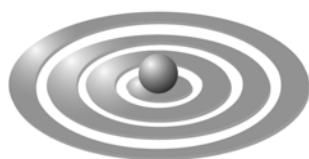


THE JOANNA BRIGGS INSTITUTE

Educational interventions for mental health consumers receiving psychotropic 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)



THE JOANNA BRIGGS INSTITUTE

JBI Best Practice Technical Reports

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>. 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.

Email: jbi@adelaide.edu.au

Telephone: +61 8 83034880

Facsimile: +61 8 83034881

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".

Publisher

The Joanna Briggs Institute Adelaide

© The Joanna Briggs Institute 2006

ISSN 1833-7732

Contact details

The Joanna Briggs Institute, Margaret Graham Building, Royal Adelaide Hospital, North Terrace Adelaide, South Australia, 5000, Australia

Contents

Introduction	4
<i>Best Practice</i> 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

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)

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.

Joanna Briggs Institute (2006). Educational interventions for mental health consumers receiving psychotropic medication *Best Practice Evidence Based Information Sheets for Health Professionals*, 2006; **10**(4):1-4.

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:

Rhonda D Griffiths, Ritin S Fernandez, Maria S Mostacchi, Venita Evans (2004) Comparison of educational interventions for mental health consumers receiving psychotropic medication *JBIP Reports* 2(1): 1–44. doi:10.1111/j.1479-697X.2004.00007.x

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.

Level of Evidence	Feasibility F(1-4)	Appropriateness A(1-4)	Meaningfulness M(1-4)	Effectiveness E(1-4)	Economic Evidence EE(1-4)
1	SR of research with unequivocal synthesised findings	SR of research with unequivocal synthesised findings	SR of research with unequivocal synthesised findings	SR (with homogeneity) of Experimental studies (eg. RCT with concealed allocation) Or 1 or more large experimental studies with narrow confidence intervals	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
2	SR of research with credible synthesised findings	SR of research with credible synthesised findings	SR of research with credible synthesised findings	Quasi-experimental studies (eg. without randomisation)	Evaluation of important alternative interventions comparing all clinically relevant outcomes against appropriate cost measurement, and including a clinically sensible sensitivity analysis
3	SR of text/opinion with credible synthesised findings	SR of text/opinion with credible synthesised findings	SR of text/opinion with credible synthesised findings	3a. Cohort studies (with control group) 3b. Case-controlled 3c. Observational studies without control groups	Evaluation of important alternative interventions comparing a limited number of outcomes against appropriate cost measurement, without a clinically sensible sensitivity analysis
4	Expert opinion without explicit critical appraisal	Expert opinion without explicit critical appraisal	Expert opinion without explicit critical appraisal	Expert opinion without explicit critical appraisal, or based on physiology, bench research or consensus	Expert opinion without explicit critical appraisal, or based on economic theory

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.

Grade of Recommendation	Feasibility	Appropriateness	Meaningfulness	Effectiveness
A	Immediately practicable	Ethically acceptable and justifiable	Provides a strong rationale for practice change	Effectiveness established to a degree that merits application
B	Practicable with limited training and/or modest additional resources	Ethical acceptance is unclear	Provides a moderate rationale for practice change	Effectiveness established to a degree that suggests application
C	Practicable with significant additional training and/or resources	Conflicts to some extent with ethical principals	Provides limited rationale for practice change	Effectiveness established to a degree that warrants consideration of applying the findings
D	Practicable with extensive additional training and/or resources	Conflicts considerably with ethical principals	Provides minimal rationale for advocating change	Effectiveness established to a limited degree
E	Impracticable	Ethically unacceptable	There is no rationale to support practice change	Effectiveness not established

