original article

Psychology in medical curricula: "need to know" or "nice to know"?

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of Given the wealth research evidence demonstrating the importance of psychological and behavioural factors in a range of illnesses, and the influence of doctor-patient interactions on patient satisfaction and adherence, one would hope that psychology would be an entrenched and valued part of medical curricula. To practice effective evidence-based medicine, doctors must know how psychological and behavioural factors influence health and illness: medicine should be taught from a biopsychosocial perspective. However, this does not appear to be the case. The hidden curriculum makes a separation between the "need to know" biomedical sciences, and the "nice to know" behavioural and social sciences.

The past

The struggle to entrench psychology within medical curricula has been long (Litva & Peters, 2008). For example, the Flexner report (1910) recommended that doctors develop a socially-oriented perspective of medical practice. However, it was acknowledged that it was unlikely that psychology would be accepted in medical education unless its relevance to clinical practice could be demonstrated. As evidence of the importance of psychological factors in health, illness, and medical consultations accrued, the arguments for the inclusion of psychology in medical curricula should have become stronger. However, psychology did not become a core component of all medical curricula.

The present

In recent decades there has been a desire to change the perception of psychology from something that is "nice to know" - an interesting, but not essential component of medical education - to "need to know" an indispensable component of medical education (Peters & Litva, 2006).

In the United Kingdom, the General Medical Council signalled a shift in the status of psychology from "nice to know" to "need to know" with the recommendations in "Tomorrow's Doctors" (GMC, 1993), the revised edition of which (GMC, 2003) states that graduates must understand the influence of behaviour on health and illness, as well as normal processes of physical, intellectual and social development. They must also understand the



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psychosocial experiences of patients and how these affect medical consultations, treatment, and recovery.

The last decade has seen the redesign of the curricula of many existing medical schools and the establishment of "modern" curricula in newly-created medical schools. The old curricula - in which students began their clinical training only after completing several years of study of basic biomedical sciences - are being replaced by new curricula - in which students have early exposure to real patients and are taught relevant behavioural and social sciences from the first year of their education. However, different medical schools decide which aspects of psychology they will teach, and incorporate psychology in different ways.

The push for a standardised psychology curriculum for medical education in the UK was recently boosted when the British Psychological Society (BPS) endorsed the "Psychology Core Curriculum for Undergraduate Medical Education" proposed by BeSST (Behavioural and Social Science Teaching in Medicine: www.heacademy.ac.uk/besst/ PsyCoreCurric.asp). The BPS anticipates that its endorsement of the core curriculum will facilitate the establishment of evidence-based methods of teaching psychology to medical students. However, the existence of a core curriculum (let alone its endorsement and application) is unusual in Europe.

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Recent research in Europe has demonstrated low levels of acceptance of psychology within medical education. For example, a survey of medical students in Lithuania, Poland, and Russia found that while many agreed that psychology is important in medical education, close to half were unsure or disagreed (Jakušovaitė & Blaževičienė, 2007). As one lecturer told me:

> "They do like the hard core medical stuff, but not in their view the indirectly related topics. Mostly they find it boring"

There is also evidence that the low position of psychology in a hierarchy of medical education becomes more entrenched as students progress. Verhoeven et al. (2002) found that with each year, growth in students' psychological knowledge trailed behind growth in knowledge of clinical sciences, suggesting that the curricula and/or students gave diminishing attention to psychology as they moved closer to graduating.

However, it is not all bad news: many medical students do appreciate the importance of psychology, and many enjoy studying it. This is especially the case for students who choose psychology options within their courses. However, all students need to understand the importance of psychological knowledge, not just students with an interest in psychology.

The future

After reviewing their experiences of teaching behavioural sciences in Israeli medical schools, Benbassat et al. (2003) identified three pressing issues: (1) a need for a clearly defined hierarchy of learning objectives that prioritises the acquisition of clinically relevant skills; (2) a need for integrated curricula based on the biopsychosocial model to facilitate links between behavioural sciences and clinical practice; and (3) a need to identify and train lecturers with expertise in applying behavioural sciences to medicine. Each of these needs will be addressed in turn with reference to my recent communication with academics teaching psychology in medical schools in Europe.

Clinical relevance

There is a need to demonstrate clearly the relevance of psychology to students and those people responsible for developing curricula. One academic I spoke to expressed his frustration:

"Psychology is not a structural part of the medical curriculum ... and that's a bloody shame."

The academics I spoke to agreed that medical students prefer psychology subjects which have obvious links to pathological processes (e.g. psychiatry and neuropsychology), but are less keen about "common sense" subjects such as health beliefs and illness perceptions. An important part of changing this situation is replacing the focus on theory and models characteristic of much academic psychology with a focus on applied knowledge and skills. Lecturers cannot simply hope that their lectures to psychology students will be suitable for medical students. One experienced lecturer remarked:

> "You will lose the battle immediately if you start with theoretical models or with concepts or with theories. They will be bored within a second [...] We do not get away with teaching them formal psychology. It's very applied."

This opinion reflects the findings of a British study which found general agreement among lecturers that clinical application is more important than "theory for theory's sake". (Russell et al., 2004, p.413). As one lecturer said:

"After all, we're training doctors rather than psychologists - so it's actually demonstrating to the students how psychology is relevant to medicine and being a doctor, and how it can contribute to helping them to become better doctors."

However, specialised resources are needed to accomplish this. Several of the academics identified a need for more resources and teaching aids specific to the context of teaching psychology to medical students (see also Russell et al., 2004). In particular, there was a clear need for specialised textbooks applying psychology to medicine.

