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## PURPOSE AND PROCEDURE

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The general purpose of *Evidence-Based Nursing* is to select from the health related literature those articles reporting studies and reviews that warrant immediate attention by nurses attempting to keep pace with important advances in their profession. These articles are summarised in “value added” abstracts and commented on by clinical experts. The specific purposes of *Evidence-Based Nursing* are:

- To identify, using predefined criteria, the best quantitative and qualitative original and review articles on the meaning, cause, course, assessment, prevention, treatment, or economics of health problems managed by nurses and on quality assurance
- To summarise this literature in the form of “structured abstracts” that describe the question, methods, results, and evidence-based conclusions of studies in a reproducible and accurate fashion
- To provide brief, highly expert comment on the context of each article, its methods, and clinical applications that its findings warrant
- To disseminate the summaries in a timely fashion to nurses.

The Royal College of Nursing (RCN) Publishing Company and the BMJ Publishing Group publish *Evidence-Based Nursing* under the editorship of Dr Alba DiCenso and Dr Donna Ciliska at McMaster University in Canada and Dr Nicky Cullum at the University of York in the UK. The Health Information Research Unit (HIRU) of the Department of Clinical Epidemiology and Biostatistics at McMaster University hosts the editorial office for the production of the abstracts and commissioning of commentaries. Dr Brian Haynes acts as coordinating editor to ensure that methods and procedures are consistent with other evidence-based journals prepared by HIRU.

### Criteria for selection and review of articles for abstracting

All articles in a journal issue are considered for abstracting if they meet these criteria:

#### BASIC CRITERIA

- Original or review articles
- In English
- Quantitative or qualitative studies
- About individuals of any age group
- About topics that are important to the clinical practice of nurses in any setting.

#### QUANTITATIVE STUDIES

*Studies of prevention or treatment must meet these additional criteria:*

- Random allocation of participants to comparison groups
- Follow up (end point assessment) of at least 80% of those entering the investigation
- Outcome measure of known or probable clinical importance
- Analysis consistent with study design.

*Studies of assessment (screening or diagnosis) must meet these additional criteria:*

- Clearly identified comparison groups, at least one of which is free of the disorder or condition

- Interpretation of diagnostic standard without knowledge of test result
- Interpretation of test without knowledge of diagnostic standard result
- Objective diagnostic (gold) standard (eg, central venous pressure) or current clinical standard for diagnosis (eg, sphygmomanometer reading for hypertension), preferably with documentation of reproducible criteria for subjectively interpreted diagnostic standard (eg, report of statistically significant measure of agreement among observers)
- Analysis consistent with study design.

*Studies of prognosis must meet these additional criteria:*

- Inception cohort (first onset or assembled at a uniform point in the development of a condition or disease) of individuals, all initially free of the outcome of interest
- Follow up of at least 80% of participants until the occurrence of a major study end point or to the end of the study
- Analysis consistent with study design.

*Studies of causation must meet these additional criteria:*

- Clearly identified comparison group for those at risk of, or having, the outcome of interest (ie, randomised, quasi randomised, or non-randomised controlled trial; cohort analytic study with case by case matching or statistical adjustment to create comparable groups; case control study)
- Blinding of observers of outcome to exposure (criterion assumed to be met if outcome is objective, eg, all cause mortality, self administered psychometric test)
- Blinding of observers of exposure to outcomes for case control studies or blinding of subjects to exposure for all other study designs
- Analysis consistent with study design.

*Studies of quality assurance must meet these additional criteria:*

- Random allocation of participants or units to comparison groups
- Follow up of at least 80% of participants
- Outcome measure of known or probable clinical or educational importance
- Analysis consistent with study design.

*Studies of the economics of healthcare programmes or interventions must meet these additional criteria:*

- The economic question must compare alternative courses of action
- Alternative diagnostic or therapeutic services or quality assurance activities must be compared on the basis of both the outcomes produced (effectiveness) and resources consumed (costs)
- Evidence of effectiveness must be from a study (or studies) that meets the criteria for treatment, assessment, quality assurance, or a review article
- Results should be presented in terms of the incremental or additional costs and outcomes of one intervention over another
- Where there is uncertainty in the estimates or imprecision in the measurement, a sensitivity analysis should be done.

*Clinical prediction guides must meet these additional criteria:*

The guide must be generated in 1 set of patients (training set) and validated in an independent set of patients (test set) and must also meet the above noted criteria for treatment, assessment, prognosis, or causation.

*Review articles must meet these additional criteria:*

- A clear statement of the clinical topic being reviewed
- A clear description of the sources and methods for identifying articles
- Specification of the inclusion and exclusion criteria for selecting articles for detailed review
- At least 1 article in the review must meet the above noted criteria for treatment, assessment, prognosis, causation, quality improvement, or economics of health care programmes.

**QUALITATIVE STUDIES**

- Research topic or question specified
- Appropriate research design to address question
- Research method described and substantiated
- Study participants and context described
- Information gathering and analysis appropriate
- Data interpretation and conclusions consistent with data analysis.

