Community emergency transport

schemes for prevention of maternal mortality

Key messages: **Community-based emergency transport schemes (ETS) fill a crucial gap in the referral chain by transporting expectant mothers to health facilities cheaply and efficiently.**

1. The lives of thousands of women and babies have been saved in all three intervention states.
2. ETS has the potential to be scaled up nationwide under the leadership of the NURTW (National Union of Road Transport Workers).
3. Community-based ETS works best when implemented as part of a comprehensive strategy which addresses key MNCH barriers simultaneously.

The challenge: travel is hard

Long distances to health facilities, difficult terrain and the absence of affordable transport options are major challenges for remote, rural communities in the north of Nigeria. Efforts to transfer pregnant women with complications commonly fail where transport is not available, where money cannot be found to pay for it, or where seasonal factors make the terrain impassable. Lack of security – in general or at night – adds a further challenging dimension. All these factors can result in long delays in women reaching vital health care.

Getting timely help when a maternal emergency occurs is vital. The estimated average interval between onset of an obstetric complication and death in the absence of medical intervention is just two hours in the case of a post-partum haemorrhage (bleeding after delivery), 12 hours for an antepartum haemorrhage (bleeding after 24 weeks of pregnancy and before delivery), and one day for a ruptured uterus. Hence, some modes of transport, such as oxen and carts or bicycles, may be too slow to use in addition to being uncomfortable. In too many cases, the lack of suitable transport options for women suffering a maternal complication has tragic consequences.

The response: recruiting local drivers

In 2010, the three northern states of Katsina, Zamfara and Yobe working in partnership with UK aid and the Norwegian government funded Programme for Reviving Routine Immunisation in Northern Nigeria and Maternal, Newborn and Child Health Initiative (PRRINN-MNCH) identified the lack of affordable rural transport options as a major cause of the high maternal and newborn mortality rates. Community-based emergency transport schemes (ETS) were established, building on previous emergency transport initiatives in the north, including a small-scale initiative in Kebbi state implemented with the support of the Prevention of Maternal Mortality Network in the 1990s, and schemes established between 2003-8 in Kano and Jigawa states with the support of the Partnership for Transforming Health Systems 1 Programme (PATHS 1).

The ETS model used a locally-available mode of transport – passenger transport vehicles driven by commercial drivers belonging to the National Union of Road Transport Workers (NURTW). The NURTW, which registered as a trade union in 1978, has a network of branch offices covering the entire country. Even remote communities in the north usually have access to cars driven by NURTW drivers; if not, cars can usually be found in neighbouring communities. It therefore made sense to work with what was already on the ground.

Community emergency transport schemes address the weakest link in the referral chain – that of communities to health facilities.

State and local government NURTW officials in Katsina, Yobe and Zamfara readily agreed to work in partnership with PRRINN-MNCH and proactively contributed to the design of an ETS model that suited their context. Officials from the union were trained as core trainers and cascaded the driver training down through the PRRINN-MNCH communities. Local branches of the NURTW provided supervisory support and encouragement to the drivers and special incentives – such as priority loading for ETS drivers at motor parks – were provided in some areas.

THIS DOCUMENT IS ONE OF A SERIES OF TECHNICAL BRIEFS THAT DRAW ON THE ACTIVITIES, RESULTS AND LESSONS LEARNED FROM THE PRRINN-MNCH PROGRAMME

Box 1. How the ETS worked

Four drivers are trained in each community. This helps ensure that the ETS is operational '24/7'. Drivers are notified as soon as a maternal danger sign is recognised. The woman is carefully helped into the car and helped to sit or lie depending on what position is most comfortable. The driver leaves the community as soon as possible, taking both the woman and her carers to the nearest health facility that is equipped to deal with maternal emergencies. The drivers then wait at the facility for further instructions.

The cost of the transfer is kept to an absolute minimum with drivers encouraged to seek recompense for the cost of the fuel only. To reduce transfer delays, fuel is kept in the community at all times. Drivers are issued identification (such as T-shirts, hats, ID cards or car stickers) to assist their passage through road blocks or security check-points.

Results: ETS saving lives

As of September 2013, community-based ETS schemes had been established in 806 intervention sites in 45 local government authorities (LGAs) in three states. These were sites that had received a comprehensive package of support from PRRINN-MNCH. As well as supporting their own communities, the volunteer community health workers and drivers were encouraged to roll out their activities to as many neighbouring communities as possible. This resulted in the inclusion of a further 1,592 communities.

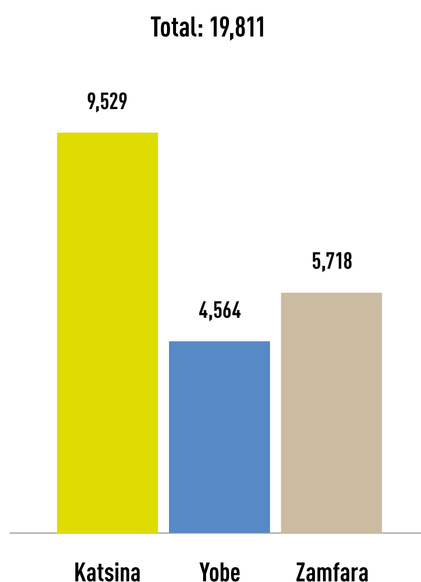
"At certain times of the year you have to wait for the river to stop flowing before you can cross. If it is urgent to cross, you have to carry a woman on your shoulders or back. If the river is fast-flowing there are hefty men who help people cross the river. We have had three instances in 2007 and 2008 when people were swept away. Once you have crossed the river, you need to hire a car or motorbike..." (Katsina)

Some of the new communities established their own ETS, while others used the ETS drivers in the original sites. Hence by September 2013 the population covered by ETS was an estimated 4.3 million. Approximately 3,200 ETS drivers were trained. Many of these drivers cascaded their training to other drivers in the community, increasing the pool of drivers who could be called upon.

