

Efficacy of an intervention for improving the reproductive and sexual health of married adolescent girls and addressing the adverse consequences of early motherhood



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Abstract

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Background In India, 45% of women were married before 18 years of age, of which 49.0% lived in rural Maharashtra (NFHS III, 2006, India). The median age at marriage was 15 years, and the median age of first birth was 17 years. Only 4.6% of married adolescent girls (MAGs) received minimum antenatal care, 9.8% were using contraception, and 1.3% had ever been tested for HIV. I aimed to evaluate the efficacy of focused interventions for averting the adverse consequences of early motherhood by monthly assessment of health needs, morbidity surveillance, and microplanning; need-specific interpersonal communication and counselling, active linkage with health providers; and community-based monitoring by village health committees.

Methods The intervention was implemented by five non-governmental organisations in five districts of Maharashtra, India, and was assessed by external evaluators in April, 2010, 18 months after the start of the project, using a quasiexperimental study design. After a census and listing of married adolescent girls, a cross-sectional, systematic random sample of 759 married adolescent girls was selected from a purposive sample of five intervention sites and 516 married adolescent girls from five randomly selected control sites for preintervention and postintervention surveys. Continuous t test and Chi square test were used to analyse the data. Odds ratios (OR) were calculated at 95% CI.

Findings Respondents from the intervention and control sites were similar for most key indicators. Median age at first birth increased at intervention sites from 16.9 years in 2008 (n=111, IQR 16.4–17.4) to 18.1 years in 2010 (n=61, IQR 17.8–18.8). In 2010, use of contraceptives was significantly higher at intervention sites (256 [33.7%] of 759 girls) than at control sites (33 [6.4%] of 516 girls; OR 7.45, 95% CI 5–11. Early antenatal registration was 78.7% (414 of 526 girls) versus 54.7%, (151 of 276 girls; OR 2.93, 95% CI 2.11–4.06); minimum standard antenatal care was 56.1%, (295 of 526 girls) versus 24.3% (67 of 276 girls; OR 3.89, 95% CI 2.78–5.48); treatment for antenatal complications was 87.6% (205 of 234 girls) versus 77.1% (108 of 140 girls; OR 2.18, 95% CI 1.21–3.12); treatment for postnatal and neonatal complications was 78.8% (123 of 156 girls) versus 62.0% (49 of 79 girls; p=0.07); treatment use for reproductive tract infection or sexually transmitted infection was 60.4% (125 of 207) versus 28.9% (43 of 149; OR 3.76, 95% CI 2.34–6.05). Testing for HIV increased from 96 (11.7%) of 818 girls in 2008 to 446 (58.7%) of 759 girls in 2010 at the intervention sites compared with nine (1.8%) of 493 girls in 2008 to 82 (15.89%) of 516 girls in 2010 at control sites.

Interpretation Focused, community based interventions, implemented by frontline health workers result in a rapid and significant improvement in utilization and coverage with reproductive health services among married adolescent girls. The interventions were implemented primarily through community health workers and auxiliary nurse midwives. With more than 900 000 community health workers and 140 000 auxiliary nurse midwives providing primary level care in India, replication of this strategy seems imminently feasible.

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Declaration of interests

I declare that I have no competing interests.

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