

# Over 17,000\* deliveries conducted by nurse-midwives at rural health centres in southern Rajasthan, India

## Action Research & Training for Health (ARTH) Udaipur, Rajasthan, India

### 1. Introduction

Action Research & Training for Health (ARTH) is a registered Indian non-profit public health organization established by a group of professionals in Udaipur, India in 1997. ARTH contributes to improving the health status of underprivileged communities through four program areas -- Reproductive Health, Neonatal and Child Health, Healthcare for the elderly and Health Systems & Policy. Our programmes are implemented through five operational units, viz. Services, Community Action, Training, Research and Outreach.



### 2. Objectives of ARTH's MNCH service programme

- To provide 24x7 delivery and newborn health services and daily primary care to women and children from economically weaker sections, in rural-tribal areas of southern Rajasthan
- To train, equip and empower nurse-midwives and enable them to provide safe maternal and neonatal health care services in interior areas without requiring the continuous presence of a doctor

### 3. Intervention approach

- Establishing and operating at nominal cost to the community through well equipped modular reproductive and child health centers in interior rural areas
- Training nurse-midwives to act as skilled birth attendants
- Providing access to primary health care by trained nurse-midwives and visiting doctors
- Setting up an efficient system of supply, communication, specialist consultation and hospital referral of patients with complications

### 4. Infrastructure

ARTH runs three health centers within its field area. Two rural health centers built by the organization, provide 24x7 services to the surrounding rural-tribal population, while the third opens on select days of the week given its recent initiation in the area.



### 5. Human Resources

Each rural health center houses at least 2 qualified Nurse-Midwives (GNMs and ANMs) who live and serve on campus to ensure round the clock services. A pool of Clinic Attendants assist with care, process

instruments, and maintain the health center. Skilled Health Assistants provide counselling services to all women who visit the facility. We additionally have a pair of 24x7 helpline workers on call in Udaipur city, who ensure that all patients referred for maternal-neonatal complications are helped with admission and receive prompt emergency care at the Government Hospital.

### 6. Services provided by health centers

The range of services provided by the health centers is given below. Services in *italics* are provided by the visiting gynaecologist, the rest are provided independently by nurse-midwives:

- Maternal and neonatal care including pregnancy checks, delivery, post-delivery and newborn care
- Reversible contraception
- Pregnancy confirmation and counselling
- Immunization and acute child care
- Primary care for adults and children
- *Safe, legal abortion in the first trimester*
- *Management of reproductive tract infections, infertility and other gynaecological disorders.*



Doctors visit the health centers regularly once or twice a week and support nurse-midwives. They empower local staff by giving them skill training and reviewing their performance. In addition, doctors are available round the clock for telephonic consultation and medical advice for dealing with each complication.

For women in labour, nurse-midwives monitor progress and conduct delivery as per standard national and WHO norms. They additionally watch for complications, and in that event initiate emergency treatment to stabilize the patient, telephone the doctor and decide on the need for referral on a case-to-case basis. If the patient does need referral, nurse-midwives counsel and prepare the family, arrange for a vehicle and (if the condition is serious) accompany the patient to hospital. In cases of refusal to referral, the nurse-midwife informs the patient and family of potential risk and takes written consent from them. She then manages the condition as per standard protocols. They have managed cases like primi with breech presentation, shoulder dystocia, severe anemia, APH, pre-eclampsia, PPH etc.



Tests being done by nurse-midwives:

- Hb estimation
- Blood group test
- Blood sugar
- HIV test
- VDRL
- Urine albumin
- Test for typhoid and malaria

### 7. Training local youth as providers of primary health care

ARTH has trained "Skilled Health Assistants" who are locally resident school-educated women. They are provided with a month long training and they provide all women that come at the health centres with counselling on contraception as well as on postpartum care. They also assist the nurse-midwives in over-all care of patients at the health centre.

