The impact of informing psychiatric patients about their medication: a systematic review
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CRD summary
This review evaluated the effect of educational interventions about medicines for psychiatric patients, concluding that there may be a positive impact on adherence and knowledge, but not on side-effects, relapse or admission rates, symptoms or quality of life. These broad conclusions appear appropriate given the synthesis presented, though more detailed reporting of the included interventions and outcomes would have been useful.

Authors' objectives
To evaluate the effect of educational interventions about medicines for psychiatric patients in terms of adherence, knowledge, economic, clinical and humanistic outcomes.

Searching
PubMed, PsycINFO, Web of Science, Science Direct, the Cochrane Library, CINAHL, International Pharmaceutical Abstracts and Ingenta were searched for relevant studies; the search terms were reported. In addition, the reference lists of included studies were screened for further relevant studies.

Study selection
Study designs of evaluations included in the review
Case studies were not eligible for inclusion in the review, though no other design-related criteria were stated. All of the included studies were randomised controlled trials (RCTs).

Specific interventions included in the review
Studies evaluating single educational interventions delivered to individuals were eligible for inclusion. Specific interventions were delivered orally, on audiotape, as a patient information leaflet, as guidelines, through counselling, or as educational session(s).

Participants included in the review
Studies including adult in-patients or out-patients with a mental illness were eligible for inclusion. The studies included general psychiatric and chronically mentally ill patients, as well as patients diagnosed with depression, schizophrenia and anxiety.

Outcomes assessed in the review
Studies measuring adherence, knowledge, economic, clinical and humanistic outcomes were eligible for inclusion. Within the included studies, clinical outcomes included measures of side-effects, symptoms, admissions and relapses; humanistic outcomes included measures of satisfaction and quality of life.

How were decisions on the relevance of primary studies made?
Two reviewers independently assessed studies for inclusion; any disagreements were resolved through a third reviewer or discussed by the review team.

Assessment of study quality
The authors stated that they assessed the validity of the included studies using criteria outlined by the Cochrane Collaboration. These included evaluating the potential for selection bias, performance bias, attrition bias, detection bias and information bias. In addition, the studies were assessed in terms of patient selection criteria, diagnostic methods used, statistical power, study design, blinding, length of follow-up and psychometric properties of the measuring instruments used.

Data extraction
Two reviewers independently extracted the data from the included studies using a standardised form. Data on key study characteristics were extracted.
Methods of synthesis
How were the studies combined?
The studies were combined in a narrative.

How were differences between studies investigated?
Major differences between study characteristics were presented in the tables and discussed in the body of the narrative synthesis.

Results of the review
A total of 17 RCTs (n=2,819) were included in the review.

Adherence (13 studies).
Four of 8 RCTs in patients with depression reported an increase in adherence, ranging from 11 to 30%. Both RCTs reporting this outcome in general psychiatric patients reported an increase in adherence, though neither study in patients with schizophrenia found any such difference.

Knowledge.
Eight RCTs measured knowledge using questionnaires. Between-group gains in knowledge ranged from 14 to 28%. However, knowledge questionnaires were heterogeneous between studies and the relationship between gains in knowledge and other outcomes were not investigated.

Economic outcomes.
No studies evaluated economic outcomes.

Clinical outcomes.
Six studies reported side-effects in depression. Only one showed a significant difference between groups, favouring additional written information.

Four studies provided data on admissions or relapses. None reported a significant difference between the groups.

Two studies reported symptoms or severity of illness in patients with depression. One found a significant improvement in overall effect; the second found no overall effect, but an improvement with counselling in a subgroup of patients with major depressive disorder.

Humanistic outcomes.
One study reported a statistically significant improvement in satisfaction for community patients receiving a patient information leaflet in addition to usual advice; this improvement was not significant in acute patients.

Two studies assessed quality of life. One reported a statistically significant increase over follow-up, without reporting any between-group data. The second study reported no overall differences in quality of life.

Authors' conclusions
The included studies suggest a positive impact on adherence and knowledge. No definitive conclusions could be drawn in relation to patient satisfaction, and no significant differences were found for side-effects, relapse and admission rates, symptoms or quality of life.

CRD commentary
The inclusion criteria in this review were broadly defined, but largely appropriate to the review question being addressed. Multiple electronic databases and article bibliographies were searched for relevant publications, though it is
unclear whether the retrieval of these articles was restricted by language of publication. The validity of the individual studies was assessed using established criteria and two reviewers were involved in selecting the studies and extracting the data, to minimise the potential for bias during these processes.

The use of a narrative synthesis seems appropriate given the apparent heterogeneity between the studies, but the synthesis was brief and further details of the interventions and outcomes reported would have been useful. The authors’ broad conclusions appear appropriate given the synthesis presented, though more detailed reporting of the included interventions and outcomes would have been useful.

Implications of the review for practice and research
Practice: The authors stated that combined oral and written information is recommended to improve adherence in patients with depression, and that written information should be presented in an easily understandable way.

Research: The authors stated that more well-designed, good-quality studies are required. These should take into account effects in in-patient populations, involve pharmacists, involve patients in testing materials, and measure economic, clinical and humanistic outcomes.

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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.