

MISCELLANEOUS

Can traditional birth attendants be trained to accurately identify septic infants, initiate antibiotics, and refer in a rural African setting?

Background

Mortality rates during labor or in the neonatal period, still represent a common issue in low income countries. Due to the lack of resources and trained medical personnel, the majority of deliveries are attended by traditional birth attendants (TBAs). In the present study, Gill et al. focused on reducing these high mortality rates in Zambia through a neonatal survival project, by educating TBAs in order to recognize signs of neonatal sepsis and eventually administer a single Amoxicillin dose before they refer them to the nearest rural health center.

Signs of neonatal sepsis included: generalized/behavioral changes, temperature instability, respiratory distress, central nervous system-specific, gastrointestinal-related, focal infection plus the unspecific criteria: "ill appearance".

Summary of results

1,889 neonates were included. Mortality among neonates cared for by intervention TBAs was reduced by about 50% (not statistically significant). TBAs conducted a median of 2 home visits (52% in week 1 and 48% in weeks 2–4). 11% of the neonates were referred for suspected sepsis. 52% of referrals occurred during week 1 and 48% during weeks 2–4. 85% of referred neonates completed their referral. Referred neonates had been ill for a median of 2 days prior to the TBAs' evaluation. Neonates clinically judged to be "extremely sick" by the referring TBA were at greatest risk of death (RR 58.61, 95% CI 54.0–18.5). Among sepsis signs, a single reason for referral was cited 19 times; 2 reasons, 23 times; 3 reasons, 52 times; 4 reasons, 73 times; and 5 or more reasons, 41 times.

Strength

Simple and very clever project to improve neonatal survival.

Limitations

There is no information regarding the age of newborns that died. A more strict visit schedule during the period that the most deaths occur, could raise the newborn survival rate. The referred neonates had been ill for a median of 2 days prior to the TBAs' evaluation, time that is rather long for not treating a sick newborn.

Practical conclusion

Gill et al. manage to reduce neonatal mortality rates among neonates cared by TBAs by about 50% using a simple and low cost program. Despite the fact that this percentage was not statistically significant, even the rescue of a single newborn can only be considered as an achievement. Even though the majority of TBAs had a limited educational background -with most of them not being able to read or write- they manage to identify in most of the cases 4 or more sepsis signs in order to refer a newborn, making this project an example that could be followed in similar areas.

Gill CJ, et al. Can traditional birth attendants be trained to accurately identify septic infants, initiate antibiotics, and refer in a rural African setting? *Glob Health Sci Pract.* 2014 Aug 31;2(3):318-27. doi: 10.9745/GHSP-D-14-00045. eCollection 2014

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