



Effective Public Health Practice Project Summary Statement

October 2006

This is a summary statement written to condense the work of the authors of a systematic review. The reference for the full review is below. The intent of this summary is to provide an overview of the findings and implications of the full review. For more information on individual studies included in the review, please see the review itself.

Reference for Review: Bilukha, O., Hahn, R.A., Crosby, A., Fullilove, M.T., Liberman, A., Moscicki, E., et al. (2005). **The effectiveness of early childhood home visitation in preventing violence: a systematic review.** *American Journal of Preventive Medicine*, 28, 11-39.

Issue

In Ontario and many other parts of Canada, Public Health departments are responsible for delivering a home visitation program to families of infants and young children. According to the Mandatory Health Programs and Services Guidelines for Ontario, the Healthy Babies, Healthy Children program is responsible for visiting the homes of high-risk families (Ontario Ministry of Health and Long-Term Care, 1997).

Statistics Canada reported that, in 2003, the rate of police-reported assaults against children under 18 years of age was 1,099 per 100,000 members of the population in that age group. Nearly one-third of sexual assaults and one-fifth of physical assaults against children and youth were perpetrated by family members. Parents were the most common perpetrators of violence against children and youth – 70% of physical violence between family members was perpetrated by parents (Statistics Canada, 2005).

Research findings related to the effectiveness of home visitation could be useful for understanding interventions that have been demonstrated to prevent violence. Findings could also be used to modify or reinforce approaches to home visitation and decisions about what kind of personnel should conduct those visits.

Review Content Summary

The Task Force on Community Preventive Services conducted this systematic review to inform recommendations on early childhood home visitation to prevent violence. They used an analytic framework that considered the relationship between intermediate outcomes for children and parents (e.g., knowledge, skills) and violence directed at the child, parent or others. A total of 23 comparative studies (22 American and one Canadian) were reviewed. There was inconsistent evidence on the effect of home visits on violence by children, and very limited evidence of their effect on violence by parents toward partners and individuals outside the home. Most of the evidence came from 21 studies that reported on child maltreatment by measuring levels of abuse, neglect, injury, trauma, ingestion of poison or out-of-home placement. Across the

studies, child maltreatment was reduced by 39% with home visits compared to control. The Task Force that authored the review considered this result strong evidence of the effectiveness of home visitation.

Comments on this Review's Methodology

Some of the methods used were described in the review itself, while others were reported on in a separate publication (Briss et al, 2001). The reviewers searched health, social science, education and criminal-justice databases to find comparative studies. Only studies conducted in "an established market economy" that reported on at least one of the primary outcomes (violence by the child, violence by the parent, intimate partner violence, or child abuse and neglect) were eligible. Two raters independently assessed studies based on nine threats to validity and excluded studies that had a limited quality of execution. Thirteen studies were randomized, nine used a non-randomized control group (composed of program drop-outs or those who refused to participate), and one compared the post-intervention measure with the national rate. Five studies were rated as "good" and 18 as "fair" by the reviewers. Data were pooled across studies but measures of heterogeneity were not reported. The timing, number and frequency of visits varied among studies and the length of the follow-up period ranged from 10 months to three years after the intervention.

Evidence and Implications for Practice & Policy

Evidence points ARE NOT weighted or ranked according to strength.

What's the evidence?	Implications for practice and policy:
<ul style="list-style-type: none"> > There is evidence that home visitation can reduce child maltreatment. > Pooled data from 21 studies found an overall 39% reduction in the rate of child maltreatment as an outcome of home visitation compared to control. It should be noted, however, that there was a large interquartile range (-74% to +24) that included 0. > Nineteen of the 26 comparisons from these studies favoured treatment over control, but it is not clear how many of the differences were statistically significant. 	<ul style="list-style-type: none"> > Home visitation can be an effective intervention to reduce child maltreatment. > This finding provides support for the home visitation practices associated with the Healthy Babies, Healthy Children program in Ontario.
<ul style="list-style-type: none"> > The evidence suggests that home visitation by paraprofessionals is less effective in reducing child maltreatment than visitation by professionals. > Reduced levels of violence were observed in 8 studies that examined visits by professionals (overall median reduction was 49% with nurses and 45% with mental health workers), whereas home visitation by paraprofessionals (examined in 18 studies) did not produce the same effect size 	<ul style="list-style-type: none"> > Home visitation by professionals is more effective in reducing child maltreatment than visitation by paraprofessionals. > In Ontario, both nurses and paraprofessionals currently provide home visitation through the Healthy Babies, Healthy Children program. The ratio of nurses' visits to paraprofessionals' visits is specified.

What's the evidence?	Implications for practice and policy:
(median reduction 18%). > Possible effects of home visitation by paraprofessionals other than violence reduction were not examined in this review.	
> Only one Canadian study was included in the review. The remainder of the studies were from the US.	> The validity of the findings for a Canadian context is not known. There is reason to believe that juvenile violence is different in Canada than in the US. For example, rates of juvenile homicide are noted by the authors to be five times higher in the US than in other industrialized nations, including Canada. The suicide rate among children <15 years is twice as high in the US than in other industrialized nations.
> The review found insufficient evidence to determine the effectiveness of home visitation on other types of violence (violence by children, or violence other than child maltreatment perpetrated by parents).	> Further research is needed to explore the effects of home visitation on forms of violence other than child maltreatment.
> The review found no studies that examined the relative effect of universal visitation versus targeted visitation.	> Further research on the effects of universal visitation is needed.
General Implications: Home visitation appears to have some positive effect on child maltreatment. Visitation by professionals (nurses, mental health workers) appears to be more effective than visits by paraprofessionals at reducing child maltreatment. Based on this evidence, and notwithstanding the limitation that most of the research was done in the US, home visitation programs delivered by Public Health are likely to be an effective method of reducing child maltreatment. Public Health should continue to employ professionals for home visitation programs.	

Cost Benefit or Cost-Effectiveness Information: Economic evaluations were reported for two of the randomized trials included in the review. Both of these studies were conducted in the United States. The majority of participants were single mothers with low socio-economic status. The first study calculated a cost of US\$6286 per family for home visits by a nurse before and after birth, beginning at a rate of one per week and tapering to one visit every six weeks up to the child's second birthday. The program was cost effective for the low-income subsample but not overall. In the other study, nurses visited very low birth-weight infants five times over the course of 18 months, at a total cost of US\$958 per family; cost-benefit analysis was not reported. Costs for both studies are expressed in 1997 dollars.

References Used to Outline Issue

Ontario Ministry of Health and Long-Term Care. (1997). Mandatory Health Programs and Services Guidelines.. Retrieved October 30, 2006 from:
<http://www.health.gov.on.ca/english/providers/pub/pubhealth/manprog/mhp.pdf>.

Statistics Canada. (2005). Family violence in Canada: A statistical profile. Retrieved October 30, 2006 from: <http://www.statcan.ca/english/freepub/85-224-XIE/85-224-XIE2005000.pdf>.

Other References

Briss, P.A., Zaza, S., Pappaioanou, M., Fielding, J., Wright-De Aguerro, L., Truman, B.I., et al. (2000). Developing an evidence-based *guide to community preventive services*—methods. *American Journal of Preventive Medicine*, 18 (Supplement 1), 35-43.

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