Action Research and Training for Health

Annual Report
2008-09

Draft

772, Fatehpura, Udaipur 313 004, Rajasthan
Phone : 0294-2451033
website: www.arth.in; e-mail: arthindia@gmail.com

1. SERVICE INNOVATION

1.1 Rural Reproductive and child health centres

Having successfully provided reproductive and child health services in the villages of southern Rajasthan through two health centres for the last 11 years, this year ARTH expanded its service intervention area by starting two more health centres. One of the new health centres is located in village Jaswantgarh of Gogunda block of Udaipur district. This centre became operational in December 2008. However it did not yet provide delivery services as it was not accredited under the Janani Surakasha Yojana (JSY) and people prefer to go to the centres that are accredited under the scheme so that they can get the cash benefit. We applied for MTP certification for the centre, and meanwhile provided medical abortion services here with a referral tie up with the organization's health centre at village Kadiya. Given below is the data of the services provided at the three rural health centres during the year 2008-09.

The other new health centre, called the urban reproductive and child health centre is located in the slums of Udaipur city. Detailed information about this centre is given below separately. The location and population covered by all the four health centres is as follows:

ARTH RCH center	*Panchayat Samiti*	*Villages covered*	*Total population*	*% SC & ST*
Kadiya	*Badgaon*	*22*	*21720*	*42*
Kuncholi	*Kumbhalgarh*	*19*	*22337*	*50*
	Gogunda	*8*	*10595*	*47*
Jaswantgarh	*Gogunda*	*15*	*22381*	*58*
Udiapur city	*Udaipur city*	*16 slums*	*43000*	*NA*
Total /Average			*120033*	*49*

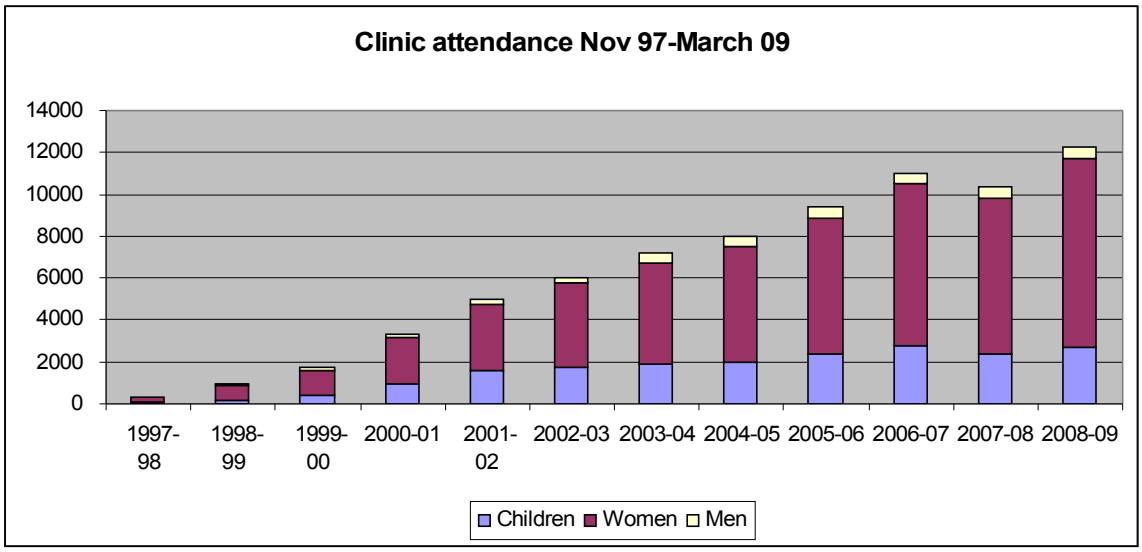
The services provided at the rural health centres included:

- 24x7 delivery services and management/referral for maternal-newborn complications
- IMNCI management for children and primary health care by nurse-midwives
- Safe abortion services (first trimester)
- Reversible methods of contraception
- Gynaecological services, including infertility management
- Laboratory facilities to do basic investigations