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

Author	#1	#2	#3	#4	#5	#6	#7	Total
Angunawela, 1998								
Rater 1	1	1	1	0	0	0	1	4
Rater 2	1	1	1	0	0	0	1	4
Boczkowski, 1985								
Rater 1	1	1	1	0	0	0	1	4
Rater 2	1	1	1	0	0	0	1	4
Brown, 1987								
Rater 1	1	1	1	0	0	0	1	4
Rater 2	1	1	1	0	0	0	1	4
Chaplin, 1998								
Rater 1	1	1	1	0	0	1	1	4
Rater 2	1	1	1	0	0	1	1	4
Dow, 1991								
Rater 1	0	1	1	0	1	0	1	4
Rater 2	0	1	1	0	1	0	1	4
Evans, 1996								
Rater 1	1	1	1	0	0	1	1	5
Rater 2	1	1	1	0	0	1	1	5
Goulet, 1993								
Rater 1	1	1	1	1	0	0	1	5
Rater 2	1	1	1	1	0	0	1	5
Gray, 2000								
Rater 1	1	2	0	0	1	1	1	6
Rater 2	1	2	0	0	1	1	1	6
Kleinman, 1993								
Rater 1	1	1	1	0	0	0	0	3
Rater 2	1	1	1	0	0	0	0	3

Kleinman, 1996								
Rater 1	1	1	1	0	0	0	0	3
Rater 2	1	1	1	0	0	0	0	3
Kuipers, 1994								
Rater 1	1	1	1	0	0	0	1	4
Rater 2	1	1	1	0	0	0	1	4
Ley, 1976								
Rater 1	1	1	1	0	0	1	1	5
Rater 2	1	1	1	0	0	1	1	5
Macpherson, 1996								
Rater 1	1	1	1	0	0	1	0	4
Rater 2	1	1	1	0	0	1	0	4
Munetz, 1985								
Rater 1	1	1	1	0	0	1	1	5
Rater 2	1	1	1	0	0	1	1	5
Perry, 1999								
Rater 1	1	2	1	0	0	1	1	6
Rater 2	1	2	1	0	0	1	1	6
Robinson, 1986								
Rater 1	0	1	1	0	0	1	0	3
Rater 2	0	1	1	0	0	1	0	3
Seltzer, 1980								
Rater 1	1	1	1	0	0	0	1	4
Rater 2	1	1	1	0	0	0	1	4
Streicker, 1986								
Rater 1	1	1	1	0	0	0	1	4
Rater 2	1	1	1	0	0	0	1	4
Merinder, 1999								
Rater 1	1	1	1	0	0	0	1	4
Rater 2	1	1	1	0	0	0	1	4
Whiteside, 1983								
Rater 1	1	1	1	0	0	0	1	4
Rater 2	1	1	1	0	0	0	1	4
Youssef, 1984								
Rater 1	1	2	1	0	1	0	1	6
Rater 2	1	2	1	0	1	0	1	6

