

Section 1 – The value of psychology in health professional education

Dominic Upton

THE NHS relies on a range of professional staff – from nurses, midwives and medical staff through to a range of professions known, collectively as the Allied Health Professionals (AHPs). The latter group work with children and adults of all ages who are ill, have disabilities or special needs. Their particular skills and expertise can often be the most significant factor in helping people to recover movement or mobility, overcome visual problems, improve nutritional status, develop communication abilities and restore confidence in everyday living skills.

The education of nurses, midwives and allied health care professionals in the UK is guided by professional bodies (see Table 1) and the over arching Health Professionals Council (HPC)/Nursing and Midwifery Council (NMC). Each of these professional bodies provides regulatory frameworks and guidance notes on the educational content of the degree level programmes that underpin the included profession.

The professional and regulatory bodies oversee the educational requirements of the individual professions and suggest the key topics and curriculum content that have to be both studied and completed in order for the individual student to be considered a proficient practitioner in that area. These regulatory frameworks and the guidance from the professional bodies all mention the need for psychology to be contained within the educational experience. For example, the dietetic student is expected to (HPC, Standards of Proficiency, 2003):

‘understand sociology, social policy, *psychology*, public health and educational methods relevant to the dietetic management of individual clients or groups.’

Another form of guidance for health care professional educational programmes are the benchmark statements produced by the Quality Assurance Agency (QAA). Subject benchmark statements set out expectations about standards of degrees in a range of subject areas. They describe what gives a discipline its coherence and identity, and define what can be expected of a graduate in terms of the techniques and skills needed to develop understanding in the subject. These exist for all the health care professions mentioned in Table 1. So, for example, the Occupational Therapist student is expected to (QAA subject benchmark, 2001):

‘understand the relevance of the social and psychological sciences to health and health care.’

Similarly, students of prosthetics and orthotics (QAA subject benchmarks, 2001) are expected to:

‘...have an awareness of the psychological and cultural factors affecting his/her patient's rehabilitation. If these factors affect adversely the treatment plan the graduate should be able to recognise the necessity to refer on to other disciplines.’

From a psychology perspective, it is positive to see that the subject is incorporated within the health care curriculum and that this appears across the broad range of health care professions working in the NHS today and educated within the Higher Education sector. However, the statements provided by the QAA, HPC and professional body are relatively broad and there is little specific material or detail. The guidance is provided in general terms and thus allows for the individual educational provider to interpret this into specific psychological topics. Because it is devolved to individual academic providers

Table 1: Professional bodies and regulatory bodies.

Profession	Professional Body	Regulatory Body
Arts therapists	British Association of Art Therapists	Health Professional Council
Biomedical scientists	Institute of Biomedical Science	
Chiropodists	Society of Chiropodists and Podiatrists (SCP)	
Clinical scientists	Association of Clinical Scientists	
Dietitians	British Dietetic Association (BDA)	
Occupational therapists	British Association of Occupational Therapy	
Operating department practitioners	Association of Operating Department Practitioners	
Orthoptists	British and Irish Orthoptic Society (BIOS)	
Paramedics	The British Paramedic Association	
Physiotherapists	The Chartered Society of Physiotherapists	
Prosthetists and orthotists	The British Association of Prosthetists and Orthotists	
Radiographers	The Society of Radiographers	
Speech and language therapists	Royal College of Speech & Language Therapists	
Nursing	Nursing and Midwifery Council	
Midwifery	Nursing and Midwifery Council	
Health visitors	Nursing and Midwifery Council	

(at both an institutional and individual tutor level) then there is some disparity in the nature and provision of material. However, as a general rule there is, unsurprisingly, a greater focus on other topics within the curriculum for health care professionals. Why is this? Why isn't psychology a core subject? Why shouldn't psychology be a central focus within the health care curriculum? This paper will explore these issues, with a focus on the place of psychology within the health care professionals' curriculum. Specifically:

- What is curriculum content?
- Why is curriculum content important?
- Studies of curriculum content.
- How should the curriculum content be chosen?

