Developing an Evidence-Based-Practice Information Skills session for nursing students at Diploma level

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Back in 2000, the School of Nursing at the University of Nottingham developed an Evidence-Based Module to be undertaken by all Nursing Diploma students. The module lasts 6 months and is undertaken in semester 2 of the Common Foundation year. The aim of the module is to introduce students to the concepts of evidence-based practice, research and the ethics of research as foundation knowledge for the critique and improvement of nursing practice.

In addition, the objectives of the module aim to enable students to:

- Identify and utilise relevant sources of evidence in the decision making process at a beginner level.
- Use portfolios to discuss the importance of evidence-based practice to effective nursing practice.
- Appraise literature relevant to evidence-based practice
- Gain insights into the research process including the ethics of research.

The method of delivery for this module utilises an enquiry-based approach to learning. Students work in small groups to study particular aspects of evidence-based practice and to interpret and examine the relevance of evidence to nursing practice. Students are also introduced to the research process and the ethics of research.

Students are expected to produce an assignment that explores the evidence base that directs best practice. They are encouraged to use a reflective model to explore an aspect of nursing care, with emphasis on the literature available to direct best practice

The literature review is the main focus of the assignment, asking for approximately 2000 words to be allocated to this part of the assignment. Sources of literature can be anything from books, journal articles, Internet sources etc. but at least two articles must be research based. Students are then asked to compare the findings of their review of the literature to their experience in practice, identifying what has been learnt and how this could direct best practice.

Library Involvement

Due to the literature review being such a major part of the assignment, the module leaders asked if library staff could produce an Information Skills session to be undertaken in the second semester to tie in with the Evidence Based Practice module. Library staff already provided a tour of the library, a general introduction to library services, an introduction to the electronic environment and literature searching skills using databases such as CINAHL during semester one. It was therefore a case of trying to develop a complimentary session that moved on one-step further.

To begin with, we looked at the current evidence-based practice training that we provide for academic staff and clinicians within the University Hospital. This training consists of looking at Evidence Based Resources such as the Cochrane Library and associated websites but also looking at filters that can be used when searching databases such as Medline to find particular types of studies, e.g. therapy studies, prognosis studies, aetiology studies etc. We decided that the

training material was far too complex for first year nursing students and not as relevant to a nursing discipline as to medicine.

We therefore decided to begin with a general introduction to Evidence Based Practice, explaining what Evidence Based Practice means and some of the reasons why it is important to take EBP on board. As much as possible, we aimed to make the training relevant to nursing. There is a range of literature relating to Evidence Based Medicine, but the idea of using the best available evidence is applicable to all disciplines and not even just health related disciplines.

We found the following quote by Di Censo which particularly describes what evidence based nursing is all about and we felt this summed up the whole process of evidence based nursing

"Evidence Based Nursing is the process by which nurses make clinical decisions using the best available research evidence, their clinical expertise and patient preferences, in the context of available resources" (Di Censo, 1998)

Evidence Based Practice is all about putting evidence into practice so we tried to keep a focus on the practical aspects of EBP by trying to put the theory into practice. We therefore used the book written back in the 1950s by Dr Spock, "Baby and Child Care" to highlight the importance of continually questioning theories and practice (Spock, 1958).

Dr Spock's book was an international bestseller and advocated among other things the laying of babies on their front whilst asleep. We explain that for many years this was accepted practice and it wasn't until the 1990s when a campaign was set up to look at the growing number of Sudden Infant Deaths, that new research was carried out. This new research found that laying babies on their back rather than on their front actually reduced the number of cot deaths.

We hoped that this would highlight that for many years, parents and practitioners were following the advice of an eminent Doctor, but had more research been done earlier some of Doctor Spock's theories may have been challenged earlier and the number of cot deaths may have been reduced. Of course, we stress that this is not the end of the story. Training sessions that we have carried out recently have coincided with news stories of particular types of mattresses being a potential cause of cot death, thus highlighting the need to constantly keep up-to-date with new research.

In addition, we thought it would be an interesting idea to find two journal articles discussing a similar subject area, but using very different research skills.

We decided to try and find articles from the Nursing Times as this was a journal that all students would recognise. After much searching, I eventually found two contrasting articles that I hoped would highlight the importance of critically appraising the literature that all students would understand, whether they had any prior knowledge of critical appraisal skills or not.

