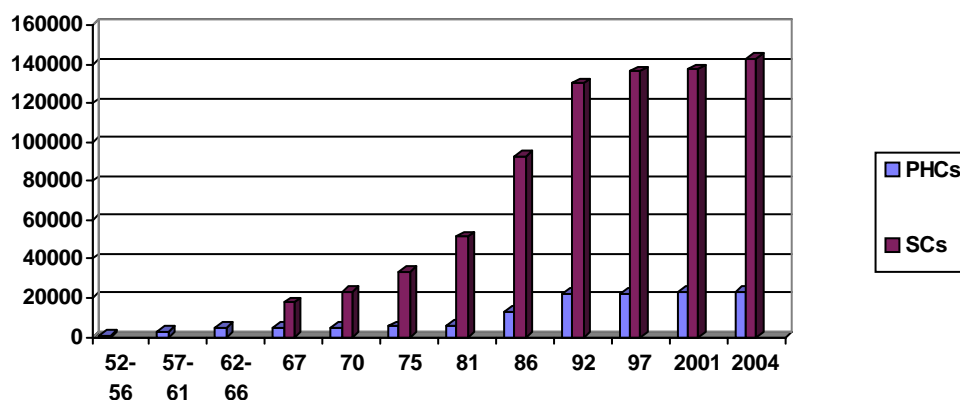
Over the years various national health programs have been supported by international agencies in India. Their valuable contribution is in terms of money and technical guidance. Unfortunately maternal health did not get focus because no agency had specific focus on maternal and women's health. In the UN system until UNIFEM came into existence none of the agencies focused on women's health. The possible reason why skilled attendance at birth was given a low priority under CSSM was that UNICEF had child survival as its objective, while the Bank did not have the ground level presence to help government refocus on maternal health and deliveries. The government at central level also did not have any strong proponents of maternal health.

After the Nairobi conference on Safe motherhood, it seems that except for WHO none of the UN or bilateral donors made concentrated efforts to improve maternal and women's health.. This may have led to the situation where national programs lost focus on maternal health. Most of the national money is committed to supporting salaries of staff. As a result, there is tremendous leverage that relatively small amounts of international aid can yield to direct national programs in particular directions, even though measuring effectiveness of such international support is difficult.

4. Changes in training and placement of ANMs

The training of ANM in 1950s focused on midwifery and MCH as their main role was of auxiliary midwife. The Indian Nursing Council in 1950 recommended two standard courses on nursing; a) A full course of three years in nursing and a minimum of 6 months of midwifery; b) A course for ANMs of two years duration which included 9 months of midwifery and 3 months of community experience. This 2 year training program for ANMs was implemented until in 1977 the "Multipurpose Health Worker Committee" under the chairman ship of Mr. Kartar Singh recommended that all ANMs and host of malaria workers be replaced by Multi Purpose worker (MPW). The existing ANMs were given a 6 months orientation for their role as MPWs.

During late seventies and early eighties, the ratio of PHC to population was radically changed from 1 PHC for 1, 00,000 populations to 1 for 30,000 PHC, to increase access to PHC services. Figure 1 shows dramatic increase in number of PHCs and Sub-centers from 1950s to 1990s. The norm for ANM was revised upwards to one ANM for 5000 population. This suddenly increased the need for ANMs. To meet this demand in a short time the ANM training was shortened from 24 months to 18 months. This new course was called Female Health Worker (FHW) training.

Fig: 1. Increase in PHC and sub-centers in India from 1952-2004 (CBHI)^{xvii}

Even though the Indian Nursing Council approved the shortened syllabus for the ANM for training of staff for the multipurpose health worker scheme, due to inadequate standards the Gujarat chapter of Indian Nursing council which is the statutory body for inspection and certification of the ANM training refused to give recognition to this shortened ANM or FHW course which is supported by the government. This also meant that FHW training did not have the quality control by the nursing council even though the schools were under the state government control. Thus the FHWs can not be registered with the nursing council and thus their legal position to practice nursing profession is not clear in Gujarat. Situation in other states is variable.