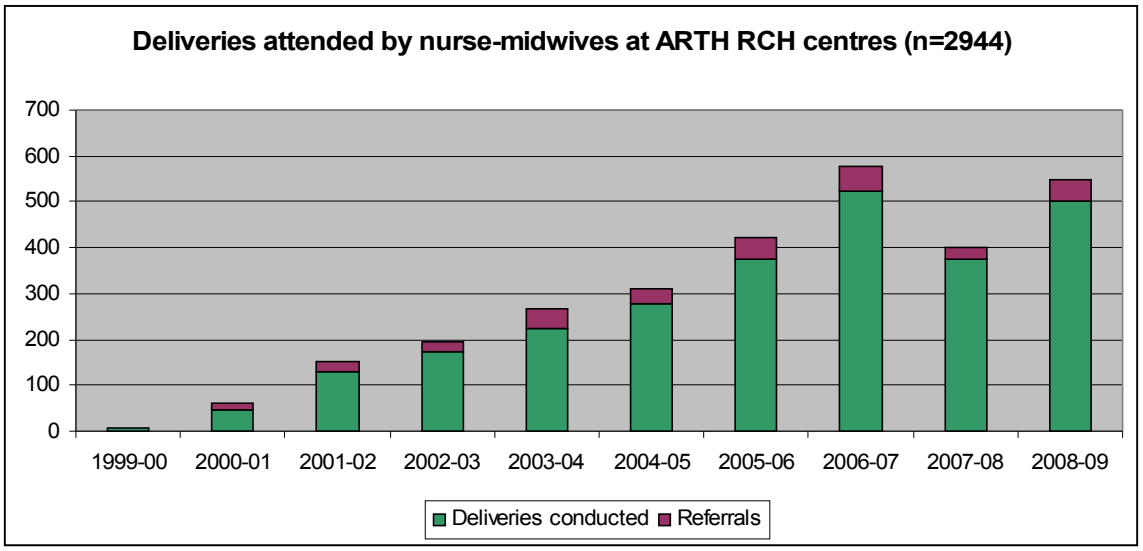
Table 1 and the charts below show data of major services provided at ARTH's rural health centres over the last three years

Table 1: Utilisation of RCH services at ARTH's rural health centres

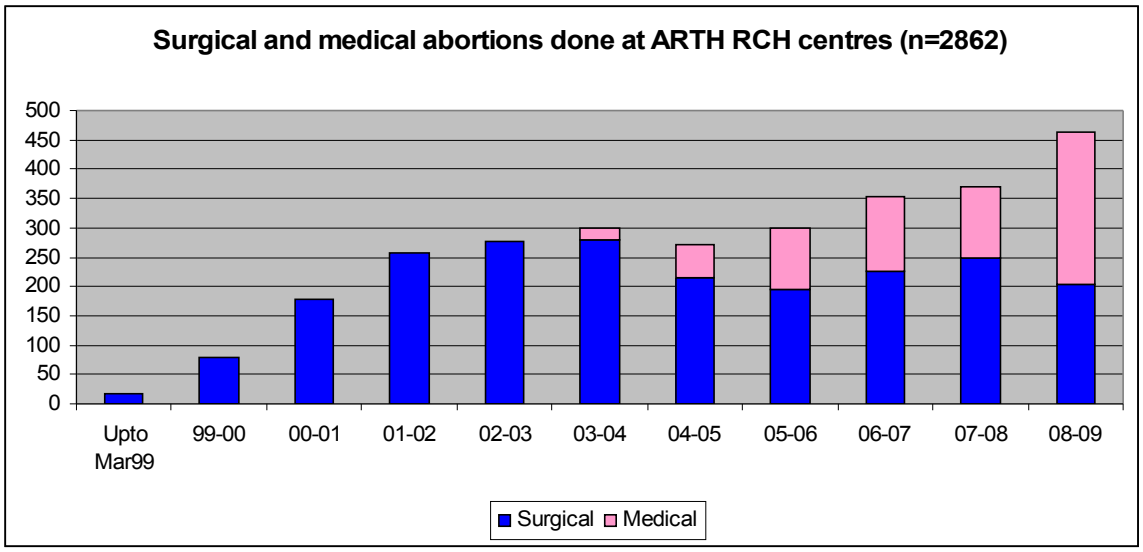
Service indicator	2006-07	2007-08	2008-09
Child immunisation	520	480	478
RTI	115	103	101
ANC visits	3140	2028	2459
Cu-T insertions	190	125	183
DMPA (Total injections)	734	967	1110
Obstetric emergency referrals	33	25	35