What is curriculum content?

Obviously, before we explore the nature of the curriculum content of the health care professionals it is important to know exactly what we mean by curriculum content and how it maps onto the current provision. At a broad level, 'content' can be defined as the amount of time allocated to areas such as basic sciences, clinical sciences, clinical and communication skills, research methods or psychology. Although when asked the question – Which is the most important topic to a client, patient, student, practitioner or educator? – the answer will probably be 'all of them' (although there is no evidence that this question has ever been asked) there may be indirect ways of assessing this. For example, the total amount

of time allocated, or the proportion of the total curriculum time for each area, is one way to measure the relative emphasis on different content areas. So, for example, if we discover during the first year of a three-year degree course that 25 per cent is devoted to research, 25 per cent to psychology and to communication skills and the remaining 50 per cent being devoted to the basic biological aspects then both the tutor and the student can see how the importance has been defined by course designers.

There is also the potential to define content at much finer levels. So, for example, we could sub-differentiate 'biology' into anatomy, physiology and biochemistry. Alternatively, we could examine the years of a course in which particular topics are delivered and assessed. For example, is psychology simply taught in the first year and does not count towards the final degree classification? Is anatomy taught across all three years? Again, it is not difficult for the student or tutor to see the relative importance of these topics.

The dominance of anatomy, biochemistry and other basic science disciplines in the early years of the undergraduate curriculum arose partly as a consequence of the research developments in these areas, and the promise that they would have a significant impact on health care delivery. Whether this amount of curriculum content is necessary is now the source of considerable debate. Do students want this much information on these topics, do they need this much information on these topics? Similarly, do patients want information on anatomy and biochemistry, do they need this information? Would they prefer a consultation with a practitioner that could communicate, rather than one that knew the underlying physiological or biochemical processes underlying the condition but could not communicate?

Obviously, this is not to deride the clinical skills of the health care professional. But, for example, diabetes is caused by a biological abnormality in the pancreas – in

particular in cluster of cells called the islets of Langerhans. Islets are made up of two types of cells: alpha cells, which make glucagon, a hormone that raises the level of glucose in the blood, and beta cells, which make insulin. I know this information because: (a) I had a very traditional education; (b) I like pub quizzes; and (c) I have access to the internet. But do people with diabetes want to know this? Does a dietitian need to know this? Or a podiatrist? Or the majority of other health care professionals that come in contact with a person with diabetes? Surely, the person wants to know how best to treat, or control, the condition. The person with diabetes wants the practitioner to know how to communicate, to understand the psychosocial consequences of diabetes and how these can be managed, how best to control the consequences of the condition. They do not need or want a biochemical, anatomical or physiological lesson.

Obviously, the counter argument to this is that in order to understand how to treat something then practitioners need to know the underlying biological substrates and mechanisms. But, if this was the case, why do we treat schizophrenia, primary generalised epilepsy, or other conditions which we are still unclear over the exact underlying physiological cause?

There is increasing acknowledgment that undergraduate health professionals should be taught only what is relevant for *effective* professional practice. On this basis, the argument could and should be that psychology should take pride of place within the undergraduate curriculum. Psychosocial variables have been recognised as key to health and illness. The importance of behavioural factors in health and illness has been recognised not only by students, researchers, practitioners but also by government and policy makers (Wanless, 2004; Abraham & Michie, 2005). Is it not time that educators similarly appreciated the increased importance of psychology in the traditional health professional timetable? Obviously, psychology is

mentioned in all the Standards of Proficiency guidance highlighted above but how this translates into educational provision is rather limited. Hence, the amount of psychology may be over ridden by other more 'pressing' issues. On some podiatry courses, for example, there may be 20 to 30 hours of psychology across the whole curriculum whereas there will be, perhaps 10 times this amount for core biological material. The last sentence also raises the issue of language – often psychology is relegated to the sidelines and is described as 'supplementary' or 'additional' material, whereas other material is described as 'core' or 'fundamental'. For example, if we look at the quote provided earlier from the HPC Standards of Proficiency (2003) we note that dietitians are supposed to 'understand sociology, social policy, psychology, public health...' we can see that psychology is not clearly identified and emphasised but is merely a part of a smorgasbord of other 'supplementary' activities. This may be telling in terms of the importance attached to psychology by the HPC and may communicate this to educators and, ultimately, students. But why is the curriculum content important?

