A major issue today in knowledge generation is that often researchers keep on undertaking research without critically appraising previous studies to inform themselves about whether or not a particular project should be undertaken, or to synthesise what is already known about a phenomena. This has the potential to waste valuable resources and results in study replications in many parts of the world, without justifiable reason. Moreover, nurses and other health professionals do not always have the time to carry out their own research, and so might rely on literature reviews from other authors, especially when considering innovations and developments in their practice. Literature reviews today are essential for the assessment and development of knowledge within particular research fields. If rigorously undertaken, and written and disseminated well, literature reviews are valuable for practitioners, researchers, educators, managers and policy makers in many fields. For example, managers and policy makers need to use a wide range of evidence for decision-making about policy and the organization of services; and because information is much more complex these days they need to have a systematic means to use a growing knowledge base to address complex phenomena. Moreover, high quality evidence requires that both qualitative and quantitative evidence are utilized to inform policy decision-making.

The purpose of our editorial is two-fold: firstly, to encourage researchers and academic advisors of research students to consider the implications of how and why they are developing the knowledge base of nursing and health care, and educating others to explore and develop knowledge from disseminated literature and other sources. Secondly, we want to encourage researchers to gain more knowledge and skills in the methodologies of systematic reviewing of literature, incorporate these skills into research practice, and then disseminate their findings as soon as possible.

Increasingly in international journals it is more difficult for would-be authors to get their narrative-style (or ‘traditional’) literature reviews published. This is especially the case for graduate students hoping to publish a review paper from their thesis. Why is this so? Narrative reviews are often criticised as a qualitative form of searching, where findings are descriptively presented and literature appraised without systematic processes to uncover, explain, and report evidence. A most important point is how bias can be eliminated in terms of the data available, and the quality of the primary research methodology when one tries to review the evidence related to the phenomenon of interest. The old approach of extracting information from literature in an ad hoc fashion is becoming dated and less acceptable to modern research practices (for example, what we call the “Smith & Jones (2001) said ‘...’ while Lee (2014) argued that ‘...’” approach to describing literature findings). Increasingly narrative or traditional reviews are less likely to be published in journals that want to save valuable publication space for more rigorous reviews that produce good evidence and clearly contribute to growing knowledge of the professions. For this reason the Pacific Rim International Journal of Nursing Research no longer accepts narrative or traditional literature reviews.

There are a growing number of different kinds of literature reviews incorporating various reviewing strategies and research foci. Sometimes the terms for these reviews are a little confusing for novices and experienced researchers alike: narrative or integrative or mixed-method reviews (combining reviews of qualitative and quantitative research findings), systematic reviews, meta-synthesis, meta-analysis, meta-study, and so on. Do
some reading on the Internet, books and journals. There is lots of information about these now, especially from the last 5–10 years. There are also a growing number of training courses about how to review literature so that the evidence is more compelling and rigorous. We argue that nursing educators need to ensure that research courses include content about the different kinds of literature reviews to educate future researchers about their utilization.

Systematic reviews

Learning how to conduct systematic reviews helps novices or researchers to be able to evaluate which ones are sound and are good sources when they need to utilize the recommendations or findings from them. Like any research methodology, you need to learn and understand more about systematic reviews before you embark on one. The methods used to develop, conduct and report a systematic review vary according to different authors or organizations that promote these. There are number of tools available online and software to help you review literature more methodically. For example, we urge you to look at the websites of two global non-profit organizations promoting systematic reviews: Joanna Briggs Institute and the Cochrane Collaboration. Also read recent articles from well-respected journals to understand more about systematic reviews and how to report them. As mentioned they must be rigorous and often take time for the novice reviewer or researcher. It is interesting to note that systematic reviews reported in top nursing journals have been found to vary enormously in methodological quality.

The number of published systematic reviews in nursing science has increased dramatically over recent years but what is a systematic review? This is an orderly method of evaluating and interpreting all available research findings regarding a phenomenon of interest, a research question or topic. The evaluation of the research findings is meant to be trustworthy and rigorous, and so it is important that the methodology (gies) employed can be examined through an audit trail. Although systematic reviews have their detractors, this form of literature reviewing is now becoming more commonplace, not only for quantitative data but increasingly for qualitative data.

As a systematic reviewer you need to document, through a clear process, how and where you got the information from the literature (what were your data sources); how you selected and critically appraised the quality of included studies; and how the extracted information was merged with other information and analysis. Importantly, there needs to be a clear description of the strengths and weaknesses of the research processes and findings being examined, as well as the review process itself.

More specifically the elements that authors need to report on for a systematic review include the background of the topic. How do they believe that systematic review on this topic is important? What is state of the art and how can systematic reviews can fill the gap of the existing knowledge? The objective(s) and review question(s) need to be identified clearly at the beginning. The inclusion criteria in terms of population or participants, intervention or phenomenon of interest, comparator and the outcome of interest in terms of quantitative evidence and the context in terms of qualitative evidence, need to be specified. The search strategy description, which includes the data sources that you got the evidence from, the year range, the language of publication, all need to be explained. The methodology section of a review report consists of how the reviewer critically appraised the evidence for methodological quality, how they extracted the data, and how analysis or synthesis of data occurred from the various data sources. The results need to be presented with a description of the studies that were included in the review, the meta-synthesis (for qualitative evidence) and meta-analysis (for quantitative evidence) displayed in a table. If you use systematic review software this table can be easily produced. The most important part of a review report, the ultimate goal of doing a systematic review, is the recommendation(s) you produce. This is because the evidence synthesised from primary research has the capacity to effect practice and practice changes, and helps to inform future research directions.
In conclusion we encourage all our readers to consider the merits of undertaking systematic reviews, as well as accessing them to inform practice, research, teaching, management and policy. Nurse educators and research advisors of graduate students are especially encouraged to help students to incorporate systematic reviews into their doctoral training as a first step to explore the literature on their thesis topic. For master students, where a smaller thesis study is required, a well-developed systematic review on a relevant topic or research question can be utilized as the total study since it is rigorous, time consuming and can add significantly to knowledge. Finally, nurse educators are encourage to utilize the findings from contemporary systematic reviews in their teaching practice. This will help to reduce the theory–practice gap in nursing and health care, by incorporating more recent evidence in curricula content than that found in dated textbooks and other sources of information.

Correspondence to: Patraporn Tungpunkom, RN, Dip. APPMHN, PhD, Director, Thailand Centre for Evidence Based Nursing, Midwifery and Health Science, Faculty of Nursing, Chiang Mai University, Chiang Mai, Thailand, 50200; Email: patraporn.t@cmu.ac.th

Sue Turale, RN, DEd, FACN, FRCNA, Co–Editor, PRIJNR and Professor, Faculty of Nursing, Chiang Mai University, Chiang Mai, Thailand, 50200.

References