Impact of geriatric home screening services on mental state: a systematic review

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Authors' objectives
To determine the impact of geriatric home screening services on mental state.

Searching
MEDLINE was searched from January 1976 to June 1997; HealthSTAR was searched from January 1975 to June 1997. Keywords used for searches were "health services for the aged" exploded, and "clinical trials" exploded.

Bibliographies of relevant reports were searched for additional studies.

Only trials published in English or French were included.

Study selection
Study designs of evaluations included in the review
Controlled trials (randomised and non-randomised) which included at least one measure of mental state.

Specific interventions included in the review
Geriatric home screening services; Questionnaire or health visits to assess physical, mental, functional, or social status was, following which patients were offered advice and/or appropriate referrals were made.

Reference standard test against which the new test was compared
The review did not include any diagnostic accuracy studies that compared the performance of the index test with a reference standard of diagnosis.

Participants included in the review
Men and women aged 65 years or more who lived at home.

Outcomes assessed in the review
Mental state as measured by level of anxiety, depression, social contacts, quality of life, psychiatric hospitalisation, loneliness, psychogeriatric hospital admission, self-perceived health, morale and memory. Assessed by physicians, nurses, social workers, health visitors or volunteers. Outcome evaluations were carried out 12-36 months after the initial assessment.

How were decisions on the relevance of primary studies made?
Assessed by one reviewer.

Assessment of study quality
Each study was assessed according to the 6 criteria of the Evidence-Based Medicine Working Group (Guyatt et al., 1994 see Other Publications of Related Interest):

1. Randomised study.
2. No clinical significant differences between groups reported at baseline.
3. Equal treatment of groups except for the intervention.
5. Complete follow-up of all subjects enrolled in the trial.

6. Intention-to-treat analysis.

One reviewer assessed the studies.

**Data extraction**

Data on study design, subject selection, interventions, proportion of screened subjects receiving new services or treatments as a result of the screening, length of follow-up, outcome measures, and results were systematically abstracted from each report and tabulated.

**Methods of synthesis**

How were the studies combined?
A qualitative synthesis was undertaken by comparing and contrasting the abstracted data.

How were differences between studies investigated?
The author does not state how differences between the studies were investigated.

**Results of the review**

Seven randomised controlled trials (total number of participants is at least 3532).

Four of the seven studies met all six of the validity criteria, three of the studies did not state whether the outcomes were rated blindly and the remaining study did not state whether the groups were similar at baseline, whether the outcomes were rated blind, and did not use an intention to treat analysis.

In 6 studies someone visited the subjects at home, in one an annual postal questionnaire was followed by selective visits. The frequency of visits ranged from 1-4 times per year. In most studies only a small proportion of the screened group had identifiable problems for which recommendations were made, when recommendations were made compliance with these was very variable and only a minority of the screened group received new services or treatments as a result of the screening. Two studies reported small effects on morale or self-perceived health, five reported no differences between the screened and control groups. All studies showed no relationship between the subject selection criteria, type of screening service, proportion of patients in the screened group receiving new services or treatments, length of follow-up, outcome measures and positive effects.

**Authors' conclusions**

There is little evidence that geriatric home screening services had an impact on the mental state of aged subjects. However, only a minority of screened subjects received new services as a result of screening, the screening visits may not have been intensive enough and most of the studies focused primarily on the assessment and treatment of physical rather than mental problems. The review has methodological limitations; the literature search was limited to articles published in English and French, publication bias was not assessed and only one reviewer assessed inclusion and validity of articles.

**CRD commentary**

This is a clearly presented review. However, the literature search was restricted to articles identified from MEDLINE and HealthSTAR in English and French and so relevant studies could have been missed. Inclusion and validity criteria were appropriate and clearly stated, however, only one reviewer assessed the articles. Individual study details are presented and, due to the heterogeneity in study designs, a qualitative review is presented.

**Implications of the review for practice and research**
The author did not state any implications for further research and practice.

**Bibliographic details**

**PubMedID**
9629528

**Other publications of related interest**
1. Guyatt, GH, Sackett DL, Cook DJ. Users' guides to the medical literature II. How to use an article about therapy or prevention B. What were the results and will they help me in caring for my patients? JAMA 1994;271:59-63.

**Indexing Status**
Subject indexing assigned by NLM

**MeSH**
Aged; Canada; Europe; Geriatric Assessment; Health Services for the Aged /standards; Health Status; Home Care Services /standards; Humans; Mental Health; Outcome Assessment (Health Care) /statistics & numerical data; Randomized Controlled Trials as Topic /statistics & numerical data

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**Record Status**
This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.