

Traditional Birth Attendant Training for Improving Health Behaviours and Pregnancy Outcomes

COCHRANE ABSTRACT

BACKGROUND: Between the 1970s and 1990s, the World Health Organization promoted traditional birth attendant (TBA) training as one strategy to reduce maternal and neonatal mortality. To date, evidence in support of TBA training remains limited and conflicting.

OBJECTIVES: To assess effects of TBA training on health behaviors and pregnancy outcomes.

SEARCH STRATEGY: We searched the Trials Registers of the Cochrane Pregnancy and Childbirth Group and Cochrane Effective Practice and Organisation of Care Group (EPOC) (June 2006); electronic databases representing fields of education, social, and health sciences (inception to June 2006); the internet; and contacted experts.

SELECTION CRITERIA: Published and unpublished randomized controlled trials (RCT), controlled before/after and interrupted time series studies comparing trained and untrained TBAs or women cared for/living in areas served by TBAs.

DATA COLLECTION AND ANALYSIS: Three authors independently assessed study quality and extracted data.

MAIN RESULTS: Four studies, involving over 2,000 TBAs and nearly 27,000 women, are included. One cluster-randomized trial found significantly lower rates in the intervention group regarding stillbirths (adjusted odds ratio [OR] 0.69, 95% confidence interval [CI] 0.57–0.83, $P < .001$), perinatal death rate (adjusted OR 0.70, 95% CI 0.59–0.83, $P < .001$) and neonatal death rate (adjusted OR 0.71, 95% CI

0.61–0.82, $P < .001$). Maternal death rate was lower but not significant (adjusted OR 0.74, 95% CI 0.45–1.22, $P = .24$) while referral rates were significantly higher (adjusted OR 1.50, 95% CI 1.18–1.90, $P < .001$). A controlled before/after study among women who were referred to a health service found perinatal deaths decreased in both intervention and control groups, with no significant difference between groups (OR 1.02, 95% CI 0.59–1.76, $P = .95$). Similarly, the mean number of monthly referrals did not differ between groups ($P = .321$). One RCT found a significant difference in advice about introduction of complementary foods (OR 2.07, 95% CI 1.10–3.90, $P = .02$) but no significant difference for immediate feeding of colostrum (OR 1.37, 95% CI 0.62–3.03, $P = .44$). Another RCT found no significant differences in frequency of postpartum hemorrhage (OR 0.94, 95% CI 0.76–1.17, $P = .60$) among women cared for by trained versus TBAs.

AUTHORS' CONCLUSIONS: The potential of TBA training to reduce peri-neonatal mortality is promising when combined with improved health services. However, the number of studies meeting the inclusion criteria is insufficient to provide the evidence base needed to establish training effectiveness.

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COMMENTARY

Of the eight United Nations Millennium Development Goals, three refer to health issues: child mortality, maternal mortality, and human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS) and malaria. Millennium Development Goal 5 aims to reduce the maternal mortality ratio by three quarters by the year 2015. Maternal mortality in low-income countries is a continuing scandal because of the high (sometimes very high)



incidence and because many of the deaths could be avoided given basic emergency obstetric facilities and access to them.

For many years, the World Health Organization (WHO) advocated training of traditional birth attendants and integrating them with the mainstream clinical services. The hope was that traditional birth attendants would recognize complications (eg, eclampsia,¹ postpartum hemorrhage) or obstructed labor and refer women in a timely way to hospitals or clinics with the expertise and facilities to deal with their problems.

Traditional birth attendants may be responsible for approximately a quarter of births in developing countries. They are frequently older women, often illiterate, who have learned their trade through apprenticeship or experience. Some assist with a small number of births per year; others do frequent deliveries. Although there was a major investment in training of traditional birth attendants between the 1970s and 1990s, there was little evidence that this was a good use of resource and little formal evaluation of the results of training programs.

During the 1990s, WHO and other international agencies decided that what was required was not the training of traditional birth attendants, but the presence of skilled attendants (doctors, nurses, midwives) at birth. The training and support of traditional birth attendants became unfashionable. This shift in policy to abandon traditional birth attendants, as such, lacked a firm evidence base, as had the earlier decision to invest in traditional birth attendant training.

Sibley and colleagues from Emory University, Atlanta, have made an important contribution by reviewing, systematically, the evidence for training traditional birth attendants. They included studies of differing types from Malawi, Bangladesh, Pakistan, and Guatemala. They have found some evidence of improved perinatal mortality and of more appropriate referrals as a consequence of training.

It will be a long time before there are sufficient skilled attendants in the poorest countries with highest maternal mortality rates. In any case, the hospitals and clinics may be difficult to reach, may be unattractive, and may incorporate cultures that are not respectful to pregnant women. It is likely that traditional birth attendants will continue to function in many parts of the world for some time, and consideration is still needed about what they can best and most safely contribute. They can adopt specific, novel techniques and roles,^{2,3} as well as provide broader care during pregnancy and childbirth.

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- Amorim AR, Linne YM, Lourenco PMC. Diet, or exercise, for weight reduction in women after child birth.
- Doyle LW, Crowther CA, Middleton P, Marret S. Magnesium sulfate for women at risk of preterm birth for neuroprotection of the fetus.
- Su LL, Chong YS, Samuel M. Oxytocin agonists for preventing post partum hemorrhage.
- Dennis C-L, Ross LE, Grigoriadis S. Psychosocial and psychological interventions for treating antenatal depression.