Why is curriculum content important?

Curriculum content is important for a range of issues. At the outset, and most simply, it is reasonable to assume that undergraduate curriculum content (along with the process) will influence how well health care professionals are prepared for their professional roles (Schofield et al., 1994) – one would hope so at least! Hence, the curriculum content would impact on how much they know their levels of clinical competence, and their beliefs about what is important for the provision of good clinical care. Furthermore, content areas allocated more time in the curriculum are likely to be perceived by students as more important than those allocated a lesser amount of time.

It also has to be noted that the unintended curriculum has important implica-

tions for practice and for patient care. Ewan (1998) reported that there was a relationship between time at medical school and an inability to see the importance of psychosocial factors in health and illness – explained by the predominantly biomedical clinical experience. Hafferty (1998) maintains, 'Not all of what is taught during medical training is captured in course catalogues, class syllabi, lecture notes and handouts, or the mountains of documents compiled during accreditation reviews. Indeed, a great deal of what is taught – and most of what is learned – in medical school takes place not within formal course offerings but within medicine's hidden curriculum.' The hidden curriculum includes those elements of education that implicitly impact on students' attitudes. Hence, if the timetable is structured in such a way as to emphasise the core (sic) biological skills rather than the supplementary (sic) behavioural sciences then this will communicate the relative importance to the student. Although there is limited research evidence in allied health care professionals, it is probably safe to assume that the actions and messages are similar to those exposed in the medical curriculum.

Not only is this important, however, but changes in curriculum content can have an impact on resources at a number of levels whether these be human resource, physical resource, research facilities or the more nebulous 'power base'. It is likely, therefore, that there will be continual political struggles in the curriculum with those currently predominating fighting for the status quo, and some would argue, irrespective of the educational need.

One example of this tension was the move to include social and behavioural sciences in undergraduate medical curricula in the 1970s on the back of the research evidence linking these disciplines to explaining health and illness. The introduction of these new professional groups proved difficult to achieve and highlighted a number of issues (Sanson-Fisher & Rolfe, 2000). For example, the established disciplines (e.g.

those within the basic and clinical sciences) were reluctant to relinquish time or resources within the curriculum since it was perceived that these 'softer sciences' carried a low educational priority. In consequence, student access time was difficult within an already crowded curriculum and the new study areas were relegated in importance and time. This had a further implication: there was a limited staff base given that access to students was limited. Given that the new disciplines were usually small, there was limited capacity to undertake a substantive programme of research quickly. The small discipline resource base, limited teaching allocations, lack of research prominence, and the dissatisfaction expressed by some members of traditional disciplines, may have reinforced impressions that behavioural sciences were not as important as the more traditional disciplines. Although this highlights the historical perspective of a medical education curriculum, the same process has anecdotally, been reported as happening within the health care professions.

Of course, it is hoped, that education is now in more liberated and understanding but this may not be the case. At a recent seminar organised by the Higher Education Academy – Health Science and Practice (October 2005) the delegates – most psychology tutors on health care professional courses – highlighted their isolation. They reported that they were often viewed as 'service teachers' who were separate from the 'core' team and were expected to design and deliver the psychology input within a slot not always planned in conjunction with the rest of the course. Obviously, it would be a sweeping generalisation to state that this was common across all professions, across all courses and across all institutions, but it was certainly a thread evident from representatives teaching on amongst others – physiotherapy, podiatry, medicine and nursing courses. Most of the delegates also called for a more systematic review of what was taught on health professional courses, and for this to be guided by a psychologist. Currently

there is little information on what psychology is taught on health professional courses, how it is taught and by whom. So what evidence guides curriculum design?

