

The role of food safety in child survival programmes

Editor – the article by F.F. Fikree et al. (1) reports that diseases of infectious etiology (diarrhoea and ARI) were the leading clinical causes of death in the post neonatal period with diarrhoea being responsible for 43.3% of all deaths. The authors conclude that child survival programmes must therefore maintain and strengthen their strategies for prevention and control of these infections. As far as diarrhoea is concerned, the wide use of oral rehydration salts will certainly be successful in helping to reduce mortality. However, in order to reduce morbidity, the causes of infant diarrhoea need to be elucidated.

Despite the fact that three successful prevention strategies (i.e. breastfeeding, immunization, drinking-water and sanitation) have been strongly promoted in the past, surveys of diarrhoeal diseases indicate that these interventions have not been fully effective in preventing diarrhoeal diseases in infants and young children (2, 3). On the other hand, there is strong evidence that food and poor food handling practices play a major role in the transmission of diarrhoea. Is it perhaps possible that the child survival programmes are incomplete, and need to be complemented by measures to assure the safety of the complementary food (weaning food) given to the infants? After all, diarrhoea is caused by pathogens that need to enter the child's body through the mouth. Since complementary food contains substances that are not only nutritious for the child but support the growth of bacterial pathogens, regarding food as vehicle of transmission of pathogens appears to be logical. In 1993, the *Bulletin* published an article that suggested contaminated food was a major cause of diarrhoea and associated malnutrition among infants and children (4). The role of food in the epidemiology of diarrhoea had also been recognized by the 1992 Joint FAO/WHO International Conference on Nutrition (5).

The results published by Fikree suggest that this link ought to be considered and the prevention strategies appropriately amended to include food safety. In 1996 WHO issued Basic Principles (6) for the safety of complementary food. What is needed is their vigorous implementation. ■

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The missing link: neonatal care in rural communities

Editor – Over the past decade, neonatal mortality rates (NMR) and perinatal mortality rates (PMR) in developing countries, especially in sub-Saharan Africa, have failed to decline substantially, unlike infant and under-five mortality rates. There is a serious gap in the care of the newborn infant during and after birth as shown by Fikree et al. from Pakistan (1) who reported a NMR of 47.1–65.5/1000 live births. In the rural areas of these countries, more than half

of the deliveries take place at home without skilled attendants and even when problems arise, professional medical care is rarely sought (1–3). In these countries, NMR and PMR are about 40–60, and 60–80/1000 live births, respectively, thus remaining unacceptably high (2, 3).

The programmes introduced by WHO, UNICEF and USAID through Integrated Management of Childhood Illness (IMCI), Integrated Management of Pregnancy and Childbirth (IMPAC), and Maternal and Neonatal Health (MNH), are aimed at solving these problems. But still, they require active contact between the mothers or carers of the newborn infant and the health services. Qualified obstetric and neonatal care is still institution-centred. Good antenatal care (including tetanus immunization) and obstetric services (including referral and Caesarean section facilities) do reduce maternal and perinatal mortality, as good neonatal treatment units reduce PMR and NMR. But worldwide each year over 50 million mothers deliver, mostly at home, without skilled attendance (3). In our area (the Mbulu District of the United Republic of Tanzania), more than 70% of all deliveries take place under these circumstances (unpublished data). Of the living newborn infants born at home, at least 40–50% of those who require medical attention do not receive it, and die (1, 3–4). In our area, 40% of all neonatal deaths never reached a health facility (Hinderaker SG, personal communication). The reasons for this include, among other factors, traditional beliefs, cultural habits, poor education, and poverty.

New approaches should be explored if the international community is willing to reduce one of the tragedies in international child health. As outlined in the report "Saving newborn lives" (3), a partial solution could be to teach locals to diagnose and possibly treat sick newborns using a community-based approach with regular village visits (3). As studies from rural communities in developing countries have shown, the

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basics of neonatal care and treatment could be carried out at home; thus substantially reducing NMR and PMR (3–5). These services could be provided through professional midwives, as used in nineteenth-century Sweden (6), community members, as used in Bolivia (3), or village health workers, as used in India (4). A functioning referral system should also be available with good curative support services, but referrals should not delay the treatment of sick newborns.

Nevertheless, questions remain and this approach may not be suitable everywhere. In nineteenth-century Sweden, community midwives had an impact on both maternal deaths and perinatal deaths. During this time, people had confidence in health personnel. In developing countries, people may not have the same confidence in western medicine and health systems. If that is the case, will professionally trained health personnel be willing to become “community-based”? Will there be enough support from formal health institutions? We cannot be sure whether a community approach will have the impact we hope for. But can the international community afford not to try? ■

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