

**A critical appraisal looking at traditional birth attendants: their potential impact on the health of mothers and newborns in developing countries and the policy on traditional birth attendants.**

Thesis to the Swiss Tropical Institute, University of Basel, in conformity of The Master's in International Health Program offered by TropEd



*Photo: Temple next to City Palace, Udaipur/India, 2007*

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## **ABSTRACT**

**Objective:** The thesis is going to evaluate the exclusion process of traditional birth attendants (TBAs) from international policies and the evidence of existing research on impact of training TBAs on maternal and newborn mortality and to identify potentials of TBAs in community-based reproductive health programmes.

**Background:** Maternal and newborn morbidity and mortality continues to be a problem with a huge disparity between developed and developing countries. Around 99% of maternal and newborn deaths occur in low and middle income countries, globally amounting to about 500 000 maternal deaths and 8 million peri-neonatal deaths per year. In this settings traditional birth attendants, which are mostly women embedded in the community and its socio-cultural frame with no formal medical training and no connection to the formal health system, play a major role around childbirth. TBAs exist since centuries and still continue to be the major providers of care for families, in poor and remote areas where they assist up to 50 – 80% of deliveries nowadays. TBA training has been part of ongoing interventions for decades to improve health on community level. At the end of the 1990s the Safe Motherhood Initiative made a shift in policy to address the persisting high numbers of maternal deaths by focusing on “skilled birth attendants”. TBAs were not regarded as skilled and therefore not included in this definition. As a consequence they dropped out of international SMH policies. Despite ongoing global efforts neither the intended coverage of 90% SBA for all child-bearing women nor a major achievement to lower maternal and newborn mortality in the countries with the highest burden can be reported.

**Research method:** A comprehensive literature research was conducted to collect knowledge about TBAs, to gain an overview about policies and program involvement of TBAs, the state of health of mothers and newborns in developing countries and evident health strategies on community-level to improve their health.

**Analysis:** Systematic reviews on the impact of training TBAs on maternal and newborn mortality were identified by literature research. Particular attention was paid to identify systematic reviews which justified the exclusion of TBAs from international policies. In a second step the systematic reviews were analysed by a critical appraisal regarding their evident impact on maternal and newborn mortality, need for further research and possible new potentials of TBAs.

**Results:** 14 reviews were identified, 2 studies met the criteria of systematic review on the impact of TBAs on maternal and newborn health. No systematic review regarding the impact of training TBA on maternal and newborn health could be linked to the SMH decision-making process to exclude TBAs from SBA policy.

The 2 eligible systematic reviews for analysis showed 8% respectively 30% decrease in peri-neonatal mortality and a decrease of 11% in birth asphyxia mortality. No causal association could be made between training of TBAs and their impact on maternal mortality due to gaps and weaknesses in studies' quality. A general neglect of reporting relevant background information, confounding factors and TBA-/community participation in program planning was identified.

**Discussion:** The logic of the decision-making process of exclusion of TBAs from international policies could not be reproduced by literature research and evident findings do not confirm the TBAs missing impact on maternal and newborn health. Regarding these results more research is needed to provide evidence for community-based approaches in resource poor settings to improve the health of mothers and newborns. Questions arise regarding a new approach of Safe Motherhood strategies, which may take into account multilevel approaches regarding the dyad of mother and child, different levels of care and health care providers, continuum of care during pregnancy, delivery and postpartum period, and packages of interventions to address the specific problems. The potential of TBAs has to be assessed for each specific context regarding their role and profile. Promising results in involving TBAs in new sectors like malaria or HIV/AIDS prevention and treatment, as well as MCH community-based interventions provide the basis for further research. The quality and adequacy of training to improve the quality of care provided by TBAs and give them skills to tackle the major health problems requires new attention and improvement. The revision of a single indicator like 'maternal mortality ratio', prone to bias to measure the outcome of TBA's performance, should be addressed and probably complemented by a range of process indicators.

**Conclusion:** The persisting high numbers of maternal and newborn deaths in developing countries, the gap in providing skilled birth attendants and quality services and the presence of TBAs as main providers of care for families in areas lacking crucial resources indicates a public health problem which should be addressed by global commitment and funds. Still findings about the impact of TBAs needs further

evaluation regarding maternal mortality decrease, but strong evidence on lowering peri-neonatal mortality could be associated. International agencies may take up the responsibility and guidance to further evaluate the effectiveness of TBA training and their potentials, initiate and synthesize research and surveys on TBAs to provide guidance to program development and implementation. A core set of recommendations to address the health of the most vulnerable and neglected population should be designed and research on implementation initiated. A key to successful interventions will be the integration of TBAs in the public-health system, resulting in a team of providers addressing all levels of care, including the participation of the community to insure acceptance, commitment and empowerment. Substantial to make progress is a wide approach to address the underlying determinants of maternal and newborn health like poverty, gender discrimination, education, weak infrastructure and security.