The attendance at the health centres has been steadily increasing with more and more women seeking services. The service indicators show an increase in the utilization of Cu-T and the injectible contraceptive as well as antenatal check-ups, over the previous year.



The number of women coming to ARTH's health centres for delivery had reduced in 2007-08 when the Janani Suraksha Yojana started and ARTH's centres were not accredited under the scheme. Though we applied for certification in the scheme but did not get it last year. After intensive efforts at the state level to relax the criteria for accreditation in favour of midlevel providers, we managed to get ARTH's health centres accredited under JSY in August 2008. Once we got accredited, the number of women delivering at our centres again increased.



The number of women coming to ARTH"s health centres for abortions has been increasing over the years, with the proportion of increase being higher this year. The proportion of medical abortion has been steadily increasing because women prefer the medical method as compared to the surgical, since it does not involve any invasive procedure.

ARTH is in the process of building its own campuses at the sites of the two rural health centres which have been operating for the last 14 years from rented premises. At one of the sites near the Kuncholi health centre, ARTH bought around 2500 sqft of private land in 2006 at the then market price. In the first phase, construction of the health centre started this year, in January 2009. Due to availability of limited funds the construction would be undertaken in phases with the residential quarters for nurse midwives being constructed in the second phase.

Outreach RCH clinics

Apart from providing services at the health centres, the nurse midwives continued to reach out to people in select villages through weekly field clinics that were organsied at fixed day, time and venue. However, over the years more and more women and children have been coming to the health centres to avail a more comprehensive package of services. Hence the utilization of such outreach clinics has been reducing, as is evident from the number of users given below in table 2. Therefore, over the years ARTH has been organizing fewer field clinics and in 2008 we closed down some of these clinics.

Table 2: Number of beneficiaries in outreach clinics

Service indicator	*2006-07*	*2007-08*	*2008-09*
Client visits	*1689*	*1174*	*380*
Reproductive health	*853*	*672*	*250*
Child Health	*536*	*287*	*56*
Other problems	*300*	*215*	*110*
ANCs	*540*	*301*	*78*

1.2 Urban Reproductive and Child Health Centre

The other new health centre started by ARTH this year, as part of the expansion of its service intervention area, provides primary health care services to the people residing in the slums of Udaipur city. The urban reproductive and child health centre (URCH) is being operated in collaboration with the government of Rajasthan, under the National Rural Health Mission. The center is located in a slum area as per the guidelines of the state government and covers approximately 43,000 population, most of whom live below the poverty line. The centre is staffed by a medical officer, four full time nurses, one part time lab technician, and a data entry operator. One of the nurses assists the doctor in OPD services, while the others deliver community services to women of reproductive age group and children, including antenatal, postnatal, and primary health services, at anganwadi centers and households. Their strategy is to reach women at their doorstep and cater to their health needs through home-level management and treatment or referral to the URCH as and when required.

The services provided at the URCH during the reporting period included:

- Primary health care
- Child health care
- Reversible methods of contraception
- Laboratory facilities to do basic investigations
- Referral for deliveries and maternal-newborn complications

1.3 "Gaon Pas": village pregnancy advisory services

In July 2007, ARTH introduced village level pregnancy advisory services through an initiative called "*gaon pas*" or *gpas* to increase awareness of and access to reproductive health services at village level, to enable women to better manage their own fertility. In the second year of the intervention, village health workers (VHWs) appointed by ARTH and ASHAs continued to provide the following services to the women in 64 villages in two blocks of Udaipur district (Badgaon and Gogunda) and in one block of Rajsamand district (Kumbhalgarh):

- Pregnancy testing
- Contraceptives (oral pills and condoms) including emergency contraceptive (EC) pill
- Counseling on fertility options to help the women decide the future course of action especially following the result of the pregnancy test and
- Referral advice and /or accompaniment to health centres, if required.