Studies of curriculum content

Although it would be expected, and hoped, that curricula are based on some evidence, preferably research-based (Davies, 1999) in reality this is often not the case and much of the curricula content is based on personal preference and individual idiosyncrasy. Although health care teaching staff are increasingly trained to make clinical decisions based on available evidence, when they put on their teacher's hat they seem to abandon their critical thinking about 'what works'. For example, a search of the databases using the descriptors of behavioural health education, curriculum content, evidence-based teaching, and teaching strategies in behavioural health yields almost no articles. There are a few articles theoretically supporting reflective learning, and the importance of teaching critical appraisal skills, for example. However, there are few, if any, relevant literature relating to the content of the health care practitioner curriculum.

There are some studies that have explored the topics that should be included in certain health care curricula. For example, Ah-Chan et al. (2001) reported on a survey of New Zealand ophthalmologists and GPs, who were asked to identify the topics that they felt should be presented in undergraduate education. The focus was on the specific skills associated with being an ophthalmologist (e.g. measuring visual acuity, papillary reflexes and so on). Interesting as the results were there was a notable absence: there were no psychology or communication skills included in either the survey questionnaire of the final report.

Rolfe et al. (2002) in a survey connected with the medical curriculum reported on a survey of recently qualified medical practitioners in New Zealand. This survey explored the necessity of knowing what

medical conditions needed to be understood and what skills were needed in the clinic, but again no psychology was included. Interestingly, that in terms of core practice, the graduates felt that the most important things to learn about were (along with medical examination techniques of various conditions) 'Managing a violent or un-co-operative patient' (74.8 per cent), and 'Handling difficult patients' (64.2 per cent), 'Obtaining consent to manage an incompetent patient' – there was little mention of communicating with the normal (sic) patient, or with the patients' relatives, or the importance of psychological techniques in clinical practice.

This being said, however, the study highlighted some interesting findings, not the least of which was the fact that newly qualified medics were able to discriminate among their learning needs and identify many areas which they think need improvements. Indeed, the respondents identified a number of learning needs which may imply that medical students feel they are inadequately prepared for practice. Furthermore, it was of interest that the emphasis from the recent students was that they felt unprepared in how to deal with communication and psychological issues: surely an indication of a need to increase or improve in this area?

These studies raise a number of issues. Is it enough to know how to diagnose, but unable to communicate efficiently in order to obtain the information? Is it enough to know the underlying physiological, anatomical or biochemical disorders but are unable to understand and appreciate the influence of psychological factors? Is it sufficient to know how to treat a condition but unable to communicate this to the patient/client?

These studies have mainly focussed on the medical curriculum rather than other health care professionals. The previous literature on the undergraduate health professional education has largely focussed on the methods employed to teach them (e.g. Sanson-Fischer et al., 1991) and there has been little, if any, literature exploring the validity of the content of these programmes.

There has been some interest in whether teaching methods produce different educational outcomes such as knowledge, satisfaction or clinical competence.

But why is the research into curriculum content lacking? Obviously, some would argue that it is not a priority since it appears as if graduates have adequate levels of competence. While an appealing argument, it appears inconsistent with research indicating levels of errors in existing patient care (Bhasale et al., 1999; Flaatan & Hevroy, 1999), and high levels of patient dissatisfaction with aspects of care provision (Ellis & Tattersall, 1999; Kutner et al., 1999). Furthermore, Greiner and Knebel (2003) assert that today's health care workers are not being adequately educated or evaluated to ensure that patients receive safe, high quality care. If we assume that the content of the current programmes is not satisfactory, how should we choose the content?

How should curriculum content be chosen?

