A systematic review of the effectiveness of in-home community nurse led interventions for the mental health of older persons

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CRD summary
This review evaluated the effectiveness of in-home community-led nurse interventions for mental health of older persons. The authors concluded that validated screening tools were superior than either nurses' opinions or usual admission assessments. The authors' conclusion reflected the evidence, but reliance upon predominately observational studies made the reliability of the conclusion unclear.

Authors' objectives
To evaluate the effectiveness of in-home community nurse-led interventions for home-based older persons with or at risk of mental health disorders.

Searching
CINAHL, MEDLINE, PsycINFO, ProQuest Health and Medical Complete (including dissertations and theses), EMBASE, APAIS-Health, The Cochrane Library, Joanna Briggs Institute of Nursing and Midwifery, DARE and World Health Organisation Health Evidence Network were searched from 1995-2006 for studies published in English.

Study selection
Randomised controlled trials (RCTs), quasi-experimental studies and studies with qualitative research design were eligible for inclusion. Patients had to be aged 60 or over and have or be at risk of mental illness. Interventions needed to be carried out by a community nurse in the home of a patient with the aim of improvement the mental health of the patient.

Interventions eligible for inclusion were screening, education, referral, consultation, counselling, medicine administration, complementary therapy or any psychological intervention that was within the scope of the community nurse's role. Outcomes of interest were nursing actions to determine incidence or prevalence of mental health disorders, any change in a patient's attitude to their mental health disorder, any objective measurement of mental health and any change in diagnostic status regarding a mental health disorder. Studies that included nurses with a designated mental health function and studies based in community health clinics were excluded from the review.

Interventions included in the review were the use of screening tools compared to nurses’ judgement or usual admission assessments and the implementation of multidisciplinary management plans of older patients with depression. Screening tools included: 15-item Geriatric Depression Scale (GDS-15); Structured Clinical Interview for the Diagnostic and Statistical Manual IV disorders (SCID); Outcome and Assessment Information Set (OASIS); Primary Care Evaluation of Mental Disorders (PRIME-MD); and Psychological Distress Index (PDI-29). Multidisciplinary management plans included a five-part total quality management (TQM) plan and Psychogeriatric Assessment of Treatment in City Housing (PATCH) model.

Three reviewers independently selected studies for inclusion in the review. It was not reported how disagreements were resolved.

Assessment of study quality
Study quality was assessed using the following criteria: quality of randomisation; allocation concealment; blinding; attrition; comparability of study groups at baseline; and reliability of outcome measures.

Three independent reviewers independently performed the validity assessment. Any disagreements were resolved by an additional reviewer.
Data extraction
Data was extracted independently by three reviewers and the results compared for any differences.

Methods of synthesis
A narrative synthesis was presented.

Results of the review
Nine studies were included in the review. One study was a RCT (n=371), five were descriptive correlational studies (n=1,185), two were cohort studies (n=160) and one was a case-control study (sample size not provided). Only two studies had an adequate sample size. None of the three studies that reported randomisation to intervention or control group reported the method of allocation concealment. Six studies reported that outcome assessors were blinded.

Screening tools for mental health disorders (especially depression) were the focus of five studies. In all five studies, nurses judgement or usual admission assessments were inferior to validated screening tools in detecting an actionable level of psychiatric symptoms.

Implementation of comprehensive nursing interventions was the focus of four studies. In all four studies the intervention was superior to the control group. One RCT found that the PATCH Model intervention was more effective for reducing psychiatric symptoms for older patients with a psychiatric diagnosis (Brief Psychiatric Rating Scale (BPRS) 29.7, SD 8.4 at baseline and 27.4, SD 7.2, p=0.002 at end of study and Montgomery Asberg Depression Rating Scale (MADRS) 13.7, SD 9.5 at baseline and 9.1, SD 6.2 at end of study) compared with usual care (BPRS 30.1, SD 11.2 at baseline and 33.9, SD 13.6 at end of study and MADRS 11.7, SD 5.8 at baseline and 15.2, SD 9.5 at end of study).

Authors’ conclusions
Validated screening tools were consistently and significantly more accurate for detecting symptoms of mental health disorders than either a nurse's opinion or a non-validated or non-mental health disorder specific tool.

CRD commentary
The review question and the inclusion criteria were clear, although broad in terms of intervention and study design. The authors searched relevant databases, but limited the review to English-language publications and so relevant studies might have been missed. Steps were taken in the review process to minimise reviewer bias. In view of the clinical and methodological heterogeneity between the studies, it was appropriate that a narrative synthesis was used. The authors’ conclusion reflected the evidence presented. However, due to reliance on predominately observational studies the reliability of the conclusion is unclear (even though these studies were likely to represent the best evidence available).

Implications of the review for practice and research
Practice: The authors stated that home healthcare providers should consider making available validated screening tools for mental health disorders for use by nurses during admission assessments or when an older patient was identifiably at risk.

Research: The authors stated that the following studies should be performed: controlled trials that examined mental health outcomes from care provided by community nurses who had undertaken extra mental health education; qualitative studies that described specific actions nurses used when identifying and managing older persons with mental health disorders; and cost-benefit analysis of nursing interventions.

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Bibliographic details
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.