The project team conducted IEC sessions with various stakeholders- these included meetings of adolescent girls in which nearly 800 girls participated during the year; community meetings with women and men; orientation meetings with panchayat members, anganwadi workers, anganwadi supervisors and PHC staff; video shows. We developed IEC material such as wall paintings, training booklets and

pamphlets. Through these activities we reached out to more than 8000 people nearly 75% of whom belonged to the schedule caste and schedule tribes.

ASHAs and VHWs conducted pregnancy tests of more than 700 women in the villages. Being aware of their pregnancy status the women could timely decide whether to continue or terminate their pregnancies. Several women started taking contraceptives after counseling by the VHWs. EC is not available through the public health system and people in the villages did not know about it earlier. We informed them about it and nearly 250 people took EC from us. Thus though people in the urban areas have easy access to EC we were able to make it available to the rural population as well through this intervention.

1.4 Intervention for continuum of maternal & newborn health care in Rajasthan

ARTH initiated an intervention to develop a strategy for providing continuum of care from pregnancy to one year after delivery, in order to help reduce maternal morbidity and mortality, and neonatal mortality in a primary care setting in the villages of southern Rajasthan. Having started in the year 2006, this was the third year of the intervention. With a rapid increase in the number of institutional deliveries in the country, largely as a result of the cash incentive scheme, 'Janani Suraksha Yojana' (JSY), postnatal care assumes an even greater importance. Government of India's guidelines of 2005 for auxiliary nurse midwives (ANMs) and lady health visitors (LHVs) recommend that two postnatal visits be provided for recently delivered women within ten days of delivery. However, thus far there is no documented experience of such postnatal visits by midlevel providers that detect and manage maternal and neonatal complications.

Since majority of maternal deaths occur in the first week after delivery, the intervention involves two postpartum visits by trained nurse midwives (NMs) in the first week after delivery. The NMs visit the homes of women irrespective of the place of delivery, which may be ARTH's own health centres or any other public or private health facility or home. For this, a system for timely reporting of deliveries from the villages has been established. Arrangements have been made to provide transport to NMs for providing postnatal visits at the homes of recently delivered women. The NMs detect complications in mother and/ or newborn and manage them to the extent possible, besides advising and helping in referral, if required.

In this year, out of the 1320 deliveries reported, 90% women (1192 women) received the first postnatal visit and 77% (1025 women) received the second postnatal visit as well. Thus there were a total of 2217 home level postnatal visits by NMs in ARTH's field programme area.

Between 14 and 28 days after delivery, village health workers (VHWs) and ASHAs visit all delivered women, three times. ARTH trained thirty-three ASHAs and three VHWs to record information, provide counseling to mother/ other family members and to refer to nurse midwives if necessary, during these postnatal visits.
Over the last 3 years, the total number of maternal deaths in ARTH's field programme area has been declining, as is reflected in the table below.

Table 3: Maternal deaths in field area

Maternal deaths in field area	Antenatal period	Deaths < 24 hours of delivery	Postpartum 2-42 days after delivery	Post abortion	Total
Apr06-Mar 07	1	2	4	1	8
Apr07-Mar 08	0	1	3	2	6
Apr 08-Mar 09	0	1	3	1	5

2. TECHNICAL ASSISTANCE

2.1 Improving access to safe abortion services in Rajasthan

The second phase of reproductive and child health programme implementation plan for Rajasthan has identified improving maternal health care services as a priority. It aims at increasing safe abortion services to 50% by 2010. During 2008, district level PCPNDT coordinators in charge of preventing sex selection, were given the charge of also facilitating implementation of the MTP Act in their respective districts.

With the objective of facilitating effective implementation of the MTP Act, rules and regulations in the state so as to result in increased access to safe and legal abortion services, a situational analysis of the available resources on abortion was led by ARTH in Rajasthan. With concurrence of the Directorate, data collection was carried out in the entire state in 2008. District level CM&HO offices, Medical Associations, RCHO offices were contacted and data on implementation of the MTP Act was collected by a team of 3 investigators.