Appendix 3 - References from the systematic review

- Angermeyer M, Loffler W, Muller P, Schultze B, Priebe S. 'Patients and relatives' assessment of clozapine treatment. *Psychol Med* 2001; **31**: 509–17.
- Angunawela I, Mullee M. Drug information for the mentally ill: a randomised controlled trial. *Int J Psychiatry Clin Pract* 1998; **2**: 121–7.
- Benson PR. Drug information disclosed to patients prescribed antipsychotic medication. *J Nerv Ment Dis* 1984; **172**: 642–53.
- Boczkowski JA, Zeichner A, DeSanto N. Neuroleptic compliance among chronic schizophrenic outpatients: an intervention outcome report. *J Consult Clin Psychol* 1985; **53**: 666–71.
- Breggin P, Cohen D. *Your Drug May be Your Problem*. New York: Perseus Books, 1999.
- Brown CS, Wright RG, Christensen DB. Association between type of medication instruction and patients' knowledge, side effects, and compliance. *Hosp Community Psychiatry* 1987; **38**: 55–60.
- Chaplin R, Kent A. Informing patients about tardive dyskinesia. Controlled trial of patient education. *Br J Psychiatry* 1998; **172**: 78–81.
- Dow MG, Verdi MB, Sacco WP. Training psychiatric patients to discuss medication issues. Effects on patient communication and knowledge of medications. *Behav Modif* 1991; **15**: 3–21.
- Eckman TW, Wirshing WC, Marder SR *et al*. Technique for training schizophrenic patients in illness self management: a controlled trial. *Am J Psychiatry* 1992; **149**: 1549–55.
- Evans M, Macpherson R, Thompson E, Babiker I. Educating psychiatric patients about their treatment: do fact sheets work? *J R Soc Med* 1996; **89**: 690–93.
- Gervin M, Barnes RE. Assessment of drug-related movement disorders in schizophrenia. *Adv Psychiatr Treat* 2000; **6**: 332–43.
- Glick I, Burti L, Okonozi K. Effectiveness in psychiatric care. Psychoeducation and outcome for patients with major affective disorders and their families. *Br J Psychiatry* 1994; **164**: 104–6.
- Goulet J, Lalonde P, Lavoie G, Jodoin F. Effect of patient education on neuroleptic treatment of young psychotic patients. *Can J Psychiatry* 1993; **38**: 571–3.
- Gray R. Does patient education enhance compliance with clozapine? A preliminary investigation. *J Psychiatr Ment Health Nurs* 2000; **7**: 285–6.
- Jadad AR, Moore RA, Carroll D *et al*. Assessing the quality of reports of randomized clinical trials: is blinding necessary? *Control Clin Trials* 1996; **17**: 1–12.
- Jewell J, Chemij M. Tardive dyskinesia, the involuntary movement disorder that no one really understands. *Can Nurse* 1983; **79**: 20–24.
- Kleinman I, Schachter D, Jeffries J, Goldhamer P. Effectiveness of two methods for informing schizophrenic patients about neuroleptic medication. *Hosp Community Psychiatry* 1993; **44**: 1189–91.
- Kleinman I, Schachter D, Jeffries J, Goldhamer P. Informed consent and tardive dyskinesia. Long-term follow-up. *J Nerv Ment Dis* 1996; **184**: 517–22.
- Kuipers J, Bell C, Davidhizar R, Cosgray R, Fawley R. Knowledge and attitudes of chronic mentally ill patients before and after medication education. *J Adv Nurs* 1994; **20**: 450–56.
- Ley P, Jain VK, Skilbeck CE. A method for decreasing patients' medication errors. *Psychol Med* 1976; **6**: 599–601.
- Macpherson R, Jerrom B, Hughes A. A controlled study of education about drug treatment in schizophrenia. *Br J Psychiatry* 1996; **168**: 709–17.

- Merinder LB, Viuff AG, Laugesen HD, Clemmensen K, Misfelt S, Espensen B. Patient and relative education in community psychiatry: a randomized controlled trial regarding its effectiveness. *Soc Psychiatry Psychiatr Epidemiol* 1999; **34**: 287–94.
- Munetz MR, Roth LH. Informing patients about tardive dyskinesia. *Arch Gen Psychiatry* 1985; **42**: 866–71.
- NSW Health Department. *Caring for Mental Health. A Framework for Mental Health Care in NSW*. Sydney: NSW Health Department, 1998.
- Perry A, Tarrier N, Morriss R, McCarthy E, Limb K. Randomised controlled trial of efficacy of teaching patients with bipolar disorder to identify early symptoms of relapse and obtain treatment. *BMJ* 1999; **318**: 149–53.
- Robinson GL, Gilbertson AD, Litwack L. The effects of a psychiatric patient education to medication program on postdischarge compliance. *Psychiatric Q* 1986; **58**: 113–18.
- Seltzer A, Roncari I, Garfinkel P. Effect of patient education on medication compliance. *Can J Psychiatry* 1980; **25**: 638–45.
- Staples PBP, Jefferies M, Warder L. Empowering the angry patient. *Can Nurse* 1994; **90**: 28–34.
- Streicker SK, Amdur M, Dincin J. Educating patients about psychiatric medications: failure to enhance compliance. *Psychosoc Rehabil J* 1986; **4**: 16–27.
- Whiteside SE. Patient education: effectiveness of medication programs for psychiatric patients. *J Psychosoc Nurs Ment Health Serv* 1983; **21**: 16–21.
- World Health Organization. *The World Health Report 2001 42: Mental Disorders Affect One in Four People*. Geneva: World Health Organization, 2001.
- Youssef FA. Adherence to therapy in psychiatric patients: an empirical investigation. *Int J Nurs Stud* 1984; **21**: 51–7.