Educational interventions for mental health consumers receiving psychototropic medication

Technical report

Rhonda Griffiths RN CM BEd(Nurs) MSc(Hons) DrPH
Ritin Fernandez RN MN (CritCare) PhD Candidate,
Maria S Mostacchi CNS(Mental Health) BHealth(Clinical Studies) and
Venita Evans Bsc(Psych) Gdip(Psych)
Joanna Briggs Institute Evidence Based Publications

The Joanna Briggs Institute is involved in the development and dissemination of a number of publications that inform health professionals about clinical practice and specifically what constitutes best practice in health care. These serials include the *International Journal of Evidence Based Healthcare* (formerly JBI Reports) published by Blackwell Publishing and available online at [http://www.blackwell-synergy.com](http://www.blackwell-synergy.com). Systematic reviews conducted by Collaborating Centres of the Joanna Briggs Institute are published in the *International Journal of Evidence Based Healthcare*. These systematic review reports are further abstracted and published by Blackwell Publishing as the series *Best Practice* Information Sheets for Health Professionals. All *Best Practice* Information Sheets are derived from systematic reviews of health care research literature either conducted by the Joanna Briggs Institute Collaborating Centres or in some cases by an external source.

**Aims and scope of the Technical Report**

The conduct of systematic reviews and the development of *Best Practice* Information Sheets involve rigorous, standardised methods to ensure that all information provided to health professionals is of the highest standard and constitutes best practice. The conduct of a systematic review and development of the corresponding *Best Practice* issue are two parts of a staged process. All aspects of the conduct of the systematic review and the development of the accompanying *Best Practice* issue are documented so that these methods may be scrutinised. The processes involved in conducting Joanna Briggs Institute systematic reviews, including review methods are documented within the systematic review report. The format of *Best Practice* precludes it from including detailed information regarding the abstraction of evidence and development of recommendations embodied in the publication. For this reason *JBI Best Practice Technical Reports* are provided as a complementary publication to document all aspects of the development of *Best Practice Information Sheets*. In determining the quality of the Joanna Briggs Institute *Best Practice Information Sheets* the information provided in the Technical Report and the Systematic Review Report should also be considered.

**Disclaimer**

"The procedures described in Best Practice must only be used by people who have appropriate expertise in the field to which the procedure relates. The applicability of any information must be established before relying on it. While care has been taken to ensure that this edition of Best Practice summarises available research and expert consensus, any loss, damage, cost, expense or liability suffered or incurred as a result of reliance on these procedures (whether arising in contract, negligence or otherwise) is, to the extent permitted by law, excluded".

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## Contents

Introduction 4  
*Best Practice Information Sheets development methods* 4  
Acknowledgements 4  
Identification and synthesis of the evidence 6  
Executive summary 6  
Abstraction of the evidence and development of practice recommendations 8  
Appendix 1 - Levels of Evidence and Grades of Recommendation 9  
Appendix 2 - Table of included studies from the systematic review 10  
Appendix 3 - References from the systematic review 12
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Introduction

The aim of Joanna Briggs Institute evidence publications is to provide the best available evidence relating to clinical questions that are important to health professionals and consumers. Although the publications relate to the same clinical question/s and are therefore complementary they serve different purposes and so are of a different scope and format. The Best Practice Information Sheets are targeted to base level health professionals and are restricted to a six-page format, recognising the time constraints on today's clinicians. This prevents details of the development process being presented in the Best Practice Information Sheets. The Best Practice Information Sheet Technical Report provides this detail to allow scrutiny of the development process. The development of these publications is essentially a stepped process involving first the identification and synthesis of the evidence (Systematic Review) and then the abstraction of the evidence and development of recommendations for practice (Best Practice Information Sheets). In examining the methods and processes that ultimately produce practice recommendations the reader should consider the information available in the both the Systematic Review Report and the Best Practice Information Sheet Technical Report for a given information sheet.

This technical report details the development process for the following Best Practice Information sheet.


Best Practice Information Sheets development methods

All Joanna Briggs Best Practice Information Sheets are developed by staff from one of the Joanna Briggs Collaborating Centres with the assistance of an advisory panel of clinicians and other experts.

Acknowledgements

Best Practice Information Sheet developers
Ritin Fernandez; Prof Rhonda Griffiths

Joanna Briggs Institute Collaborating Centre
The New South Wales Centre for Evidence Based Health Care, Liverpool, New South Wales, Australia, a collaborating centre of the Joanna Briggs Institute.