As data collection progressed, seven zonal reports were prepared which demonstrated the status of implementation of the Act through district specific fact sheets and these were disseminated in zonal workshops which were held under the guidance of the Director RCH along with representatives from districts of the zone. During this year, four zonal workshops (Udaipur, Bharatpur, Ajmer and Kota) were held. In these workshops the participants, comprising of district programme managers, members of the district MTP Committees and gynecologists working in the government institutions, made plans for improving the implementation of the Act in their respective districts. To follow-up on the plans made during the zonal workshops, ARTH contacted the concerned district level officials in three districts (Rajsamand, Ajmer, Bharatpur) with pre-designed checklist and found out whether the plans made during the zonal workshop were actually being put to action. To reach out to other stakeholders on the issue of access to safe abortion we decided to interact with the members of the civil society and clinicians in the next year.

2.2 School of Midwifery Practice

ARTH is in the process of building its own campus at village Iswal, about 20 km from Udaipur city. 2000 sqm land was sanctioned by the government of Rajasthan last year though we got the possession only in May 2008, after much persuasion with the land revenue officials. Due to delays caused by the office of tehsildar in releasing the papers for registration, the land was registered much later in September 08. After inviting tenders for construction, the work finally started on site in January 09.

The plan is to construct in phases, beginning with the training center in about 1000 Sqft and trainees hostel in 5284 Sqft plinth area. Later as more funds are raised, a health centre (4000 Sqft) and residential quarters for nurse-midwives (2272 Sqft) plinth area would be built.

To improve the quality of delivery services being provided in the state, government of Rajasthan has decided to train the ANMs as skilled birth attendants (SBAs). To do so, it has designated

ARTH (in addition to a medical college and another government institution) as a 'zonal midwifery resource centre" to carry out training of trainers of SBAs.

The ToT for first batch of skilled birth attendants' trainers was conducted in March 2008. In continuation five more batches were held this year.

The table below gives information about the various training programmes conducted by the School in this year.

Name of organization	*Duration*	*Participants*	*Issues covered*
Government of Rajasthan	15 days	95 (5 batches) nursing tutors and staff nurses	Antenatal care, care during labour, management of maternal and neonatal emergencies, postnatal care, neonatal care
Hanuman Van Vikas Samiti, Sakroda; Chirag Nainital; Chetna, Ahmadabad; SRKPS, Jhunjhunu; Shiv Shiksha Samti, Tonk	4 days	8 community organisers	Verbal autopsy of maternal deaths
12 NGOs	3 days	30 (2 batches) supervisors and managers	Burden of unsafe abortion, abortion services in Rajasthan, safe abortion techniques, post abortion care, MTP Act, safe abortion and sex selection, advocacy and intervention planning for safe abortion
Government of Rajasthan	2 days	11 doctors and staff nurses	Evidence based maternal and newborn care, how to bring about changes in delivery care practices, orientation on BEMOC guidelines

2.3 SAMWEDNA

ARTH continued to provide technical support to two NGOs- Shiv Shiksha Samiti in Tonk and SRKPS in Jhunjhnu districts of Rajasthan- in operating their nurse midwife based health centers modeled on the ARTH's health centres. Both the organizations have been providing RCH services through these centres for the last four years. This year the following training programmes were held for the health centre staff of both the organizations:

- A two-days' training of managers on postnatal care in which one person from each organisation participated. The main issues covered in the training were:
    - Importance of postnatal care
    - How can postnatal care be effectively provided by a nurse midwife in rural areas
    - How can the services being provided at the health centres, better supervised
    - How to assess the quality of postnatal care services

- Training of four nurse midwives was done in two batches on the following issues:
    - Routine care during antenatal period
    - Antenatal problems and their management
    - Care during labour, management of emergencies during labor
    - Management of obstetric emergencies
    - Care during post-partum period
    - Infection prevention
    - Maintenance of records and registers
    - Treatment of illnesses in children according to IMNCI protocols

