Nurses may need to search the literature for various reasons such as:

- Responding to requests from nurses, funders and policy makers for current knowledge about nursing practice or work life
- Collecting current knowledge about a nursing topic before undertaking new research

The six basic steps outlined below can be envisioned as part of a continuum. All searches should include steps 1 to 4. Adding further steps makes your search more rigorous. Your decision about how rigorous the search should be must be carefully considered and will depend on the reason for doing the search and the funding available to support it.

1. **Clarify the question and identify key words**
   - Construct a question that clearly identifies what you want to know. The more precisely you frame your question the more successful you will be in retrieving appropriate literature.
   - **Hints:**
     - Successful searchers often spend time with at least one other colleague (and ideally an experienced librarian) to clarify the question and determine a search strategy.
     - Reading a few articles on the topic may help you define a question.

   Usually generating a search question requires identifying three elements: target group, intervention and outcome. Occasionally, only two elements - target group and outcome - will be need to be identified (e.g., in search questions on etiology or prevalence). You may also want to identify potential comparison groups. For example, you may need to compare the absenteeism rates of nurses who practice self-scheduling with those of nurses whose schedules are based on a master rotation schedule.

   Some successful searchers have found that listing the elements of the question in a table format helps to identify key words for searching. For each of the elements you will want to think of several different search terms. Table 1 includes keywords to answer the question, “Do hospital nurses who participate in self-scheduling have improved satisfaction and/or lower rates of absenteeism?”

<table>
<thead>
<tr>
<th>Target group</th>
<th>Intervention</th>
<th>Outcome</th>
<th>Comparison group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worksite</td>
<td>Nurse self-scheduling</td>
<td>Nursing satisfaction</td>
<td>Master rotation schedule</td>
</tr>
<tr>
<td>Employer</td>
<td></td>
<td>Absenteeism</td>
<td></td>
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<tr>
<td>Corporation</td>
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</tbody>
</table>

2. **Develop Inclusion Criteria**
   - Some examples of inclusion criteria are:
     - Language (e.g., English)
     - Quantitative or qualitative studies
     - Original or review articles*
   - *Review articles combine the results of a number of studies on the same topic. Some examples are:
     - **Meta-analysis:** An overview that incorporates a quantitative strategy for combining the results of several studies into a single pooled or summary estimate.
     - **Systematic Review:** A critical assessment and evaluation of the research (not just a summary) that attempts to address a focused clinical question using methods designed to reduce the likelihood of bias (may or may not include meta-analysis).
     - **Meta-synthesis:** A critical assessment that combines the results of qualitative analyses.
     - **Non-systematic Review:** A review of articles about a given topic that are not based on a systematic search or assessment. These articles may be helpful as background information.
3. Search and retrieve potentially relevant articles
   Using key words and inclusion criteria:
   - Search databases such as Medline, CINAHL, ERIC, PsycINFO
   - Seek advice from people who have expertise in the topic area for ideas about relevant journals, bibliographies and grey literature (unpublished or limited publication reports such as government released documents) that should be hand searched

4. Evaluate and select articles relevant to your search
   Using pre-set relevance criteria each article should be independently assessed, preferably by two people (raters).
   Some examples of relevance criteria are:
   - The intervention is possible in the clinical context
   - Consistently uses the outcome criterion/criteria as set out in the question
   - Use a control group (i.e., the study compares one group with another)
   - Describes a policy statement relevant to nurses
   - Uses an accepted qualitative research design (e.g., ethnography, phenomenology, grounded theory, discourse analysis, feminist analysis, participatory action)

   When raters make different decisions, they should discuss their opinions until they reach consensus.

5. Appraise the article for validity and generalizability
   All relevant articles (including systematic reviews, meta-analysis and qualitative research reviews) should be assessed for their methodological quality using evaluation criteria.
   Some examples of validity criteria are:
   - Study group selection (lack of bias)
   - Appropriate study design
   - Control of confounding variables
   - Clearly explained data collection methods
   - Reporting of survey response rates
   - Reporting of instrument reliability
   - Description of withdrawals and dropouts
   - Clearly explained search strategy for reviews
   - Qualitative research reports that include analysis appropriate to the research design
   - Data presented to support the analysis provided

   When appraising policy statements, it may not be possible to assess the validity or generalizability of the findings. However the first four steps (defining the question, developing an inclusion strategy, retrieving articles and assessing article relevance) should be followed.

6. Summarize the findings
   Report the findings and clearly describe the results of each step so that the reader can assess the comprehensiveness of the study and possibly replicate it. Keep a record of your search strategy or include it as an appendix to the report or use it in future updates.

Conclusion
To be credible, literature review procedures must be comprehensive, explicit, replicable and have minimal bias.

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September, 2002

References available upon request
References


