

## Update 13

### Information Overload??

Evidence based health care is increasingly emphasised in the schools of different health care disciplines, but few studies have yet assessed the ability of students to apply research evidence to clinical decisions. A randomised study, published in this weeks BMJ, has attempted to do just that. Its findings cast some doubt over the ability of students to successfully implement the evidence based approach.

Medical students, who had examined a standardised patient, were presented with related literature of varying methodological validity and varying levels of importance.

The results were worrying in that students' certainty about the correctness of their treatment decisions was not influenced by either the validity of methods or the interaction between validity and importance. The authors concluded that, through the evidence based approach, "These students may be learning to recognise salient results at the expense of considering how the results were obtained or whether the findings, required to apply the results, are present in the patient". (1)

Unfortunately there seem to be no quick fixes for coming to grips with the flood of information that health care practitioners and students are bombarded with on a daily basis - A few figures quickly reveal the scope of the problem. (2)

- More than 10 million scientific and technical documents are published annually.
- More than 7000 scientific articles are written daily and an estimated 2 million articles are published in the biomedical literature each year.
- If a health care practitioner were to read just 2 articles per day, within one year he/she would fall more than 60 centuries behind or, viewed another way, if he/she read everything of importance in mainstream health care he/she would need to read 6000 articles per day.
- It has been estimated that by the year 2000 the 'knowledge' of 1950 had doubled, but that by the year 2000 that knowledge was hidden in 30 times as many publications.

How might one cope in this sea of information??

I'd like to suggest that you improve your critical appraisal skills so you can better sort the wheat from the chaff. However, based on the findings of the study mentioned above, from this weeks BMJ, that solution may have its limitations.

I'm reduced to suggesting a few things that don't seem to work -

- If you were thinking of relying on the summaries provided by a few good textbooks, think again. The information housed in most textbooks is hopelessly out of date by the time most texts go to print.
- Traditional continuing education programs don't work.
- Furthermore, although it might be tempting to try to cover more ground by just reading abstracts, or just reading conclusions, you should be aware of an old maxim that says -

**The conclusion giveth, but the methodology taketh away.**

### References:

- 1) Schwartz A, Hupert J. Medical students' application of published evidence: randomised trial *BMJ* 2003;326:536-538.
- 2) Arndt KA. Information excess in medicine. *Arch Dermatol* 1992;128:1249-56.