Review: home visitation by nurses beginning prenatally and extending through infancy prevents child abuse and neglect


QUESTION: Are interventions aimed at preventing child maltreatment effective?

Data sources
Studies were identified by searching Medline, HealthSTAR, PsycINFO, ERIC, and Current Contents for the years 1993–9 using the content terms child abuse, child neglect, battered children syndrome, incest, prevention and control, and screening combined with the methodological terms statistics and numerical data, aetiology, epidemiology, experimental design, meta-analysis, and literature review. Experts in the field were also consulted.

Study selection
Studies were selected if they were original research articles, reviews, meta-analyses, or practice guidelines that described interventions to prevent child maltreatment.

Data extraction
The lead author critically appraised the key articles and extracted data on preventive strategies and outcomes. A panel of experts used a consensus process to analyse and discuss the data, and to grade the level of evidence and strength of recommendations according to the established methods of the Canadian Task Force on Preventive Health Care.

Main results
3 studies that assessed screening showed limited ability to predict future maltreatment because of high false positive results. All 4 reviews that examined the effectiveness of perinatal and early childhood programmes in preventing child physical abuse and neglect showed some positive outcomes. 2 randomised controlled trials evaluated home visitation by nurses for first time mothers of low socioeconomic status, single parents, or teenage parents. 15 years follow up in 1 trial showed reduced child abuse and neglect in the group receiving visits prenatally and throughout infancy. Another trial showed reduced injuries and ingestions at 4 years follow up in the group receiving home visits. 3 trials evaluating the effectiveness of paraprofessional home visitors showed no difference between groups. 1 study evaluated the effectiveness of a comprehensive healthcare programme involving prenatal, postnatal, and paediatric care. No difference was seen between groups for physical abuse or neglect. Because of methodological weaknesses, no conclusions could be drawn from 2 studies, 1 evaluating a parent education and support programme and another evaluating a combined services programme. 2 systematic reviews of educational programmes designed to teach children strategies to avoid sexual abuse showed improved knowledge and prevention skills, but did not show a reduction in actual abuse.

Conclusions
The strongest evidence for prevention of child abuse and neglect supports a programme of frequent home visits by nurses for first time disadvantaged families beginning prenatally and extending through infancy. Screening to identify individuals at risk is not recommended.

COMMENTARY
In this updated review, MacMillan reaches largely the same conclusions as the previous guidelines published in 1993.1 Although the Canadian Task Force on Preventive Health Care does not require 2 or more independent ratings of studies, its process of critical appraisal and expert panel review is thorough and well established, and its conclusions influential. In this case, the recommendations are very important to community, clinic, and hospital based nurses, who identify parents in need or who provide the preventive interventions reviewed here.

With a synthesis of this breadth (including other reviews as well as primary studies, and without restriction by type of intervention, provider, population, or setting), the conclusions can only be drawn at a broad level. It is therefore important to pay attention to the details of the studies and interventions when applying this evidence to practice. Home visits, for example, are good, but the strong evidence is only for programmes of high intensity and duration, with specific content and implementation by nurses. Some programmes reduce injuries and ingestions, but this may not be a complete proxy for child maltreatment.2

The recommendations highlight a critical distinction between screening individuals and identifying at risk populations. Screening can cause harm by inaccurately labelling certain individuals as likely perpetrators of abuse. However, identifying higher risk communities or populations that will benefit most from services is an essential part of effective programming.

Evidence remains inconclusive on the effectiveness of comprehensive health care programmes, parent education and support programmes, or combinations of services in preventing child maltreatment. “No evidence of effect,” however, is different from “evidence of no effect.” For these programmes, we need better research before we know whether they are effective in reducing the incidence of child maltreatment. Until that research is available, such programmes should only be implemented under careful examination.

Sarah Hayward, RN, MPH
Manager, SEARCH Program
Alberta Heritage Foundation for Medical Research
Edmonton, Alberta, Canada