3. RESEARCH

3.1 Home Based Management of Young Infants

ARTH was one of the partners in a multi-site field trial coordinated by the Indian Council of Medical Research (ICMR), New Delhi in five states, namely Bihar, Maharashtra, Orissa, Uttar Pradesh and Rajasthan. The research study, 'home based management of young infants' (HBMYI) intended to study the effectiveness of a package of home-based interventions, delivered by a village-based worker, in reducing mortality among neonates and young infants (<60 days) in rural communities. ARTH conducted the research study in Rajsamand district of southern Rajasthan where neonatal mortality was above 40 per 1000 births and more than 70 percent of the deliveries occurred at home. The study was undertaken across four PHC areas of the district covering a total population of 108882.

The study, started in 2003, followed two approaches- in two PHC areas village based female workers called *shishu rakshaks* (SRs) were employed while in the other two PHC areas anganwadi workers (AWWs) were trained to provide the home-based care. Both SRs and AWWs were trained to provide the necessary newborn care. They worked closely with the ICDS and health department to facilitate liasioning with the existing health system for sustainability and replicability of the programme. The SR/AWW enumerated all the pregnancies in her area and visited the families during pregnancy, delivery and 8 times during the first postpartum month. She educated the mother and the family on newborn care and feeding, detected problems and managed or referred them. More than 100 SRs and AWWs were trained to work in the intervention area. ANMs in the area were trained on techniques of resuscitation and sepsis management. A referral system was also established.

Apart from the monthly review meetings, this year a four-day refresher training was held for the SRs and AWWs to address specific issues related to the management of asphyxia, sepsis, hypothermia and problems in breast feeding.
ICDS had granted special permission to SRs to give injections as part of this research study. In the initial phase of the study, the SRs who had certain necessary pre-requisite skills were trained to give the intra muscular gentamycin and vitamin K injections while others were not. Subsequently as other SRs underwent training and acquired the necessary skills, this year they

were given a four-day training to administer injections to children. Anganwadi workers were not trained to give injections as the ICDS department did not allow them to give injections.

The following data indicates the status of newborn children in the intervention area during this year and their management by the SRs and AWWs.

Service indicator	Numbers recorded	Numbers managed	Numbers referred
Total deliveries registered	2236	NA	NA
Institutional deliveries	1775	NA	NA
Home deliveries	461	NA	NA
Live births	2187	NA	NA
Still births	59	NA	NA
Neonatal deaths	81	NA	NA
Premature babies	40	36	2
Sepsis	77	45	32
Low birth weight babies	367	349	5
Problem in breast feeding	42	37	4
Hypothermia	34	32	0
Pneumonia	21	15	6
Umbilical sepsis	200	197	3

3.2 Maternal morbidity, its burden, consequences and options for interventions in a rural area in Rajasthan

A study on maternal morbidities was conducted in ARTH's field intervention area of 49 villages around ARTH's rural health centres in two blocks of Udaipur district (Badgaon and Gogunda) and in one block of Rajsamand district (Kumbhalgarh), covering a total population of nearly 55,000. The objectives of the study were:

- To estimate the burden of maternal morbidity in a rural community of north India
- To study the short term sequelae of less serious, serious and chronic maternal morbidity
- To document care seeking patterns and determinants for selected maternal complications

The study consisted of the following components:

- A prospective cohort study examining short term consequences of pregnancy related morbidity.
- A cross sectional survey of ever married women examining chronic / residual obstetric morbidity and of recently delivered women to identify those who had complications.
- A qualitative study examining social and economic consequences of chronic obstetric morbidity.
- Process documentation of interventions at primary care level to address key morbidities.

