Finding Evidence-based information

Date March 2017
The Process to finding evidence-based information

1. Analyse your topic
2. Plan your search
3. Decide where to search
4. Evaluate and Manage
Analyse your topic

- Analyse your topic
- Plan your search
- Decide where to search
- Evaluate and Manage
A sample case study

You are a recently graduated RN working with a child health nurse. One of her patients is 5 year old Sam who suffers from nocturnal enuresis. His mother said it is a constant problem and it was affecting Sam more lately as he is now getting to the age when children like to have a sleep-over. Sam was reluctant to accept invitations because of his embarrassment.

The conventional therapies include medication (desmopressin in antidiuretic hormone or arginine vasopressin, either of which decrease night-time urine production), and enuresis alarms. His mother is unconvinced about the safety of Sam taking ‘drugs’ and wants to try using a bed wetting alarm. You decide to find out which treatment is more effective by doing a search to find the evidence.
Analyse your case study

Identify the answerable question – a/the core question that requires evidence-based information from which to make a decision for the best treatment etc.

You are a recently graduated RN working with a child health nurse. One of her patients is 5 year old Sam who suffers from nocturnal enuresis. His mother said it is a constant problem and it was affecting Sam more lately as he is now getting to the age when children like to have a sleep-over. Sam was reluctant to accept invitations because of his embarrassment.

The conventional therapies include medication (desmopressin in antidiuretic hormone or arginine vasopressin, either of which decrease night-time urine production), and enuresis alarms.

His mother is unconvinced about the safety of Sam taking ‘drugs’ and wants to try using a bed wetting alarm.

You decide to find out which treatment is more effective by doing a search to find the evidence.
Analyse your case study

In this sample case study, a few key points from the patient interview have been identified. This will enable us to work through the steps to find the best-evidence on which to make a decision for the most appropriate patient care.

In the case study it is identified that:
• Sam is a 5 year old child.
• Sam suffers from nocturnal enuresis
• Sam’s mother advised that it is a constant problem and is affecting Sam psychosocially
• Sam’s mother would like to avoid the use of drugs as a form of treatment.

The research question for this case study could be:
Is the use of a bed wetting alarm an effective treatment for nocturnal enuresis in young children?

Make sure your research question is specific and that it is a question and not a statement.
The research question for this case study could be:
Is the use of a bed wetting alarm an effective treatment for nocturnal enuresis in young children?

<table>
<thead>
<tr>
<th>Question parts/concepts</th>
<th>5 year old child suffering from Nocturnal Enuresis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Problem/Population</td>
<td></td>
</tr>
<tr>
<td>Intervention</td>
<td>Bed wetting alarm</td>
</tr>
<tr>
<td>Comparison</td>
<td>Medications such as Desmopressin or Arginine vasopressin</td>
</tr>
<tr>
<td>Outcome</td>
<td>No bed wetting</td>
</tr>
</tbody>
</table>

The PICO Search Strategy Worksheet can help us design an effective search strategy.
Plan your search

Analyse your topic

Plan your search

Decide where to search

Evaluate and Manage
## Analyse the research question

<table>
<thead>
<tr>
<th>Question parts (concepts)</th>
<th>Search terms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>P</strong> 5 year old child suffering from Nocturnal Enuresis</td>
<td>Child, Nocturnal enuresis</td>
</tr>
<tr>
<td><strong>I</strong> Bed wetting alarm</td>
<td>Bed wetting alarm</td>
</tr>
<tr>
<td><strong>C</strong> Medications such as Desmopressin or Arginine vasopressin</td>
<td>Not required due to Sam’s mother’s concerns about the use of drugs</td>
</tr>
<tr>
<td><strong>O</strong> No bed wetting</td>
<td></td>
</tr>
</tbody>
</table>

But why do you need to find alternative terms and key words (synonyms) and how do you find them?
Creating a smart search strategy

• Decide which terms (words) you should use to search.
• Focus on the **Intervention, what and who** it is meant to treat as the searchable concepts:
  – Child/children
  – Nocturnal Enuresis/Bed wetting
  – Bed wetting alarm
• For each concept consider any synonyms (keywords & alternative terms)

**Fundamental to smart searching is to identify all the different ways each concept can/might be expressed - list them in Database Search Strategy Form.**
You can do this using dictionaries, thesaurus, the simple internet searches etc.

