

Epidemiological transitions in maternal and child health in Peru: 1990–2013



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Abstract

Background Millennium Development Goal (MDG) 4 set the target of reducing the under-5 mortality rate by two-thirds between 1990 and 2015. MDG 5 set the target of reducing the maternal mortality ratio (MMR) by three-quarters over the same time period, and also achieve universal access to reproductive health. The objective of this study is to analyse the epidemiological transitions in maternal and child health in Peru from 1990 to 2013.

Methods We analysed the risk of child mortality by age, and MMR by cause, stage of pregnancy, and age from 1990–2013 in Peru using data from the Global Burden of Disease Study, 2013.

Findings From 1990 to 2013, child deaths per 1000 livebirths in Peru dropped from 16 to 8·0 during the early neonatal period, 8·3 to 2·7 in the late neonatal period, 29 to 6·5 in the post-neonatal period, and 21 to 4·9 in those aged 1–4 years. MMR for Peru was 130 per 100 000 livebirths in 1990, 76 per 100 000 in 2003, and 64 per 100 000 in 2013. MMR, by cause, from 1990 to 2013 fell from 20 to 9·7 for sepsis, 7·3 to 2·9 for obstructed labour, 20 to 15 for late maternal deaths (up to a year after delivery), 12 to 8·5 for hypertension, 33·2 to 9·4 for haemorrhage, 13 to 6·9 for abortive outcomes, 15 to 7·3 for direct deaths, and 9·5 to 4·3 for indirect deaths (during pregnancy and within 6 weeks of delivery). MMR, by time period of pregnancy, from 1990 to 2013 fell from 17 to 8·5 during the antepartum period, 32 to 16 during the intrapartum period, 62 to 24 during the postpartum period, and 20 to 15 during the late period. MMR, by age, in Peru from 1990 to 2013 changed from 0·8 to 0·2 for ages 10–14 years, 12·0 to 5·7 for ages 15–19 years, 25·0 to 11·0 for ages 20–24 years, 25·0 to 8·0 for ages 25–29 years, 26·0 to 12·0 for ages 30–34 years, 24·0 to 13·0 for ages 35–39 years, 14·0 to 8·6 for ages 40–44 years, and 4·7 to 6·1 for age ≥ 45 years.

Interpretation Peru has significantly improved child health, with a 70% decline in child mortality with an annualised rate of decline of 5.3% from 1990 to 2013. The ratios of maternal deaths due to haemorrhage and obstructed labour were reduced significantly by 72% and 60%, respectively, from 1990 to 2013. Deaths in pregnant women younger than 35 years dropped by more than 50%, but increased by 30% for women 45 years and older from 1990 to 2013. Postpartum deaths fell by 61% in the study period. The Peruvian government has prioritised access for pregnant women to health facilities and prenatal and postnatal care, including culturally adapted health services. UNICEF and the Ministry of Health in Peru partnered to establish the *Mamawasi* (mother's home in Quechua local language) project, to encourage women in rural areas who lack transportation to give birth in health centres. Furthermore, economic growth, diminishment of extreme poverty, focus on health initiatives, and political and social support have contributed to improvement of child health and achievement of the MDG 4 target. Although improvements in maternal health have been made, the MDG 5 target is unlikely to be met.

Funding None.

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Declaration of interests

We declare no competing interests.

Published Online
March 26, 2015

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