Advisory Panel
Mr Scott Fanker (Clinical Nurse Consultant, Mental Health),
Dr Prakash Gandev (Mental Health Clinical Director, Liverpool Health Service),
Dr Richard Gray (MRC Fellow in Health Services Research, United Kingdom),
Mr Leslie Rech (Acting Service Manager, Mental Health),
Mr Jack Muller (Service Manager, Mental Health),
Dr Matthew Thomas (Psychiatric Registrar, Liverpool Health Service),
Mr John Aunins,
Ms Judith Daisley,
Dr Andrew Pethebridge,
Mr Graham Estall,
Ms Suzanne Fahey,
Ms Carlie Naylor,
Ms Nichola Belcastro,
Ms Debbie Wick,
Ms Margaret Piper,
Dr Louise O'Brien,
Ms Amanda Baker,
Ms Cheryl Ussia,
Dr Karen Chow and
Ms Hayley Kennedy.
Identification and synthesis of the evidence

All Best Practice Information Sheets are derived from systematic reviews of the best available evidence. The review upon which this BPIS is based is:


All Joanna Briggs Institute systematic reviews are conducted by trained reviewers with the assistance of expert review panels. The review protocols and reports are subjected to a rigorous internal and a blinded external review process.

The executive summary of the systematic review is presented below. (Refer to the full systematic review report for additional information about the review processes followed):

Executive summary

**Background** One in four people globally will be affected by mental disorders at some point in their life. Currently approximately 450 million people worldwide suffer from this condition thereby placing mental health disorders among the leading cause of illness. Although treatment with psychotropic medication for specific psychological interventions has been demonstrated to be beneficial, it is also associated with relapse due to non-adherence to the medication regime. Factors associated with non-compliance include inadequate knowledge of the condition and the side-effects of the drugs. However, there is still some debate amongst psychiatrists as to the relative benefits of informing consumers about the side-effects.

**Objectives** The objective of this review was to systematically assess the literature and present the best available evidence that investigated the efficacy of educational interventions, relating to psychotropic medications, for consumers with a mental health disorder.

**Search strategy** A literature search was performed using the following databases Medline (1966–2000), CINAHL (1982–2002), EMBASE (1980–2002) ProQuest, Psychlit and the Cochrane Controlled Trials Register (Issue 2, 2002 of Cochrane Library). In addition, the reference lists of relevant trials and conference proceedings were also scrutinised. No language restrictions were applied. Experts and investigators were contacted to elicit further information.

**Selection criteria** All relevant randomised controlled trials that investigated the effectiveness of providing education and the methods to provide education to adult consumers with a mental illness were eligible for inclusion in the study.

**Data collection and analysis** Eligibility of the trials for inclusion in the review, details of eligible trials and the methodological quality of the trials was assessed jointly by two reviewers. All information was verified by a third reviewer. Odds ratio for dichotomous data and a weighted mean difference for continuous data were calculated with 95% confidence intervals. Where synthesis was inappropriate a narrative overview was undertaken.

**Results** Twenty-one studies were included in this review. Knowledge was assessed in 15 studies. Compliance was assessed in 13 studies. Relapse was assessed in five studies and insight was assessed in six studies. Those patients who were provided with education demonstrated a significant increase in the level of knowledge and compliance compared to those who were not. However, there was no difference in the incidence of relapse and insight in those who were provided education. A structured education session using both written and verbal methods followed by discussion was demonstrated to be effective. The evidence suggests that consumers who were provided multiple education sessions had greater knowledge gains in the short term (up to 1 month); however, the effectiveness of multiple sessions in the long term (2 years) was inconclusive. The review provides evidence that multiple education sessions are better than single education sessions in improving knowledge relating to medications and insight into illness.

**Conclusions** Evidence from the trials demonstrates that structured educational interventions delivered at frequent intervals are useful as part of the treatment program for people with a
mental illness. More well-designed and reported randomised studies investigating the efficacy of education are urgently needed.

**Key words:** education, mental health, psychotropic medication, systematic review
Abstraction of the evidence and development of practice recommendations

All Joanna Briggs Institute Best Practice Information Sheets are a standardised format that includes a background to the clinical question, a summary of the evidence from the systematic review, recommendations and/or implications for practice (graded using the Joanna Briggs Institute Feasibility, Appropriateness, Meaningfulness and Effectiveness scale). The recommendations arising from the evidence in the systematic review and embodied in the Best Practice Information Sheets are developed by the Best Practice Information Sheets developers with the assistance of the expert advisory panel. Essentially the recommendations for Best Practice Information Sheets are where possible evidence based. The developers and the advisory panel consider the evidence and the context in which the evidence may be used and then develop recommendations for practice. Where no evidence is identified in the systematic review the developers and the expert panel develop consensus statements to inform practice. At this point the Best Practice Information Sheet is subjected to an extensive review process external to the developers and advisory panel.

