Cochrane
Effective Practice and Organisation of Care

Summary of a **Cochrane Review**

Reviewing deaths to prevent mothers and children from dying in the future

What was the aim of this review?

This Cochrane Review aimed to assess if 'death audits and reviews' (exploring why people have died and what could have been done to prevent these deaths) can prevent mothers and children from dying. The review authors collected and analysed all relevant studies to answer this question and found two studies.

What did the review study?

Every year, millions of newborn babies and young children die. Many women also die while they are pregnant or giving birth, or shortly afterwards. More than half of these deaths happen in sub-Saharan Africa.

In many settings, health facilities or communities carry out 'death audits and reviews'. Here, people explore why a person died, what could have been done to avoid this death and what could be done better in the future.

At best, death audits and reviews could help improve the quality of care and prevent new deaths among mothers and children. But they could also cost money, be based on wrong information and take health workers away from other important tasks. If they are done badly, they could also make health workers feel blamed and humiliated, which could lead to poorer care. We need to find out if audits and reviews work and which approach is best.

The review authors searched for studies where people from health facilities or the community carried out audits or reviews of deaths of pregnant women, women who had recently given birth, newborn babies or children under five years of age. The studies had to compare places or times where death audits and reviews were used to places or times where they were not.

Key messages

In a study from West African hospitals, where death rates among women and babies were high, reviewing deaths probably led to fewer deaths among pregnant women, new mothers and newborn babies.

In French hospitals, where death rates among babies were low, it may have made little or no difference to death rates among newborn babies.

(Main results on next page.)

How up-to-date was this review?

The review authors searched for studies that had been published up to 16 January 2019.

What were the main results of the review?

The review authors found two relevant studies. Both studies assessed death audits at health facilities.

The first study took place in West African hospitals that had high death rates among women and babies. In this study, doctors and midwives were given extra training in pregnancy and childbirth care. This included one day of training in how to carry out death audits of women who had died during pregnancy or childbirth. They then returned to their hospitals and held audits at monthly meetings, with regular support from an expert from a different hospital. These hospitals were compared to hospitals without the training and audit meetings.

For mothers and babies who were in hospital, this approach:

- probably led to fewer pregnant women and new mothers dying, and probably led to slightly better care for mothers;
- probably led to fewer babies dying during the first 24 hours. However, it may have made no difference to the number of babies who died after their first 24 hours, although the range where the actual effect may be (the "margin of error") includes both an increase and a decrease in the number of babies who died.,
- probably made no difference to the number of stillbirths.

The second study took place in hospitals in France that already had very few deaths among newborns. In this study, doctors and midwives were given information about pregnancy and childbirth guidelines. They then held audit meetings in their hospitals where they discussed stillbirths and newborn babies who had become sick or died. These hospitals were compared to hospitals without the information and the audit meetings.

This approach:

- may have made little or no difference to the number of babies who died during their first week
- probably reduced the number of babies who were sick because they received poor quality care.
- We don't know what the effect was on stillbirths or on the number of mothers or older babies and children who died because the study did not measure this.

This summary includes key findings from research based on a Cochrane systematic review. **This summary does NOT include recommendations.** In systematic reviews you search for and summarise studies that answer a specific research question. The studies are identified, assessed and summarised by using a systematic and predefined approach.

Reference

Willcox ML, Price J, Scott S, Nicholson BD, Stuart B, Roberts NW, Allott H, Mubangizi V, Dumont A, Harnden A. Death audits and reviews for reducing maternal, perinatal and child mortality. Cochrane Database of Systematic Reviews 2020, Issue 3. Art. No.: CD012982. DOI: 10.1002/14651858.CD012982.pub2.

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NIPH Norwegian Institute of Public Health