

Home Visits for Pregnant Adolescents

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Help Desk Answers provides answers to questions submitted by practicing family physicians to the Family Physicians Inquiries Network (FPIN). Members of the network select questions based on their relevance to family medicine. Answers are drawn from an approved set of evidence-based resources and undergo peer review.

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This series is coordinated by John E. Delzell, Jr., MD, MSPH, Assistant Medical Editor.

Clinical Question

Do home visits for pregnant adolescents improve health outcomes?

Evidence-Based Answer

Nurse home visits for pregnant adolescents seem to improve resource utilization and prenatal clinic visit show rates. (Strength of Recommendation [SOR]: B, based on a randomized controlled trial [RCT] and cohort trial.) When nurse visits are continued for up to two years after delivery, there is a decrease in the likelihood of arrest or conviction among the children of these mothers. (SOR: B, based on a cohort trial.) There is conflicting evidence on the effect of prenatal home visits on gestational age and weight at birth.

An RCT of 400 predominantly white, unmarried, low-income adolescent mothers in the Elmira Nurse-Family Partnership assessed the effectiveness of nurse home visits on several outcomes of teen pregnancy.¹ Those who received home visits had an average of nine (range = 0 to 16) visits during pregnancy. Those who received home visits had fewer preterm deliveries compared with the control group, which did not receive home visits (0% vs. 11%; $P < .05$) and had higher infant birth weights (mean = 3,423 g [7 lb, 9 oz] vs. 3,028 g [6 lb, 11 oz]; $P = .02$). A follow-up study of this same group of adolescent mothers was published after 19 years of follow-up.² A subset of the original cohort who received home visits during pregnancy continued to have visits for the first two years of their infant's life. Compared with those in the control group, female children of the mothers who received nurse home visits were less likely to have been arrested (21% vs. 37%; risk ratio [RR] = 0.57; 95% confidence interval [CI], 0.35 to 0.93) or

convicted (12% vs. 28%; RR = 0.42; 95% CI, 0.20 to 0.90). There were no differences in arrest and conviction rates among male children. There was no reduction in pregnancy rates among those whose mothers received home visits (32% vs. 31%; RR = 1.0; 95% CI, 0.70 to 1.5). Among male offspring, there was no difference in rates of alcohol or drug use, high school graduation, fathering a child, or contraception use.

In a prospective cohort trial, 83 primiparous low- to middle-income teenagers received nurse home visits and separate social work visits, and were matched to 216 randomly selected adolescents receiving traditional services to assess the effect of home visits on prenatal resource utilization, and gestational age and weight at birth.³ After three months of participation in the program, there was a significant increase in the number of prenatal visits (12 vs. eight; $P < .01$) and attendance at prenatal clinic appointments (99% vs. 89%; $P = .02$). There was increased enrollment in Medicaid (65% vs. 43%; $P < .01$) and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC; 76% vs. 34%; $P < .01$). There was no difference in birth weight or gestational age at birth.

In an RCT of primiparous Hispanic adolescents, 104 women who received regular home visits (weekly to every six weeks) during pregnancy through 24 months postpartum were compared with 121 controls who received public health nursing with at least three home visits to assess maternal weight gain, gestational age at delivery, and birth weight.⁴ There was no significant difference in maternal weight gain or gestational age at delivery. Infants in the intervention group had a greater average birth weight (3,294 g ►

[7 lb, 4 oz] vs. 3,130 g [6 lb, 14 oz]). A greater percentage of infants in the control group had low birth weight (11% vs. 5.6%) and were delivered before 37 weeks' gestation (8.2% vs. 4.3%).

In a policy statement, the American Academy of Pediatrics recommends a multidisciplinary approach to the care of pregnant adolescents, including a medical home and utilization of community resources such as social services, nurse visitation programs, and WIC to improve outcomes for pregnant adolescents and their children.⁵

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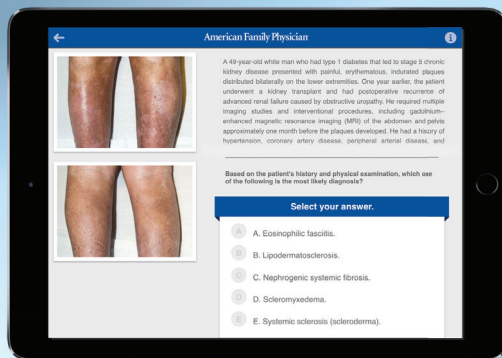
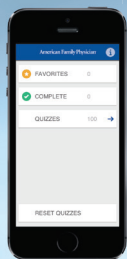
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