

Executive summary

The effectiveness of domiciliary health visiting: a systematic review of international studies and a selective review of the British literature

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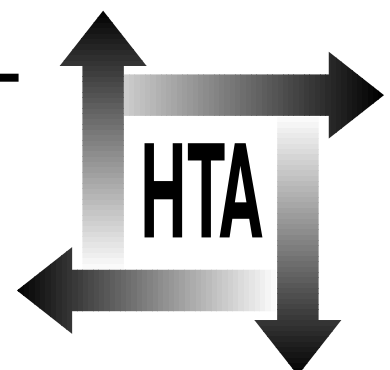
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**Health Technology Assessment
NHS R&D HTA Programme**





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Objectives

The objectives were to:

- conduct a systematic review of the effectiveness and cost-effectiveness of domiciliary health visiting (Part I)
- conduct a selective review of the British health visiting literature (Part II)
- provide recommendations for future research.

Methods

Data sources

An extensive search of electronic databases, relevant journals and reference lists was undertaken. Key individuals and organisations were also contacted.

Study selection

Studies assessing the outcomes of home visiting by British health visitors were included. In addition, non-British studies in which home visiting was undertaken by personnel with responsibilities within the remit of British health visitors were also included.

Other relevant studies, which did not meet the inclusion criteria, were also retrieved and are discussed separately in Part II.

Studies that assessed the process of home visiting by British health visitors and those that analysed policy issues are also discussed in Part II.

Data extraction (Part I)

Data were extracted from each study according to an agreed procedure. The quality of studies was assessed using a standardised quality checklist.

Data analysis and synthesis (Part I)

Where appropriate, quantitative data were entered into a meta-analysis. Data were also discussed in a narrative manner.

Results (Part I)

Parents and children

There was evidence to suggest that home visiting was associated with:

- improvements in parenting skills and in the quality of the home environment
- amelioration of several child behavioural problems, including sleeping behaviour
- improved intellectual development among children, especially among children with a low birth weight or failure to thrive
- a reduction in the frequency of unintentional injury, as well as a reduction in the prevalence of home hazards
- improvements in the detection and management of postnatal depression
- enhancement of the quality of social support to mothers
- improved rates of breastfeeding.

There was insufficient evidence to show an effect of home visiting on the following outcomes because of the small number of studies available (four studies or fewer): physical development (weight and height); the incidence of child illness; mothers' use of informal community resources, or the size of their informal support network; children's diet; mothers' return to education, participation in the workforce, or use of public assistance; family size or number of subsequent pregnancies.

There was no evidence that home-visiting was effective in: improving children's motor development; increasing the uptake of immunisation; increasing the uptake of other preventive child health services; reducing the use of emergency medical services; reducing hospital admission rates.

In view of the problem of surveillance bias, no conclusions could be drawn concerning the effectiveness of home visiting in reducing the incidence of child abuse and neglect.

Elderly people

There was evidence to suggest that home visiting to elderly people was associated with:

- reduced mortality among the general elderly population and frail 'at-risk' elderly people
- reduced admission to long-term institutional care among the frail 'at-risk' elderly population.

There was insufficient evidence to show an effect of home visiting on the following outcomes because of the small number of studies available (four studies or fewer): the duration of elderly people's stay in hospital; the physical health of elderly people.

There was no evidence that home visiting was effective in: reducing admission to hospital; reducing admission to long-term institutional care among the general elderly population; improving functional status; improving psychological symptoms; enhancing elderly people's well-being or their quality of life.

Cost-effectiveness

Findings from the limited number of studies assessing cost-effectiveness indicate that there is a potential for home visits to parents and their children, and to elderly people and their carers, to produce net cost savings, in particular hospital cost savings.

Limitations of the studies

- The majority of studies were too small and lacked sufficient power to detect effects of the intervention. A number were non-randomised and had unblinded outcome assessment or used self-reported outcome measures. Many studies did not report their results in sufficient detail to be included in a meta-analysis.
- Many studies were not British; hence, extrapolation of the results of mostly North American studies to the British context was difficult.
- Most studies concentrated on those at 'high risk' of adverse outcomes; hence, extrapolation of the results to those at differing levels of risk was also difficult.
- Many interventions were multifaceted; hence, the independent effect of home visiting could not be assessed.