The study started in the year 2006 and some of the above mentioned components were completed in the previous years. This year the prospective cohort study on maternal morbidity was conducted. The specific objectives of the cohort study were:

- To study the short term sequelae (physical, social, economic and psychological) of serious and less serious complications occurring around the time of delivery
- To compare sequelae among women with a normal delivery and those having maternal complications

- To compare short term sequelae among women having a surviving perinate with those having perinatal deaths

From among the recently delivered women in the study area, those with none, less severe and severe maternal complications were identified. Criteria for inclusion of women in the study were developed after an international expert group meeting in ICDDR-B, where a similar study was underway. Nearly 400 women with severe and less severe morbidity around the time of childbirth, those with perinatal death and those with normal deliveries were followed up at 6 weeks, 6 months and 12 months after delivery to study the physical, psychological, social and economic consequences of maternal morbidity on their lives. A morbidity extraction checklist for identifying women with morbidity and classifying them accordingly was used.

A structured questionnaire was developed, which was pre-tested and finalized. It covered all aspects related to consequences and care seeking pattern. For psychological aspects, modified EPDS was used. After the recruitment of women in the study, investigators visited women's homes for the interview and collected information as per the structured questionnaire. Research manager guided the recruitment, data collection and analysis. The list of women to be interviewed was revised on an ongoing basis. While it was relatively easy to find women at home at the time of visit at 6 weeks, but women were not always available at their homes for interviews to be done at 6 months and 12 months post partum. In some cases, contacts were made at women's parents' homes or their farms. If a woman could not be contacted even after 3 visits, the investigators were instructed not to follow-up thereafter. Data collection started in June 2008 and would be completed by July 3009. A team of two research investigators collected data, while two supervisors verified its quality and cleaned and coded it. Data was entered in the software package Epi6. Preliminary data analysis is underway.

4. ADVOCACY

4.1 Evidence based advocacy for maternal and neonatal health

The focus of our advocacy efforts has emerged from various research studies conducted by ARTH. Based on the findings of these studies conducted over the last couple of years, on quality of delivery services and immediate neonatal care at home and in institutions, and verbal autopsy studies of maternal deaths, we found that evidence based practices for maternal and neonatal care are not followed in the institutions and that several irrational practices to augment labour and delivery are prevalent both at institutions and homes. Given the recent rise in the number of institutional deliveries in Rajasthan, we have been carrying out advocacy at state and district levels on evidence based maternal neonatal care, and its link to perinatal mortality. This year we trained more than 105 midwifery trainers across several districts of Rajasthan on skilled birth attendance and evidence based care, who will in turn train ANMs and staff nurses across the state. We oriented gynecologists and labour room nurses of government district hospitals and community health centres and held intensive discussions with senior officials in the directorate of family welfare, government of Rajasthan to improve evidence based practices in the state. An IEC and advocacy strategy, particularly focusing at government facilities with high case load of deliveries has been planned for the next year. In addition, this year ARTH published four articles on maternal & neonatal health in international journals, which have strengthened our advocacy efforts on the issue.

Publications

This year, ARTH printed a flip book on contraception, safe abortion and emergency contraception. This is a pictorial booklet giving information about contraception, safe abortion and emergency contraception in hindi, that can be used by village health workers/ASHAs to inform the community about contraceptives, pregnancy testing, emergency contraception and safe abortion services.

We published the following articles in international journals this year:

Name of publication	Name of journal
Childbirth practices in rural Rajasthan, India: implications for neonatal health and survival	Journal of Perinatology (2008)
Comparison of domiciliary and institutional delivery care practices in rural Rajasthan, India	Journal of Health, Population and Nutrition 2009 April
Pregnancy related deaths in rural Rajasthan-exploring context and care seeking through verbal autopsy	Journal of Health, Population and Nutrition 2009 April
Maternal health: a case study of Rajasthan	Journal of Health, Population and Nutrition 2009 April

Interns

ARTH hosted two interns during the year, both of whom came for a duration of one year as part of the programme called “Swadesh Ki Khoj”, coordinated by the NGO Chirag in Nainital.

Name of the intern	Organization name	Duration of internship	Educational qualification
Tanuja Panwar	Chirag, Nainital	12 months	Bachelor of Arts
Puhpa Ravat	Chirag, Nainital	12 months	Bachelor of Arts

During the internship period, both Tanuja and Pushpa worked as health centre assistants, helping the nurse midwives in the day-to-day functioning of the rural health centres, besides acting as field investigators for the research study on maternal morbidity.