In doing this you will ensure a comprehensive search strategy from which to find relevant information relating to the research question. This will enable you to then make an informed decision(s).
Recap on NCS1102 – how to find alternative terms

**Dictionaries & Encyclopaedias:**
Use these to source the meaning of terminology. Some are e-versions.

**Dictionaries**
- Australian nurses' dictionary
- Black’s medical dictionary
  Available online.
- Dictionary of nursing theory and research
- Mosby’s dictionary of medicine, nursing & health professions
- Taber's cyclopedic medical dictionary
  Available online

**Encyclopedias**
- The encyclopedia of elder care [electronic resource]: the comprehensive resource on geriatric health and social care
  3rd. ed. 2014
- Nursing leadership [electronic resource]: a concise encyclopedia
  2nd ed. 2012
- The Sage encyclopedia of qualitative research methods
  Available online
- Encyclopedia of diseases and disorders
  Available online

**Books:**
Are a good starting point for an introduction to the topic such as background information, theories, frameworks and overviews.

Your Reading List in Blackboard includes recommended texts for your Unit.

**How to search for books**
- ECU Worldsearch
  If you know the details of the book, enter a combination of author and title. To find books on a topic, do a “Google” style search by entering keywords or phrases.
Recap on NCS1102 – how to find alternative terms

**Journal Articles:**
Provide information on current research, often specific to a topic. They are an online source of information searchable from the ECU subscribed databases and sometimes ECU Worldsearch.

**Websites:**
These include Government Reports, professional, research organisations. The Nursing Library Guide lists many of the credible sites to use.

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**Key Databases**
- CINAHL Plus with Full Text
  - International coverage, core database for nursing and allied health.
- Medline
  - International coverage, core databases for medical sciences.

**Some Key Australian Journals**
- ACORN: The journal of perioperative nursing in Australia
- Australasian Emergency Nursing Journal: AENJ
- Australian Critical care
- Australian Journal of Rural Health
- Australian nursing & midwifery journal

**Nursing Profession**
- Australian Nursing & Midwifery Council (ANMC)
- Nursing & Midwifery in Western Australia
- Australian College of Midwives
- Nursing & Midwifery Board of Australia
- Review of homebirths in Western Australia
Recap on NCS1102 – how to find alternative terms

The description tab in a record either in ECU Worldsearch can provide possible alternative search terms (keywords/alternative terms).

Using humour to enhance the nurse-patient relationship.

by Tremayne P
Affiliation: Article 2014 | Peer-reviewed
Source: Nursing standard (Royal College of Nursing (Great Britain) : 1987) 2014 Mar 25-Apr 1; 28(30): 37-40
Held by: Edith Cowan University

No other editions or formats

Description

Staff View: MARC Record
ISSN: 0029-6570
OCLC Number: 5562739169
Subjects:
- Nurse-Patient Relations
- Wit and Humor as Topic
- Adaptation_Psychological
- Humans
- Nursing Staff psychology
- United Kingdom
- Nursing

Summary:
The appropriate use of humour is a valuable asset in nursing practice. Used daily in interactions with patients, humour can help to develop the therapeutic relationship and build resilience. This article discusses how humour can promote physiological and psychological wellbeing, while reducing stress and anxiety. Recommendations for including humour in patient care are outlined.

Database:
From MEDLINE®/PubMed®, a database of the U.S. National Library of Medicine.
The Major and Minor Subjects listed within an article sourced from a Database can also provide possible alternative search terms (keywords/alternative terms).
Wikipedia only the **planning** stage!

Wikipedia articles can be **useful to gain a quick overview of the topic, and/or to find alternative terms/keywords** for your search strategy. Remember anyone can write a Wikipedia article, so will it be accurate?

Quality Wikipedia articles will **contain references to their sources** - listed at the bottom of each page. They can often be credible quality sources of information that **you can cite in your assignments**.