### 8. Training of Skilled Birth Attendants:

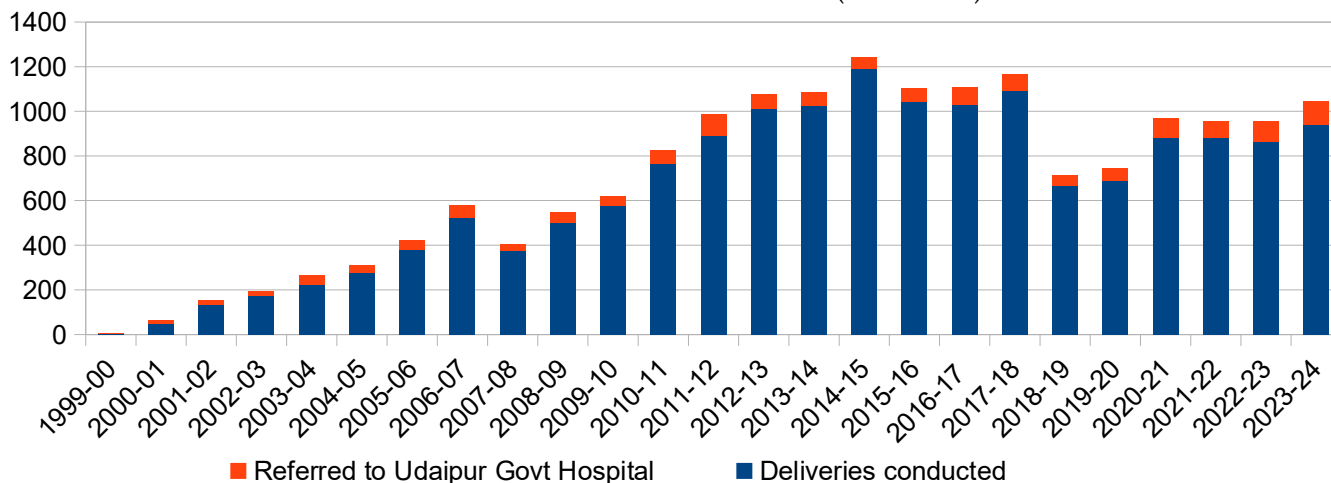
From 2007 to 2013, ARTH's School of Midwifery Practice & Primary Health Care was designated as a Zonal Midwifery Resource Center for NHM, Government of Rajasthan, and trained over 600 senior nurse-midwives and nurse tutors from all 33 districts of the state.

## 9. Performance of the Service Program

### Delivery and newborn care

From 1999 till March 31<sup>st</sup> 2024, 17,445 women came for delivery to ARTH Health centers. Of these 1355 developed complications and were referred to the teaching hospital in the city for emergency obstetric and/or neonatal care. The following chart depicts progressive delivery care performance for the period 1999-March2024.

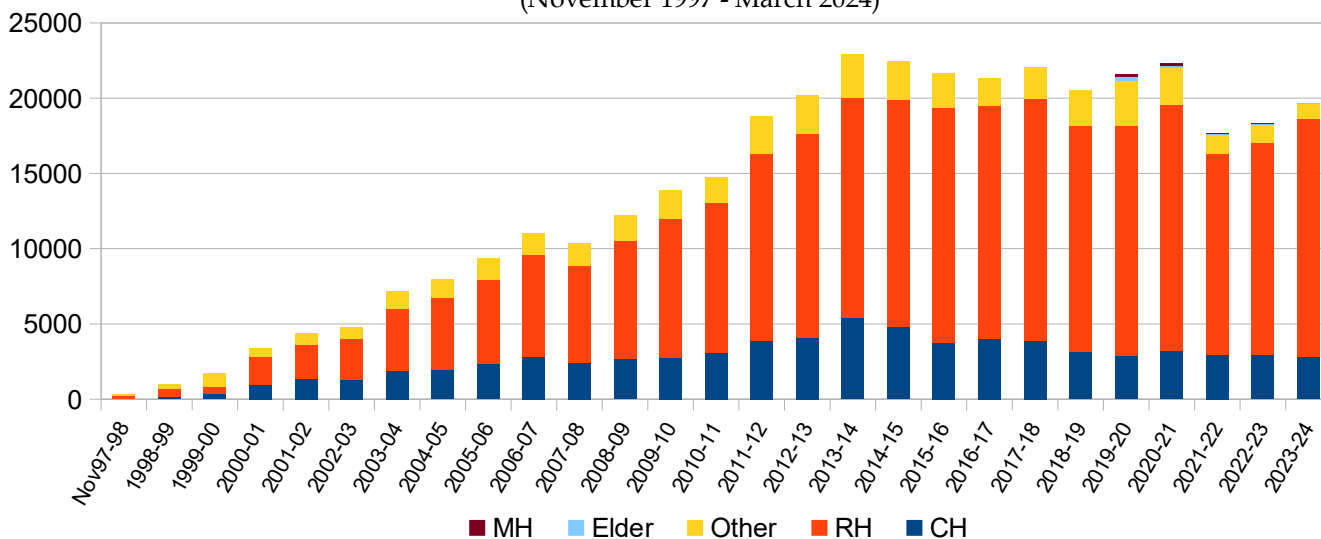
Deliveries attended by nurse- midwives at ARTH Health Centres  
November 1999 to March 2024 (n = 17,445)