Integrated curricula

It was agreed that to make psychology more relevant, it is essential that psychology is an integral part of the curriculum, rather than something that is added onto a biomedical core. Favour was given to "vertically integrated" curricula whereby early psychology sessions are used to establish an underpinning conceptual framework which can be built upon in subsequent courses.

Many medical schools now have curricula in which clinical skills are addressed from the first year of study. In some schools, students are out in the \triangleright

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"real world" of patients and practitioners within the first weeks of their course. Psychologists teaching in medical schools with traditional programs felt that early exposure to the "real world" would enhance the perceived relevance of psychology and help to enhance understanding of psychological concepts and skills:

> "Exposing them to real patients in the first week of their education ... will help medical students to understand more that real patients are much more difficult than they think."

In addition to changes to program structures, several academics identified assessment practices as a barrier to integration:

"We have one or two questions [on psychology] that are part of the total assessment ... And the students are very good at calculating and they think 'Well, this is 2 marks from the 100 or 150', and they just don't read it."

I have had similar experiences where students skipped the entire block of questions assessing psychology content. These students presumably calculated that by not revising psychology they could spend more time revising the biomedical sciences, and still pass. One way to overcome this problem would be to insist that students pass psychology <u>and</u> anatomy <u>and</u> cell biology, etc. rather than simply achieving an overall passing grade.

In addition to the experiences described above, other lecturers identified difficulties integrating modes of assessment preferred in psychology and biomedical sciences:

> "The modes of assessment that we use are very limited ... psychology is often best assessed by some sort of discursive answer rather than a multiple choice question, which is a very blunt instrument."

Multiple choice questions (MCQs) are well-suited to assessing "surface learning" of facts, but are inappropriate for assessing "deep learning" of underlying concepts and their applications (Biggs, 2003). Discursive short answer questions are well suited to assessing medical students' understanding of theoretical concepts and their clinical applications. However, students find such questions more difficult than MCQs, and this may mark psychology as "different" from the biomedical sciences with which it should be integrated.

Expert lecturers

Because many aspects of psychology are perceived to be 'common sense', there is a tendency for medical educators to assume that they can be taught by people without specialized knowledge or training (Russell et al., 2004). However, one of the barriers to improving medical students' engagement with psychology is a lack of lecturers who specialise in applying psychology to medicine:

> "[We need] psychology staff who are really committed to the medical world ... not psychologists who are experts in conditioning, but psychologists who are experts in applying conditioning."

There is a need for more academic posts in medical schools for behavioural scientists with the knowledge and skills to identify and teach relevant behavioural sciences. Behavioural scientists also need to be better represented in curriculum design teams.

Much may be gained by developing networks similar to BeSST in the UK in other parts of Europe or indeed, establishing a European network for academics teaching psychology as applied to medicine:

"It would be good to have an international or European society that would exchange books and papers or whatever and ideas on assessment ... and jokes ... that would help our lives a lot."

A European network was seen to be a potential source of material and emotional support. The latter may be particularly useful given that many psychologists teaching in medical settings report feeling somewhat alienated from both the medical establishment and their core discipline of psychology (see Russell et al. 2004).

The British academics I contacted reported that BeSST had been an important source of information and support. They also highlighted the importance work of BeSST in developing the core curriculum endorsed by the BPS. Academics in other parts of Europe appreciated the role of an organisation like BeSST, and felt that it would be useful to develop a European core curriculum for psychology in medical education. ►

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"It would help my group and the other groups in this country to have an agreed upon curriculum for various years. It's a very good idea."

Conclusion

Recent years have seen growing awareness of the value of psychology applied to medicine, and growing inclusion of psychology in undergraduate medical curricula. Although progress has been made in the three domains discussed in the latter part of this article, it is clear that more work is needed. The establishment of a European network of academics teaching psychology in medical schools may be an important part of ensuring that across Europe the full range of clinically relevant aspects of psychology are properly integrated into medical curricula and taught by expert lecturers. I would be pleased to hear from people interested in establishing such a network.

References

- Benbassat, J., Baumal, R., Borkan, J. & Ber, R. (2003). Overcoming barriers to teaching the behavioural and social sciences to medical students. *Academic Medicine*, 78, 372–380.
- Biggs, J. (2003). *Teaching for quality learning at university* (2nd ed.). Maidenhead: Open University Press.
- Flexner, A. (1910). Medical Education in the United States and Canada. Stanford, CA: Carnegie Foundation for Higher Education.

General Medical Council. (1993). Tomorrow's doctors. London: GMC

- General Medical Council. (2003). Tomorrow's doctors (revised). London: GMC
- Jakušovaitė, I. & Blaževičienė, A. (2007). The approach of medical students towards studies of the humanities and social sciences. *Medicina* (Kaunas), 43, 580-586.
- Litva, A. & Peters, S. (2008). Exploring barriers to teaching behavioural and social sciences in medical education. *Medical Education*, 42, 309-314.
- Peters, S. & Litva, A. (2006). Relevant behavioural and social science for medical undergraduates. *Medical Education*, 40, 1020-1026.
- Russell, A., van Teijlingen, E., Lambert, H., & Stacy, R. (2004). Social and behavioural science education in UK medical schools. *Medical Education*, 38, 409-417.
- Verhoeven, B., Verwijnen, G., Scherpbier, A. & van der Vleuten, C. (2002). Growth of medical knowledge. *Medical Education*, 36, 711–717.