**Note:** If the information available in Wikipedia is accurate, it will always be available as a scholarly source, such as a book, Journal Article and/or a quality website. **Do not use a Wikipedia source as supporting evidence in your assignment, always use the scholarly source.**

### Search terms to build the search strategy

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Nocturnal Enuresis</td>
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</tr>
<tr>
<td>Enuresis</td>
<td>Bed wetting alarm*</td>
</tr>
<tr>
<td>Bed wetting</td>
<td>Buzzer alarm*</td>
</tr>
<tr>
<td>Bedwetting</td>
<td>Enuresis alarm*</td>
</tr>
<tr>
<td>Urinary incontinence</td>
<td>Behaviour therapy</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td>And any others you may find..</td>
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</tr>
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#### Smart Searching: how to search for these concepts

- **words vs. phrases** (put phrases in “ “)
- **Truncation** (use * to ensure plurals, word extensions and/or the American spelling are covered in your search)
  - e.g. nurs* = nurse, nursing, nurses
  - e.g. library* = library, libraries
  - e.g. behavi*r = behaviour (Australian) vs. behavior (American)
## Search terms to build the search strategy

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• **Boolean Operators**: this is the use of ‘AND’, ‘OR’ and ‘NOT’ to join search phrases and words.

A potential search strategy:

(“nocturnal enuresis” OR enuresis OR “bed wetting” OR “bedwetting” OR “urinary incontinence”)

AND

(“bedwetting alarm*” OR “bed wetting alarm*” OR “buzzer alarm*” OR “enuresis alarm*” OR “behavi*r therap*”)

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Clarifying some queries you may have

• On this occasion we are not required to make a comparison, although we could do this at a later stage. This is because Sam’s Mum has specifically expressed her concerns with the use of drugs and wishes to go with a more natural treatment.

• There is no need to include ‘child’ as a search term, because within most databases there is the option to refine the search results by age groups. However you may have to include child in the search strategy if a database does not have this option.

• The actual search terms used in the search strategy will depend on the database you search across.

• The Boolean operator of ‘OR’ connects the synonyms for each part/concept and the Boolean operator ‘AND’ joins the concepts.
Decide where to search
It can be useful to start by doing a broad multidisciplinary search of your topic in ECU Worldsearch, the library search engine.

Search results: 149
Refine by article (excludes books): 146
Date range – last 10 years: 85
English language: 69

But how many of these results are relevant and evidence-based? This is where you will scan and skim each result and save any relevant results for later content analysis and selection for use in your assignment. This will be covered in the final step of the search process.
Where to find evidence-based information

Source databases that cover your topic area.

**Significant Health Science Databases:**
- CINAHL Plus Full Text
- MEDLINE

**Specific evidence-based health Databases:**
- The Joanna Briggs Institute
- Cochrane Library
- BMJ Best Practice

**Australian specific Health Databases:**
- Informit Health Collection
- Australian Public Affairs Full text
So what do these Databases cover?

To find out more about particular databases go the Nursing Library Guide and the Databases/Journals tab. [http://ecu.au.libguides.com/nursing/journal-articles-databases]
So what do these Databases cover?

or: check the Evidence-based Health Library Guide under the Databases/Journals tab
How do you access these Databases?

Access these databases via the Library website homepage or via the Library Guides homepage.
Accessing and searching CINAHL

Access this database via the alpha list or go to the Subjects dropdown box and choose Nursing. This subject group lists the Nursing Databases subscribed to by ECU.

Scroll down the alphabetical list.
In CINAHL, as do most databases the Boolean operator of AND is already populated for you.

Search results: 16
Refine by article (excludes books): N/A as Databases do not contain books
Refine by Academic Journal: 14
Date range – last 10 years: 7
English language: N/A as the 7 results are in English language.
In addition to the common filters available, CINAHL also includes the ability to refine search results by information type – such as specific evidence-based information.