The theme of the articles was how to care for children suffering from asthma or an allergy whilst they are in the school setting. The first article came from an issue of the Nursing Times, back in the 1950s (Freeman, 1950). The School Doctor in this case had collected opinions from a School Matron who argued that children who were shown attention at home were more likely to suffer from some sort of allergy. Her conclusion was that children should be shown "calculated neglect" whilst at school and this would cure their allergies.

After students have read through a synopsis of the article, we ask them what their initial views are. In most cases, students will raise eyebrows, look horrified, laugh, say "this can't be true" etc. We usually decide en mass that we do not agree with this particular article.

The second article came from a 1990s issue of the Nursing Times (Humphrey, 1992). In this article, the School Nurse has recognised that there is a need for children to receive some support whilst in the School setting. She therefore sets up an asthma club where students can discuss their allergies and any stigmas they may have but where she can also monitor their use of inhalers. Her conclusion is that since setting up the asthma club, she has reduced the number of asthma attacks within School.

Although, still not a rigorous piece of research, the students can automatically see that this is better evidence than the previous article. We stress the difference between an article that is just expounding an opinion and that hasn't been based on any evidence and an article that has tried to do some sort of study and observed what happened before and afterwards. Hopefully this is highlighting to the students, even if only in a basic way, the importance of critical appraisal and also the importance of keeping up to date with research.

The teaching of critical appraisal is a difficult one. To begin with, we set the students a task of critically appraising a more research based article, based on guidelines. However, we didn't get a particularly positive response from this task. Because our training takes place in a computer lab, students automatically think that they should be using a computer and doing paper based tasks in groups does not work effectively. Also, we felt that the Academic Department would be better placed in teaching critical appraisal skills. It is a difficult situation as to who should teach this type of material. Whilst not wanting to tread on the toes of academics, critical appraisal does naturally follow on from literature searching and is part of the whole process of finding literature.

After piloting the training on two intakes of students, we decided to replace the critical appraisal task with a demonstration of the Cochrane Library. Despite ruling this out when we first developed the course, we now felt that the Cochrane

Library could be a useful tool for students to use, even at this early stage in their training. On the whole, this change met with better feedback and better utilised our own information searching skills. Inevitably the issue of critical appraisal is raised by demonstrating Cochrane, by focusing on the methodology used in research and the way that both the Cochrane Database of Systematic Reviews and the DARE database evaluate research. We highlight the fact that any searching within databases such as CINAHL or the British Nursing Index must be backed up by the students appraising the literature. Many students therefore liked the idea of the possibility of finding their article on DARE and accessing a ready made evaluation!

On the whole, students seemed to find searching the Cochrane Library an easier exercise than searching the OVID versions of CINAHL or BNI. However, there were problems with students who had not really got to grips with the basics of literature searching or those students who studiously managed to avoid using a computer up to this point. It was difficult to move on to the next stage of literature searching when some students had not grasped the basics.

To alleviate this problem, this year we offered voluntary training sessions on searching CINAHL and BNI prior to the Evidence Based Practice training sessions. Due to timetabling restrictions, students receive their initial literature searching training at the beginning of their course which we find is too early for many of them to take on board the concepts of literature searching or even understand how it may help them in their assignments. We hoped that by offering additional sessions, those students could get up to speed with the basics and therefore gain more from the Evidence Based Practice sessions.

Conclusions

As with all courses that are not assessed, attendance at the courses is patchy. However, those students that do attend appear to find the session useful and interesting, particularly if they can find a systematic review that is relevant to their

practice. We now also run the training with post-registration nurses enrolled on CPD courses and this has proven particularly successful as practising nurses often have particular questions for which they want to find evidence and the Cochrane Library is a perfect tool for many of them to use.

References

Freeman, J (1950). Allergy from the School Matron's Point of View. **Nursing Times.** 46 (22), pp. 576-577.

Humphrey, E (1992). A Lesson in Confidence. **Nursing Times.** 88 (9), pp. 31-32.

Spock, B (1958). *Baby and Child Care.* London. Bodley Head.

Di Censo, A, N Cullum and D Ciliska (1998). Implementing evidence-based nursing: some misconceptions [Editorial]. **Evidence-Based Nursing.** 1, pp.38-40. **cited in** Trinder, L [ed.] (2000) *Evidence-Based Practice: A critical appraisal.* Oxford. Blackwell Science, p. 119.