The general impression is that the practical time was made short in this change while retaining the classroom components. The new syllabus of ANM for the 1.5 year FHW program had less emphasis on midwifery. As seen in the table maternal health and midwifery received only 18% of the total time in the new ANM training. With addition of subjects like sociology, microbiology, communicable diseases, pharmacology etc., the duration is too short for the student to absorb so many subjects.^{xviii}

Table-4
Time allocated to maternal health and Midwifery in the new ANM syllabus ^{xix}

Subject	Theory Hours	Practical Hours	Total Hours
Introduction to Maternal Health	15	15	30
Domiciliary Midwifery	15	60	75
Midwifery and maternity nursing	45	75	120
Total for midwifery related subjects	75 (11%)	150 (25%)	225 (18%)
Total hours for the whole syllabus	660	600	1260

Each ANM trainee was to conduct 30 Antenatal examinations, 20 deliveries including home deliveries and attend to 20 lying in women and babies as part of the practical training as per the requirements of the new syllabus. In the old 2 year syllabus midwifery and community nursing was allotted 15 out of 24 months. And of the 15 months 8 months were to be for practical experience in midwifery and rotation in community nursing. Total teaching hours devoted to Midwifery were 150 and for community nursing were 30. ^{xx}

Some ANM training schools which were newly established in order to meet the increasing demand of the expanding infrastructure did not have adequate and required teaching staff. At some places teaching and administrative standards deteriorated. Some of these schools were situated at places where the attached hospitals did not have adequate delivery load for the students to get hands on training in midwifery. Consequently many ANMs (FHWs) had inadequate practice of midwifery skills during training. Another opportunity to learn midwifery skills was the field placement to PHCs. However there was a decrease in the number of deliveries at PHCs as the focus shifted to FP and Immunization. Since the ANMs could not practice midwifery skills during training, they lacked the confidence of attending deliveries when they joined the PHCs. However there were good schools also where trainees were getting adequate practice of conducting deliveries.

Government did not have a long term and consistent training policy for the health staff. Most training was short orientations with very less hands on learning. When the workers join service it is assumed that they would know most things through their basic training. But given the deteriorating standards of the training in ANM schools, there should have been more emphasis on in service training of the health workers. For example the CSSM program which had 11 components devoted only 5 days training at the ANM level which was fairly inadequate to learn many new skills and concepts that were brought in by the program. Many of the components in the program remained weak including maternal care as a result. There is not much to look forward career-wise for the ANM which leads to demotivation and avoidance of risk taking. Most of the ANMs are young and unmarried when posted at the sub center which is usually in an area unknown to her. With sub center building being outside the village and patriarchal society, it is difficult and unsafe for her to attend house calls for delivery care. Her training does not prepare her for the realities of field where she is alone in managing obstetric complications and dealing with rural population.

In conclusion, ANM training today does not prepare her for working in rural area and does not give her skills to provide delivery care and complete package of reproductive child health care.

5. Ignorance by NGOs and building TBA skills as an alternative

From the mid sixties the training of traditional birth attendants (TBA) gained attention. This strategy of training the TBAs may have stemmed out of the realization that ANMs will not be able to deliver all the babies in their areas and the communities will take time to accept institutional deliveries. This alternative of reinforcing the role of the TBA with enhanced skills was thought of, relieving the ANM from her midwifery role. This gave a sense of false security to the health planners. The Government reporting system at some levels clubs deliveries attended by ANMs and those attended by trained TBAs, showing better performance on indicator on safe delivery.

Training TBA is important but a very difficult task. Successful TBA training programs in NGOs have demonstrated that it is possible to train TBAs but it takes

a long sustained effort^{xxi}. Unfortunately government has accepted TBA training without clarity about what it would take to make it work. Training of TBAs has also been diluted from the original 1-3 months to 6 days under CSSM and one day each month for twelve months under the proposed TFA/RCH program. Current TBA training cannot qualify trained TBA as skilled birth attendant (SBA). This deviation from building a cadre of SBA to reduce MMR can hamper the progress of RCH programs. Training of ANM in midwifery skills can help build a cadre of SBAs available at field level to ensure skilled birth attendance for all births.

NGOs also have ignored ANMs and concentrated more on training TBAs and village level health workers who are not part of government health system.

Conclusion

The midwifery role of the ANM should be restored if the goal of decreasing maternal mortality mentioned in various plan documents of government of India have to be met. The priority will have to change from FP and Immunization to comprehensive reproductive health including maternal and neonatal care and women's health such as RTI/STDs. These changes will require sustained and careful planning/resource allocation. Pouring in more resources without simultaneous systemic reforms will not lead to improved health status for women and children who are the focus of RCH. Combined efforts of government, International agencies and non-government agencies are essential to improve performance of ANM and reduce maternal mortality in India. Developing countries like Sri Lanka and Malaysia have reduced MMR significantly by ensuring universal access to skilled birth attendance.

In India, ANM can play similar role to provide quality comprehensive RCH services to fulfill unmet needs of rural population. Reorientation of health care system to give priority to maternal health care services requires amendments in national policies, program implementation plans, monitoring system, management at all levels and change in focus by international agencies/NGOs. Independent regulation body, better career prospects, adequate competency based training for MCH, follow up training/ continued education, supportive supervision, provision of basic infrastructure and improved status of ANM are

important to ensure central role of ANM as basic RCH service provider at grassroots level.

