Critically Appraised Topics (CATs): A method of integrating best evidence into general practice nursing

As we think about how to prepare for revalidation, one question we need to address is how to demonstrate that we are practising effectively and preserving safety: integrating best evidence into practice and recording the process can help us to do so.
successful CAT group format already undertaken by GPs and Allied Health Professionals at Keele University. (www.keele.ac.uk/ebp/).

The group identified several areas of need at their initial launch event:

• Further support was requested around literature searching, methodological and statistical understanding;
• A lead facilitator to coordinate and maintain momentum, and
• Good communication between members.

As an add-on to launch the group, new members attended a ‘CAT-in-a-Day’ training event in September 2015 where they were invited to complete a CAT within a day, with the support of academics. This event enabled the nurses to see the output of the CAT process, working through the CAT stages to deliver a ‘clinical bottom line’ answer to their question. The event answered a clinical question decided upon by the group and created the opportunity to deliver short ‘bite size’ skills training sessions around the stages of a CAT. The CAT-in-a-Day event enabled members to understand the process and benefits of being involved in a CAT group.

THE APPROACH
The group undertakes several stages when formulating a CAT. Once a patient or practice problem is identified within the group, an answerable clinical question is formulated that summarises the problem. The question uses a PI(E) CO framework (Population or Patient; Intervention (or Exposure); Comparison; Outcome) to identify search terms.

A search strategy is formulated from the question before searches are undertaken by the team with support from a member of the University’s Health Library to identify and collect the best available evidence. The evidence is then appraised for validity and clinical relevance using recognised appraisal tools (www.casp-uk.net; www.cebm.net/critical-appraisal/) in order to produce a clinical bottom line and generate a CAT.

IMPLICATIONS FOR PRACTICE
Dependent on the findings, consideration is then given to the adoption and implementation of new evidence to influence clinical decision making. Finally, if changes in day-to-day practice take place, evaluation of those changes in practice is essential.

Although the stages suggest this is a lengthy process, CATs can be generated and answered in a relatively short space of time, dependent on the amount and quality of the evidence available and the skills of the CAT group. Combining the clinical experience of practice nurses and nurse practitioners with that of clinical academics provides a cross-fertilisation of skills and knowledge. This allows clinical academics to keep up to date with current practice issues whilst nurses are supported to improve their literature searching, evidence interpretation and appraisal skills, and supported to translate evidence into clinical practice.

A CAT QUESTION
In patients requiring wound cleansing or irrigation is sterile saline solution superior to tap water in reducing or preventing wound infection and promoting healing?

PICO
Population – Adults requiring wound irrigation/ cleansing/ care
Intervention – Tap water
Comparison – Sterile saline solution
Outcome – Prevention/reduction of infection, wound healing

Databases searched:
Medline, TRIPS, Cochrane library

Key words searched:
P – Wound cleansing, wound irrigation, wound care, surgical wound, chronic wound, laceration, traumatic wound, ulcers
I – Tap water, non-sterile water
C – Sterile water, normal saline, saline solution, steri-pod, saline
O – Wound healing, wound infection, infection, reduction of infection

Results
One Cochrane systematic review (SR) (Fernandez and Griffith, 2012) and one Randomised Controlled Trial (RCT) (Weiss et al, 2013) were reviewed for their potential to answer the question. Several relevant abstracts were identified but were found to be part of the SR. The SR consisted of eleven trials of differing quality. The heterogeneity of the studies prevented the review from producing a meta-analysis but several outcomes were

A key component of nurses’ knowledge and skills in delivering quality health care is basing their practice on information emerging from the best evidence.
If changes in day-to-day practice take place, evaluation of those changes in practice is essential pooled across studies. Thus, the evidence suggests that tap water is neither superior nor inferior to saline solution for wound cleansing/irrigation.

Clinical bottom line
There is no evidence to suggest that saline solution is superior to tap water in promoting healing or reducing infection in wound cleansing. Evidence from a SR and an RCT suggest that tap water is unlikely to be harmful if used for wound cleansing.

Implications for practice
Nurses from the group are auditing and comparing local practice and examining the cost implications of replacing sterile saline solution with tap water in chronic wounds. Results from the local audit and the identified empirical evidence will be presented as a report for clinical leads within the local CCG to recommend changes in practice.

CONCLUSION
The process of forming a CAT group targeting practice nursing to answer locally driven clinical questions is a positive one. Creating clinical bottom line answers to specific questions can lead to positive changes to local practices and be incorporated into local pathways of care. Secondary benefits come from forming links between academic and clinical primary care settings whilst developing nurses’ research understanding and highlighting areas of future research in primary care.

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REFERENCES

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