Between December 2009 and September 2013, 19,811 pregnant women were transferred to a health facility by trained ETS drivers in Katsina, Yobe and Zamfara states (Fig 1). The majority of these transfers were for maternal complications. Hence the ETS drivers played a vital role in helping to prevent maternal and newborn deaths.

PRRINN-MNCH had exceeded its end of programme target of 5,000 ETS transfers four times over by September 2013.

Fig 1: ETS transfers by state, Dec 2009-Sep 2013



ETS transfers helped to save women and their babies in all three states.

ETS helped to reduce the cost of emergency transport for communities. A 2012 PRRINN-MNCH study compared costs before and after the introduction of ETS. The average reduction in the cost of transport ranged from 41% in Katsina to 70% in Zamfara.

ETS was welcomed and highly valued by rural communities, with many examples of women who had been assisted by the schemes readily shared by community members (Box 2).

The driver training included a strong emphasis on reaching and assisting socially excluded or vulnerable women. A 2012 review of the ETS found that a concern for the least-supported women was reflected in the attitudes and actions of many of the ETS drivers. In Yobe, for instance, ETS drivers assisted people from neighbouring Fulani communities, which had traditionally been marginalised.

"Now families take their sick ones to the hospital because they have structures in the community they can rely on."
[Community member, Yobe]

"Last year, one Fulani man and his wife came here to stay during the dry season and if not for the group the woman would have been dead. The problem was prolonged labour. The family are poor with no relatives in the community. They cannot pay for the transport or medical bills. This was known to all in the community. The community volunteers supported the family.
The family were assisted with funds from the community savings and an ETS driver transported the woman to the health facility."
[Community member, Yobe]

"Everyone knows that ₦500 is the cost to use the ETS and that is cheap compared to other drivers that one can pay an average of ₦2,000 to." [Female community volunteer, Katsina]

"What we enjoy the most is for families to come to us and ask for help. We thank the Almighty for that." [ETS driver]

Policy implications

The ETS initiative has excellent prospects for being sustained at community level once PRRINN-MNCH withdraws. By 2013 the scheme was well-known at community level. A knowledge, attitudes and practices survey in 2013 found that 77% of respondents in Yobe, 71% in Katsina and 60% in Zamfara knew of someone who had been helped by the ETS. There was a high level of community support for the scheme, with widespread recognition of its value, its role in saving lives, and its reliability as a safety net for pregnant women:

A 2012 volunteer survey by PRRINN-MNCH found that 56% of ETS drivers were motivated primarily by a wish to "help others and save lives"; 12% primarily by religious obligation; and 19% by the training they had received. Driver drop-out rates were low and the majority of drivers stated their intention to continue their ETS activities. This bodes well for the

Box 2. ETS beneficiaries – their stories

"In Kurnawa community, there was a time an ETS driver loaded passengers and goods and was heading to the market. His attention was called to help a woman with prolonged labour. He excused the passengers and said to them, this is his special assignment. He then offloaded the passengers. He travelled back to the community and immediately put on his Haihuwa Lafiya cap [hat for ETS drivers] and his T-shirt and rushed her to the hospital within 30-40 minutes. The woman delivered with the assistance that she got in the facility."
[Local government officer, Busari LGA, Yobe]

"Marariya Isa delivered at home and had a retained placenta: the husband was away from home. The chairman of the community volunteers was informed and he organised taking the woman to hospital. The chairman called an ETS driver and community volunteers accompanied the woman to Daura General Hospital. This was the first beneficiary of the ETS work."
[Village head, Yardaje, Katsina]

future sustainability of the ETS.

In July 2012, PRRINN-MNCH formalised its partnership with the NURTW by signing a memorandum of understanding. Subsequent support to the NURTW focused on ensuring that the ETS remains viable and sustainable. An ETS planning team was formed at the NURTW national head office, a signal that the NURTW was ready to assume leadership of the scheme.

An ETS driver training manual, produced with PRRINN-MNCH's support, was launched by the NURTW in November 2013 and will be used as a national training resource. A plan for building the capacity of state and local government NURTW branches was put in place with the aim of addressing weaknesses in NURTW's supervisory and monitoring role.

Improved monitoring and supervision of ETS activities at state level and below will help maintain driver motivation and will be essential for providing robust evidence of ETS performance.

With PRRINN-MNCH's support, a strategy for scaling up ETS was devised in 2013. The scale-up plans attracted funding from the federal SURE-P initiative and plans are underway to roll ETS out to eight new states plus the Federal Capital Territory.

The success and sustainability of the next phase of implementation depends to a large extent on the degree to which ETS is embedded within a wider process of community mobilisation on MNCH issues. A stand-alone transport solution may be ineffective unless other barriers are addressed simultaneously at community level.

Government recognition that ETS is a key component of a functioning health referral system will help to sustain the scheme. Recognising NURTW as an essential partner in state efforts to improve MNCH will also be important.

Conclusion

In three PRRINN-MNCH states ETS helped to avert numerous maternal and newborn deaths. Hence the scheme is making an important contribution to state safe motherhood efforts.

A future priority, already underway in the PRRINN-MNCH-supported states, is expanding access to the ETS for all women seeking to deliver at a health facility. Institutional deliveries are unlikely to increase at the desired rate unless rural physical access barriers faced by all pregnant women are addressed.

Partnership for Reviving Routine Immunisation in Northern Nigeria; Maternal Newborn and Child Health Initiative

The PRRINN-MNCH programme works with federal, state and local governments and local communities to improve the quality and availability of maternal, newborn and child health services.

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