Results (Part II)

Relevant British studies, which did not meet the inclusion criteria for Part I, were retrieved and discussed, including several higher degree theses. Client groups not covered in Part I, including travellers, the homeless, and children with special needs, are discussed in Part II, together with issues concerning British child health surveillance and domestic violence.

Part II of the report describes process issues around the identification and meeting of needs through

home visiting; analyses the micro-context of health visitor/client interaction; and demonstrates how health visiting highlights policy tensions in British healthcare in general.

In addition, Part II highlights and addresses the following questions:

- Is the health visitor a professional family friend or a statutory agent?
- What is the evidence concerning the effectiveness of professional versus non-professional home visiting?
- What are the strengths and weaknesses of different 'models' of intervention (e.g. the disease model versus an ecological model)?
- Should health visiting remain a universal service providing health promotion and prevention to all, or should it become a secondary and tertiary support service targeted only on those identified as having problems?

Conclusions

Implications for health visiting (Parts I and II)

- Several reviews of the existing literature support making the content, duration and intensity of home visits appropriate and sensitive to the needs of clients.
- It is considered that professional judgement is valid for decisions about where to target home visiting resources.
- Expectations of home visiting by health visitors should be realistic. Home visiting by itself can be insufficient to bring about radical improvements in health and social outcomes.
- The literature suggests that non-professional home visitors can play a role, but that they require guidance, supervision and support from professionals. However, more complex difficulties may not be suitable for non-professional home visiting.
- The evidence suggests that home visiting interventions that are restricted to the pursuit of only a narrow range of outcomes are less effective than more broadly based interventions in which the multiple needs of individuals and families are addressed.

Recommendations for future research – Part I

- There is a need for more studies with rigorous experimental designs to evaluate the effectiveness of home visiting by British health visitors. Such studies will require sufficient power to

detect effects, random assignment to treatment groups and standardised measures of outcome wherever possible. Results must be presented in sufficient detail to enable their inclusion in a meta-analysis. The rationale and objectives of the study should be clearly stated, and measures of outcome chosen carefully to reflect these. The content of the intervention should always be described.

- There is a need to undertake further studies comparing the effectiveness and cost-effectiveness of professional and non-professional home visitors.
- There is a need for a full economic evaluation of home visiting by health visitors using a randomised controlled trial design.
- There is a need to establish a substantial British knowledge base. The knowledge base in this country is very small indeed compared with the USA. Once British evidence has accumulated it

will be necessary to undertake a systematic review of British studies.

Part II

- There is a need for socio-legal, policy and ethical studies that explore and analyse the tensions and dilemmas in health visiting identified in this review.
- There is a need for a comprehensive survey of the roles and functions currently being undertaken by British health visitors.

Publication

Elkan R, Kendrick D, Hewitt M, Robinson JJA, Tolley K, Blair M, *et al.* The effectiveness of domiciliary health visiting: a systematic review of international studies and a selective review of the British literature. *Health Technol Assess* 2000;4(13).

NHS R&D HTA Programme

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The Standing Group on Health Technology advises on national priorities for health technology assessment. Six advisory panels assist the Standing Group in identifying and prioritising projects. These priorities are then considered by the HTA Commissioning Board supported by the National Coordinating Centre for HTA (NCCHTA).

This report is one of a series covering acute care, diagnostics and imaging, methodology, pharmaceuticals, population screening, and primary and community care. It was identified as a priority by the Primary and Community Care Panel and funded as project number 94/36/04.

The views expressed in this publication are those of the authors and not necessarily those of the Standing Group, the Commissioning Board, the Panel members or the Department of Health. The editors wish to emphasise that funding and publication of this research by the NHS should not be taken as implicit support for the recommendations for policy contained herein. In particular, policy options in the area of screening will be considered by the National Screening Committee. This Committee, chaired by the Chief Medical Officer, will take into account the views expressed here, further available evidence and other relevant considerations.

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The editors have tried to ensure the accuracy of this report but cannot accept responsibility for any errors or omissions. They would like to thank the referees for their constructive comments on the draft document.

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ISSN 1366-5278