Recommendations

The analysis shows that the role of ANMs has changed from a midwife whose main job was to deliver babies and maternal and child health care, to a paramedical whose activities are limited to FP, immunization and superficial antenatal care. Large numbers of the ANMs do not stay at the Sub-center villages and so are available only for 3-5 hours a day. They are not easily accessible to the community in emergency such as delivery as they visit assigned villages and are busy with other administrative work. The social and political factors have supported the ANM's decision of not staying at their assigned villages. The central and state governments and international agencies have focused on FP and Immunization thereby neglecting maternal health especially the midwifery role of the ANMs.

To enhance role of ANM to improve maternal health and reduce MMR, in addition to focused efforts by international agencies and NGOs, we recommend following measures by the government.

1. *Improving monitoring and supervision*

The monitoring indicators for RCH should include number of deliveries by ANMs at SC and at home. There should be a system to discourage non-adherence and encourage adherence to rules. For instance those who do not stay in the HQ should not be paid house rent allowance, travel allowance and other benefits. This should feature in the employee's annual confidential report. There should be reward and penalty system for ANMs which is based on all the RCH activities especially delivery care. The monitoring system should hold ANM accountable to health system authorities and should be encouraged to concentrate and focus on RCH program rather than national health programs^{xxii}. Appointment of second ANM will improve the situation only if there is supportive supervision and satisfactory monitoring. The supervision should become more meaningful and effective.

2. **Strengthening training of the ANMs**

There should be training need assessment to identify the gaps in skills and competencies of individual ANMs to design a need based, efficient and focused training program. ANM's basic training should be increased to 2 years, with due emphasis on maternity services especially attending normal deliveries and dealing with complications. ANMs who have attended the short FHW course and are not confident in midwifery skills should receive intensive, hands on midwifery training in district hospital labor rooms for adequate period of time. The new TFA/RCH training planned for ANMs is for 6 days which is not enough.

The advanced training should include life saving skills (LSS) in obstetrics as developed by American College of Nurse Midwives, besides normal delivery. This includes treatment of PPH, stabilization of eclampsia, basic treatment of sepsis, manual functions like removal of placenta, and diagnosis and treatment of anemia. This will help save many maternal deaths. Second ANM appointed at the sub centre should undergo this training and provide quality midwifery services. Similarly focus should be on neonatal resuscitation and care of low birth weight babies in the community, nutritional care of the mother during pregnancy and ARI management.

The ANMs will have to acquire new skills in management of RTI and STDs, PID, menstrual problems and cancer. The ANMs will need necessary medicines and supplies. ANM training schools should be strengthened with introduction of standard protocols. A separate registering and administrative body for ANM will help improve status of ANMs and attract upper class and better qualified females. Continued education including medical updates and post graduation courses with guarantee of career advancement will improve morale and quality of services provided.

3. **Managerial changes**

The annual appraisal of the individual health staff should be linked to performance indicators such as coverage for immunization, diarrhea patients treated, deliveries attended, family planning cases and place of residence. The

panchayat and the local community can be empowered to monitor the visits of the ANM and support her work. This performance appraisal should be linked to rewards such as public recognition of work, increase in salary, promotions etc. The management should take active steps to solve long standing problems of the staff. Efficient logistic management and staff friendly human resources policies would help improve performance of ANM. Corruption, nepotism, political interference in administration should be eliminated. Decentralization of powers for supplies and logistics, maintenance of infrastructure and equipment is essential to ensure full functionality.

ⁱ http://mohfw.nic.in/NRHM/Documents/IPHS_for_SUBCENTRES.pdf for ANM job description

ⁱⁱ Prakasamma M., Analysis of Factors Influencing Performance of ANMs in Nizamabad District. Unpublished PhD thesis, Jawaharlal Nehru University, New Delhi, 1989.

ⁱⁱⁱ Dr. Nalini Abraham. New Delhi. Personal discussion.

^{iv} Adranvala T. K., "Nursing in India-1908-1968", Nursing Journal of India, Vol. LIX, No. 11, November-1968, Page 369-71.

^v Iyer A., Jesai A. et al, Women in Health Care: Auxiliary Nurse Midwives. The Foundation for Research in Community Health, 1995. Page-15.

^{vi} Communication with former additional director of Health, Gujarat.

^{vii} Introduction, Chapter-1, NFHS-2 Report, IIPS, Mumbai, Accessed from website:<http://www.nfhsindia.org/data/india/indch1.pdf>, on 6th September, 2007.

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