Are traditional birth attendants good for improving maternal and perinatal health?

Joseph Ana argues that the shortage of skilled health workers means traditional birth attendants have a valuable place, but **Kelsey A Harrison** believes they do more harm than good

doc2doc

Journal club: The effect of training traditional birth attendants on neonatal mortality

JENNY MATTHEWS/PANOS

Newborn Sirah is held by traditional birth attendant Hawa Koroma, Freetown, Sierra Leone

All references are in the version on bmj.com

Joseph Ana former commissioner for health, Cross River State, Nigeria, Calabar, Nigeria **jneana@yahoo.co.uk**

YES

The use of traditional birth attendants has generated a lot of heated debate over the decades, especially among health professionals. But the facts strongly support their use.

All over Africa, governments are introducing (or announcing) free healthcare for pregnant women and children under 5 years in the rush to meet the United Nation's millennium development goals on reducing maternal and child mortality. Maternal mortality in sub-Saharan African countries varies widely, ranging from 800 to 2500 per 100 000 live births. Infant mortality ranges from 100 to 150 per 1000. Surely, all trained health hands must be on deck to deal with this emergency, including the hands of trained and monitored traditional birth attendants? Not to do so is unethical.

The causes of the poor health outcome for pregnant women and children are many, but the most important reason is the severe shortage of trained and skilled health workers. In some countries fewer than 20% of births are attended by skilled health workers.[1] The problem is worsened by health workers being concentrated in cities and capitals when most of the developing world population resides in rural areas.

As governments have struggled to find staff to run their free healthcare schemes, managers of health facilities have tried local skill mix arrangements. In primary health centres community health workers conduct consultations and treatment, including deliveries. But unfortunately, these workers tend to shun home visits, preferring to practise like hospital based nurses and midwives. This lack of contact with the community leaves a vacuum that is filled by various groups, including traditional birth attendants, religious groups, herbalists, and native doctors.

Local value

Traditional birth attendants have no formal training and some are illiterate, but they are ubiquitous and accessible at all hours of the day and night. Every village has at least one, but most have several. Because traditional birth attendants are from the village, they understand the traditions, cultures, and languages of the women that they attend to, an obvious advantage during antenatal care and childbirth. They learn from their mothers or older women in the village, and therefore their practice is fraught with risks for the woman and newborn. However, in many places, they deliver more babies than the skilled midwives. And skilled midwives soon become deskilled because they

Kelsey A Harrison retired gynaecologist and obstetrician, Tuusula, Finland **kelseyharrison50@gmail.com**

NO

The concept of training traditional birth attendants to improve maternal and perinatal health in developing countries began over 100 years ago and was promoted by the World Health Organization, United Nations, and donor agencies during the 1970s-1990s as a strategy to reduce maternal and neonatal mortality. Since then, there have been repeated assessments to ascertain whether the strategy works. The latest Cochrane review based on four studies, including one from Malawi, concluded: "The potential of TBA [traditional birth attendant] training to decrease newborn death is promising, when combined with improved health services. The number of studies however, is insufficient to provide the necessary evidence for TBA training effectiveness."[1]

Closer examination of the review shows that this conclusion is not fully supported by the results of the studies, and that the reverse might indeed be the case. Small sample size and the impossibility of pooling together the results of all four studies due to various weaknesses were important problems. But particularly telling were statements by the reviewers and researchers in referring to individual or groups of studies: "The observed improvement in the ability to correctly identify and to refer with the selected complication in a timely manner could not be attributed to TBA training," "30% of TBA were untrainable," "the accuracy of blood loss measurements by TBAs who were mostly illiterate or innumerate may be doubted."

Fundamental change

The bedrock for achieving better maternal and perinatal health is a functioning healthcare service. But what constitutes a functioning health service? In the current sub-Saharan African context (high maternal and perinatal mortality and morbidity and high prevalences of obstetric fistula, and life threatening complications such as extreme anaemia, eclampsia, haemorrhage, puerperal infections and obstructed labour), and from my perspective as an obstetrician who worked in Nigeria for 38 years, a functional health service must be one that is able to reduce the maternal mortality rate to 40–200 per 100 000 total births and eliminate obstetric fistula. This figure for maternal mortality is what was achieved in a subgroup of Zaria women who received antenatal care and were healthy during pregnancy but not necessarily during labour[2] and would meet the millennium

Maternal mortality rose after Malawi banned traditional birth attendants, who went underground and were lost to regulatory authority

stop regular delivery and concentrate more on administrative nursing duties as their careers progress. The village pregnant women and their families tend to trust traditional birth attendants and rely on their opinion.[2]

Some argue that traditional birth attendants should be prohibited from conducting any form of delivery, even when there is no skilled midwife around. Although WHO recognises that it is not ideal to allow untrained villagers to conduct deliveries, it points out that prohibiting or banning them is unwise and potentially dangerous. Maternal mortality rose after Malawi banned traditional birth attendants, who went underground and were lost to regulatory authority. This year, the country has reversed the ban and started training traditional birth attendants,[3] and mortality seems to be falling again.