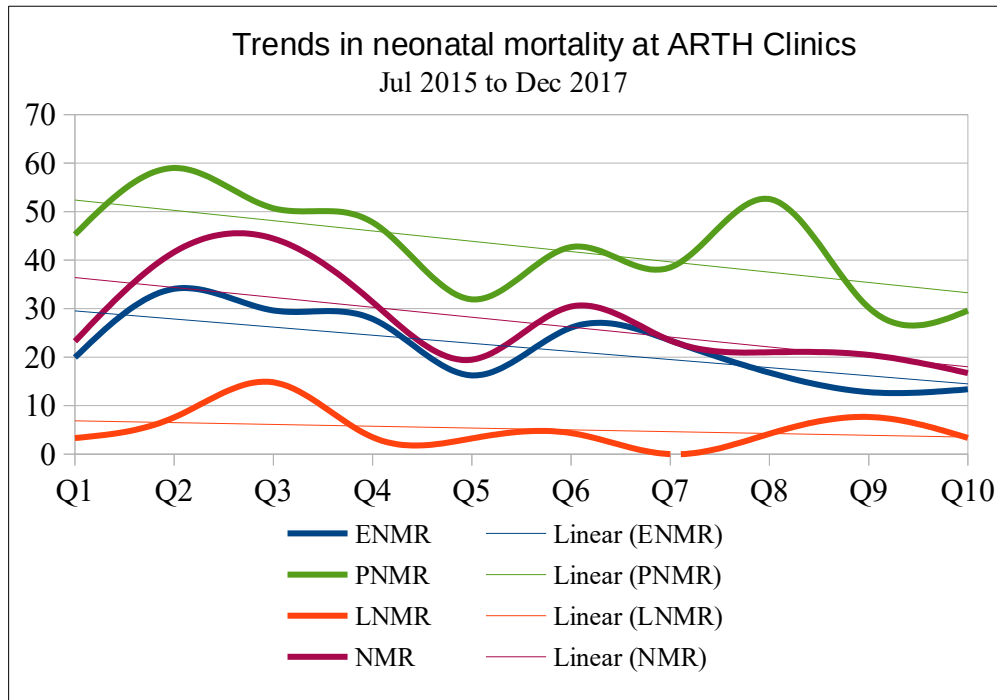
### A focus on reproductive and child health needs

ARTH's services are largely utilized by women and children for meeting reproductive health and child health needs as depicted in the chart below. About 60% of all patients are seen and treated by nurse-midwives, the doctor sees referrals and the rest.

Outpatient care for Reproductive Health, Child Health Elder and Mental health and other needs  
(November 1997 - March 2024)

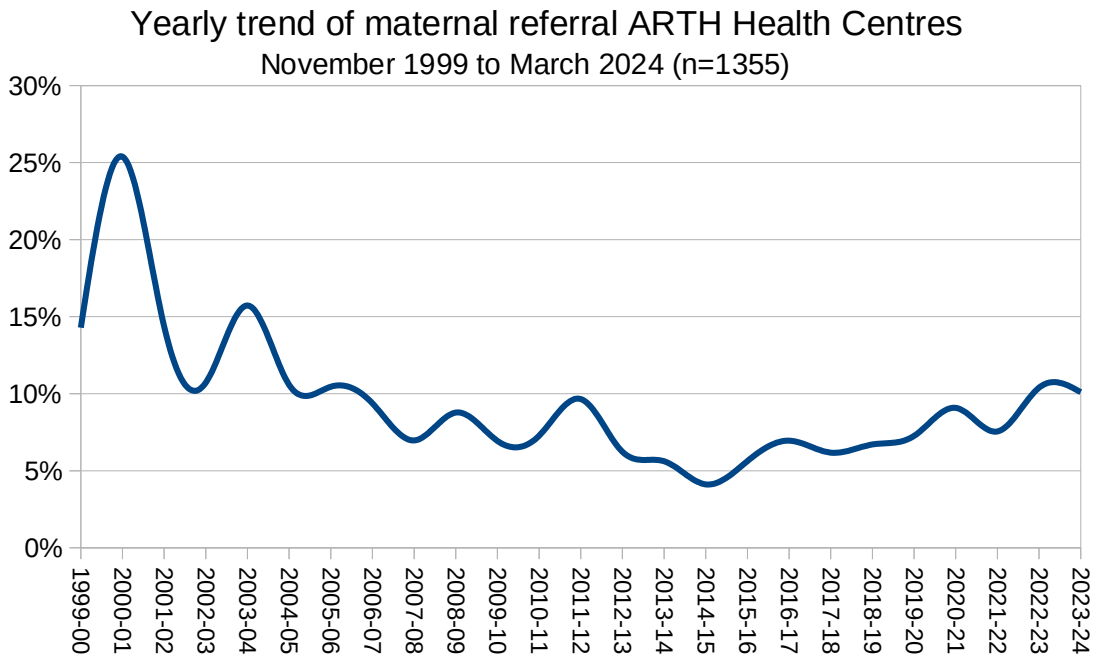


We tracked in detail the neonatal period for all births at ARTH health centres from July 2015 to December 2017. The mortality rates have shown a considerable decline, as described below.

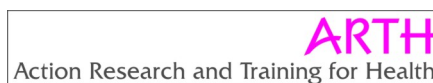


### 10. Impact

With continuous efforts being in place, ARTH health centers have through nurse-midwives backed by doctors and other health workers, provided quality maternal as well as neonatal health services. The rate of referral is currently around 10%.



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G1-2, Satyam, Ramgiri, Badgaon, Udaipur 313001, Rajasthan, India.  
 +91 294-2980075, [arth@arth.in](mailto:arth@arth.in), [www.arth.in](http://www.arth.in)