These criteria are subject to modification if, for example, it becomes feasible to apply higher standards that increase the validity and applicability of studies for clinical practice. The objective of *Evidence-Based Nursing* is to abstract only the very best literature, consistent with a reasonable number of articles "making it through the filter".

Articles meeting the criteria set out above are abstracted according to the procedure for more informative abstracts,<sup>1</sup> with these modifications: abstracts are approximately 450 words in length; and each abstract is reviewed by an expert in the content area covered by the article. This expert writes a commentary in which she or he compares the study findings to previous research findings, identifies any important methodological problems that affect interpretation of the study results, and offers recommendations for clinical application. The author of the article is given an opportunity to review the abstract and commentary before publication.

In the last issue of each year, we will publish a list of articles that passed all criteria but were not abstracted because, in the judgment of the editors, their findings were less applicable to nursing practice.

<sup>1</sup> Haynes RB, Mulrow CD, Huth EJ, et al. More informative abstracts revisited. *Ann Intern Med* 1990;113:69-76.

### Journals reviewed for this issue

|                           |                                |                                    |                        |
|---------------------------|--------------------------------|------------------------------------|------------------------|
| Acta Obstet Gynecol Scand | Br J Psychol                   | Image J Nurs Sch                   | Med Care               |
| Acta Psychiatr Scand      | Br J Surg                      | Int J Geriatr Psychiatry           | Med J Aust             |
| Addiction                 | CMAJ                           | JAMA                               | Midwifery              |
| Age Ageing                | Can J Cardiol                  | J Abnorm Child Psychol             | N Engl J Med           |
| Am J Cardiol              | Can J Contin Med Educ          | J Abnorm Psychol                   | Neonatal Netw          |
| Am J Epidemiol            | Can J Gastroenterol            | J Adv Nurs                         | Neurology              |
| Am J Gastroenterol        | Can J Infect Dis               | J Affect Disord                    | Nurs Res               |
| Am J Med                  | Can J Nurs Res                 | J Am Acad Child Adolesc Psychiatry | Obstet Gynecol         |
| Am J Obstet Gynecol       | Can J Psychiatry               | J Am Board Fam Pract               | Pain                   |
| Am J Psychiatry           | Can J Public Health            | J Am Coll Cardiol                  | Patient Educ Couns     |
| Am J Public Health        | Can J Surg                     | J Am Coll Surg                     | Pediatrics             |
| Am J Respir Crit Care Med | Can Respir J                   | J Am Geriatr Soc                   | Perspect Cardiol       |
| Am J Surg                 | Cancer Nurs                    | J Am Med Informat Assoc            | Psychiatr Serv         |
| Ann Emerg Med             | Cancer Prev Control            | J Autism Dev Disord                | Psychiatry             |
| Ann Intern Med            | Chest                          | J Child Psychol Psychiatry         | Interpersonal and      |
| Ann Med                   | Circulation                    | J Clin Epidemiol                   | Biological Processes   |
| Ann Surg                  | Clin Invest Med                | J Clin Exp Neuropsychol            | Psychol Aging          |
| ANS Adv Nurs Sci          | Clin Nurs Res                  | J Clin Nurs                        | Psychol Bull           |
| Appl Nurs Res             | Clin Pediatr                   | J Clin Psychiatry                  | Psychol Med            |
| Arch Dis Child            | Clin Psychol Rev               | J Clin Psychopharmacol             | Psychological          |
| Arch Fam Med              | Cochrane Library               | J Consult Clin Psychol             | Assessment             |
| Arch Gen Psychiatry       | Cognitive Therapy and Research | J Counseling Psychology            | Psychopharmacol Bull   |
| Arch Intern Med           | Controlled Clin Trials         | J Cutan Med Surg                   | Psychosom Med          |
| Arch Neurol               | Crit Care Med                  | J Epidemiol Community Health       | Public Health Nurs     |
| Arch Pediatr Adolesc Med  | Diabet Med                     | J Fam Pract                        | Quality in Health Care |
| Arch Surg                 | Diabetes Care                  | J Gen Intern Med                   | Qual Health Res        |
| Arthritis Rheum           | Fam Plann Perspect             | J Infect Dis                       | Res Nurs Health        |
| Aust NZ J Psychiatry      | Fertil Steril                  | J Intern Med                       | Rheumatology           |
| Behav Res Ther            | Gastroenterology               | J Manipulative Physiol Ther        | Schizophr Bull         |
| Birth                     | Gen Hosp Psychiatry            | J Neuropsychiatry Clin Neurosci    | Soc Sci Med            |
| Behav Ther                | Gut                            | J Pediatr                          | Spine                  |
| BMJ                       | Health Educ Behav              | J Pediatr Child Health             | Stroke                 |
| Br J Clin Psychol         | Health Psychol                 | J Pediatr Nurs                     | Surgery                |
| Br J Gen Pract            | Heart                          | J Pediatr Oncol Nurs               | Thorax                 |
| Br J Obstet Gynaecol      | Heart Lung                     | J Vasc Surg                        | West J Nurs Res        |
| Br J Psychiatry           | Hypertension                   | Lancet                             |                        |