Peer review

All Joanna Briggs Institute evidence publications are subjected to a rigorous peer review process. This process begins with the submission of the protocol for the systematic review to the Joanna Briggs Institute Associate Director, Collaboration and Evidence Translation. The protocol is peer reviewed by two other nominated Joanna Briggs Collaborating Centres not involved in the review itself. All other Joanna Briggs Collaborating Centres are able to make additional comments with regard to the protocol. When the systematic review is at draft report stage it is peer reviewed by the Collaborating Centres who appraised the protocol initially. In addition to the Joanna Briggs Collaborating Centres the systematic review report is subjected to external blinded peer review before publication by Blackwell Publishing. The draft Best Practice Information Sheet is also reviewed by the two nominated Joanna Briggs Collaborating Centres. The Best Practice Information Sheet is then distributed to all other Joanna Briggs Collaborating Centres for comment with regard to cultural, professional and organisational issues that may impact on the implementation of the BPIS recommendations within their constituency.

Best Practice Information Sheets ongoing review/update

All Joanna Briggs Institute evidence publications are based on the best available evidence at the time of publication. When using the publications to inform practice the reader should consider the date of publication and the possibility that recent research may have implications about the strength or direction of recommendations. All Joanna Briggs Institute systematic reviews on which the Best Practice Information Sheets are based are assessed for update at five years post publication and at this time the relevant Best Practice Information Sheets is also reviewed.

Funding

Although the majority of Joanna Briggs Institute systematic reviews and Best Practice Information Sheets are funded by corporate membership funds and/or by the Joanna Briggs Collaborating Centres, external funding is occasionally used. In these cases the internal and external peer review processes ensure that editorial independence from the funding body is maintained.

Conflict of interest

Any conflict of interest by Joanna Briggs Collaborating Centre staff and/or advisory panel members is declared in a statement within the systematic review report.
Appendix 1 - Levels of Evidence and Grades of Recommendation

It is the policy of Joanna Briggs Institute that all systematic reviews will utilise the Joanna Briggs Institute Levels of Evidence with the specific evidence hierarchy corresponding to the type of evidence identified. See evidence tables below.

<table>
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<th>Level of Evidence</th>
<th>Feasibility F(1-4)</th>
<th>Appropriateness A(1-4)</th>
<th>Meaningfulness M(1-4)</th>
<th>Effectiveness E(1-4)</th>
<th>Economic Evidence E(1-4)</th>
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<td>SR of research with unequivocal findings</td>
<td>SR of research with unequivocal findings</td>
<td>SR of research with unequivocal findings</td>
<td>SR (with homogeneity of Experimental studies e.g. RCT with concealed allocation of 1 or more large experimental studies with narrow confidence intervals)</td>
<td>SR (with homogeneity of) evaluations of important alternative interventions comparing all clinically relevant outcomes against appropriate cost measurement, and including a clinically sensible sensitivity analysis</td>
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<td>II</td>
<td>SR of research with credible synthesised findings</td>
<td>SR of research with credible synthesised findings</td>
<td>SR of research with credible synthesised findings</td>
<td>Quasi-experimental studies (e.g. without randomisation)</td>
<td>Evaluation of important alternative interventions comparing all clinically relevant outcomes against appropriate cost measurement, and including a clinically sensible sensitivity analysis</td>
</tr>
<tr>
<td>III</td>
<td>SR of Delphi opinion with credible synthesised findings</td>
<td>SR of Delphi opinion with credible synthesised findings</td>
<td>SR of Delphi opinion with credible synthesised findings</td>
<td>3a. Cohort studies (with control group)</td>
<td>Evaluation of important alternative interventions comparing a limited number of outcomes against appropriate cost measurement, without a clinically sensible sensitivity analysis</td>
</tr>
<tr>
<td>IV</td>
<td>Expert opinion without explicit critical appraisal</td>
<td>Expert opinion without explicit critical appraisal</td>
<td>Expert opinion without explicit critical appraisal</td>
<td>Expert opinion without explicit critical appraisal, or based on physiology, bench research or consensus</td>
<td>Expert opinion without explicit critical appraisal, or based on economic theory</td>
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It is the policy of the Joanna Briggs Institute that all Best Practice Information Sheets will utilise the Joanna Briggs Institute Grades of Recommendation with the specific hierarchy corresponding to the type of recommendation provided. See recommendation tables below.

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<td>Practicable with limited training and/or modest additional resources</td>
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<td>There is no rationale to support practice change</td>
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# Appendix 2 - Table of included studies from the systematic review

## Quality Assessment of Included Studies

- #1 Clear description of the inclusion and exclusion criteria
- #2 Study described as randomised
- #3 Methods to assess adverse events described
- #4 Study described as double blinded
- #5 Study described as single blinded
- #6 Description of withdrawals and dropouts
- #7 Method of statistical analysis described

No = 0  
Yes or only stated = 1  
Yes, described and appropriate = 2

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Appendix 3 - References from the systematic review