WHO suggests that until there are sufficient numbers of skilled midwives who are ready to live in the villages where their service is more in demand, the best policy is to identify traditional birth attendants, train them to recognise danger signs during pregnancy and labour, provide them with basic sterile delivery kits, and monitor and evaluate their practice.[4-6]

Benefits are proved

Such inclusive and pragmatic policy has reduced maternal mortality and perinatal and neonatal deaths and stillbirths.[4] Trained attendants feel appreciated and follow protocols. In 2005, in Cross River State of Nigeria, the State Ministry of Health in collaboration with the Dr Bassey Kubiangha Education Foundation helped the traditional birth attendants to form an association.[7] At the end of 2010 it had over 400 members. The association holds monthly meetings, at which skilled health practitioners are invited to lecture and train members. The association has also produced a training CD,[7] which members are required to own, watch, and follow. Trained traditional birth attendants acknowledge their shortcomings and embrace change and new learning (even the illiterate ones). They submit to audit of their activities and help to monitor their fellow members.[7]

In Sierra Leone, the World Bank is funding a scheme that pays traditional birth attendants about £1 for every woman they bring to hospital. In one area, they were taken into the hospital with the pregnant women and invited to attend the caesarean sections to prove that there are other ways to safely deliver women.[8]

Where traditional birth attendants have been trained and integrated into existing health systems, they have not posed any threat to skilled midwives; rather, they have been seen as stakeholders in the effort to improve maternal health. They are very helpful as "counsellors," comforting frightened rural women with complicated labour, often in the middle of night, in difficult to reach remote villages without electricity, water, or transport and no skilled health worker. In fact, it should be considered unethical to stop a lay person from assisting in such circumstances, especially one with many years' experience.

As Shima Gyoh, professor of surgery at Benue State University, Nigeria, recently said, "It's like forbidding a hospital attendant from applying first aid to victims of a road traffic accident, and insisting that they must wait for a doctor that might happen to come by."[9]

Competing interests: The author has completed the ICJME unified disclosure form at www.icmje.org/coi_disclosure.pdf (available on request from the corresponding author) and declares no support from any organisation for the submitted work; no financial relationships with any organisation that might have an interest in the submitted work in the previous three years; and no other relationships or activities that could appear to have influenced the submitted work. JA is editor of *BMJ West Africa*.

Cite this as: *BMJ* 2011;342:d3310

development goal of a 75% reduction in the estimated maternal mortality in Nigeria from that in 1990 (870/100 000 live births).[3]

To achieve this general living standards must be good—nutrition and protection against childhood infections are important. Furthermore, all pregnant women must receive basic but professional and appropriate antenatal care. Measures must be put in place to ensure that pregnant women who develop life threatening complications get effective treatment, including operative intervention if required, before it is too late. Finally, records must be kept and reliable and compulsory registration of all births and deaths must be instituted. Success depends on overcoming the all-pervading chaos in people's daily lives and inadequacies in the infrastructure.

What is the place of traditional birth attendants in this scheme of things? I believe they have little or no place. They are too old and therefore too set in their ways to adapt to modern healthcare methods. They are mainly responsible for the unbooked emergencies that have a high death rate, 2900 per 100 000 births in Zaria.[2] They cannot treat any of the principal causes of maternal death. As most are illiterate, they cannot keep reliable records of their activities, and without such records, audit becomes impossible. When literacy becomes widespread, traditional birth attendants disappear. It is therefore difficult to justify investing in both public education and traditional birth attendants.[4-6] Their use is a distraction in that it seeks to manage extreme poverty instead of working to eliminate it.

Most African countries are multiethnic—there are over 250 ethnic groups in Nigeria alone, each having its own language and culture. Implementation of a national policy requires that all those involved understand the national language—English in the case of Nigeria—which most traditional birth attendants cannot. From an equally practical standpoint, we should be worried by the fact that once something substandard gets entrenched it becomes difficult to replace it with something better in future.

I reiterate that in trying to reduce high maternal mortality, we need to treat the obstetric conditions and at the same time endeavour to remove the non-obstetric conditions especially mass illiteracy that create the unbooked emergencies.[2]

Initiatives that exclude traditional birth attendants have been shown to improve maternal health. The first was in the 1940s when maternal mortality in the Diocese of Niger in eastern Nigeria was reduced to less than 50 deaths per 100 000 live births.[7] The second

They have little or no place. They are too old and therefore too set in their ways to adapt to modern healthcare methods

was in the 1970s when obstetric fistula was eliminated in the Zaria area.[8]

Within sub-Saharan Africa, where the middle class is already reaching 30% of the population[9] there is growing realisation that things have got to change. In Nigeria, for example, people are seriously questioning why politicians send so called important people for treatment overseas instead of providing proper facilities locally for everybody.[10] In time, these aspirations will be difficult to ignore. It stands to reason that decisions must be made with an eye to the future and not just with a mind for the present. Traditional birth attendants have no place in this future. Better management of the region's abundant natural resources combined with a change in attitude towards the poor and women—helping rather than exploiting them—will surely work wonders.

Competing interests: None declared.

Provenance and peer review: Commissioned; not externally peer reviewed.

Cite this as: *BMJ* 2011;342:d3308