REMEMBER: MEDLINE and PsycInfo are also hosted by EBSCOhost and are therefore searched in the same way as CINAHL.
In addition to the common filters available CINAHL also includes the ability to refine search results by information type – such as specific evidence-based information.
Accessing and searching in JBI

Access this database the same way as you accessed CINAHL

The JBI Database contains systematic reviews, Evidence Summaries, Evidence Based Recommended Practices, Consumer Information Sheets, Systematic Review Protocol and Technical Reports. It is a small database with only 3000 records.

Note: I kept the search strategy simple because of the limited number of records held in this database.
The number of search results are listed above the search fields with the actual search results listed below the search fields.

Search results: 5
No limits used due to small number of results.
Types of information retrieved: Evidence summaries, Customer Information Sheets and systematic reviews – all forms of evidence-based information.
Accessing JBI search results

Note: Evidence-based summaries are great because they provide a list of references for the particular topic that can then be followed up on.

There is a short video on how to use the JBI Database in the Database/Journals Tab of the Nursing Library Guide.
Accessing and using The Cochrane Library

Access this database via the alpha list or go to the Subjects dropdown box and choose Nursing. This subject group lists the Nursing Databases subscribed to by ECU.

Scroll down the alphabetical list
Searching in The Cochrane Library

The Cochrane Library contains high quality, independent evidence. It includes reliable evidence from Cochrane and a group of 6 affiliated databases. In addition to systematic reviews it also includes clinical trials, method studies and more.

Note: Again keep the search strategy simple because of the highly specialized records in this database.
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Searching in The Cochrane Library

Click on the search results number and view the number of results per information type.
Refining the search results in the Cochrane Library

Click on this box to view or set limits.
Accessing search results

Cochrane Library

Cochrane Database of Systematic Reviews

Alarm interventions for nocturnal enuresis in children

Cathryn MA Glazener, Jonathan HC Evans, Rachel E Peto

First published: 20 April 2005

Editorial Group: Cochrane Incontinence Group

DOI: 10.1002/14651858.CD002911.pub2

Cited by: 9 articles

Abstract

Background
The Process to finding evidence-based information

- Analyse your topic
- Plan your search
- Decide where to search
- Evaluate and Manage
Evaluate: Scanning & Skimming search results

Scanning & Skimming

Evaluate: Scanning & Skimming search results

While locating information in the search process you should scan and skim the search results for signs of relevancy – look at the title and abstract.

<table>
<thead>
<tr>
<th>Scanning</th>
<th>Skimming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading to find specific information to answer a question/solve a problem.</td>
<td>This is a quick initial reading of the piece of information such as an article or evidence summary or randomized control trial to:</td>
</tr>
<tr>
<td>Use your knowledge of how information is organised to quickly find relevant content (e.g., abstract, introduction, conclusion, summary, tables, etc.). This will enable you to: • locate the relevant sections; and • read only as much as you need to find the relevant information.</td>
<td>• establish usefulness and/or • obtain an overview (the gist).</td>
</tr>
<tr>
<td></td>
<td>Browse, survey the content, dip into different parts of the article etc.</td>
</tr>
</tbody>
</table>

REMEMBER: You still need to analyse for content credibility and relevancy. This will include looking at the quality of the evidence (e.g. was the randomised control trial conducted in the prescribed way) and the relevancy of the conclusions/outcomes.
Managing search results in ECU Worldsearch

These 3 buttons on the top right-hand side of the screen enable you to share the information, cite, and/or save the record until you decide it is the best information for your purpose.
Managing search results in the CINAHL database

Some useful features in CINAHL to manage search results is the ability to save, cite, e-mail or access the full-text.

You can also save your search and the search results in CINAHL by setting up an account.
Managing search results in the JBI database

In the JBI Database you can print or e-mail the results and access the full-text.

There is also the ability to save the search and the search results if you create an account.
Managing search results in The Cochrane Library

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Background
And finally – some useful links

• The Nursing Library Guide: http://ecu.au.libguides.com/nursing

• Evidence-Based Health Library Guide: http://ecu.au.libguides.com/evidence-based-health

• NCS1202 Library Guide: http://ecu.au.libguides.com/nursing/NCS1202


• Evaluating resources using the 4 R’s: http://ecu.au.libguides.com/ld.php?content_id=20657907