The optimal way of determining curriculum content would be to use an evidence-based approach (Davies, 1999). Evidence-based education refers to two distinct concepts. First, it refers to the level of evidence underpinning the content presented within the curriculum. And second, it refers to the level of evidence supporting the types of teaching practices and models used to foster learning (Davies 1999; Harden et al., 1999; van der Vleuten et al., 2000). Currently, health care professional education, rather than being evidence-based, appears to be experience-based or perhaps even exposure-based (Parsall & Bligh 2001). Experience-based education is where decisions regarding clinical education and the associated competencies are based on what has always been done, and exposure-based education is based on the premise that if the students are immersed in enough hours in clinic they will eventually become competent.

But where should we derive our evidence from? The strength of evidence can be

viewed at a number of different levels – the highest level being the summarised results from a series of RCTs. However, there are no such studies available exploring the value of psychology and other topics in the health care professional curricula. In the absence of any evidence, it may be necessary to use opinion-based processes to decide on curriculum content. We should, of course, be wary of assuming that expert opinion is our best or only option for decision making in the field of health education. However, in all opinion-based approaches the results depends on who is included and who responds. Whose values should we put our trust? There has been considerable interest since the turn of the century to incorporate the views of consumers or clients in service review (Geller et al., 1999). If this is applied to undergraduate health professional education, a number of relevant consumer groups can be identified. It could be:

- Patients/clients;
- Practitioners;
- Students;
- Expert professionals.

One advantage of opinion-based processes is that they can involve a range of stakeholders and facilitate ownership of the results – so perhaps we should use all of the key stakeholders highlighted. However, depending on the process, groups with more power or greater representation in terms of numbers can influence results. Obviously, groups not included do not have an opportunity to express their views. Hence, it is likely that expert educators will have a more powerful opinion than those at the ‘sharp end’ – the student or, ultimately, the patient or client.

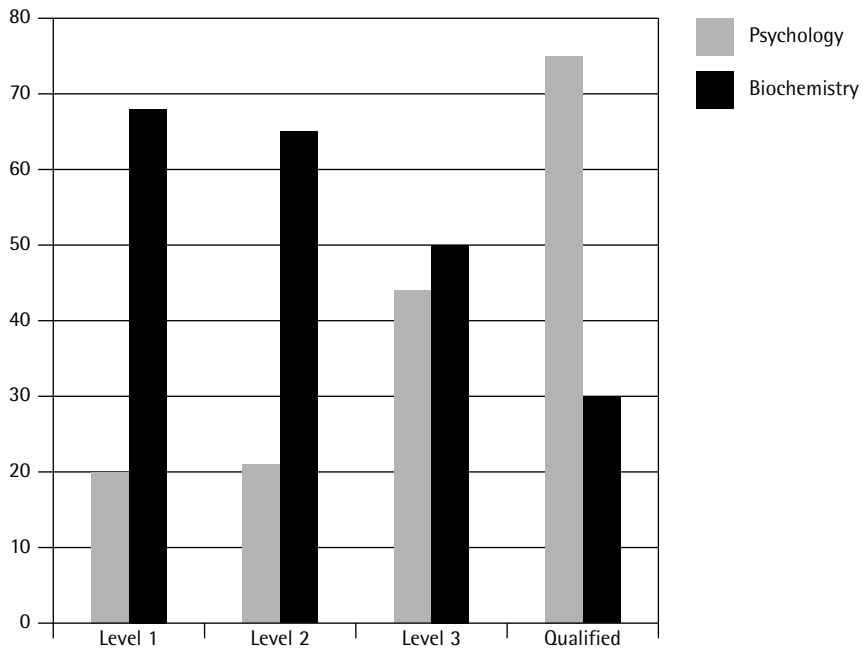
Current students are the most obvious consumers of an undergraduate course. However, they may not be aware of the tasks that will confront them as clinicians so may not be able to make an informed judgement. Although there is considerable time, effort and resource currently being invested in obtaining student views on the learning experience this has mainly focussed on the process rather than the content. An alterna-

tive is to seek the views of recently-graduated professionals as they will have the most recent perspective on their undergraduate experience, their current clinical role and the potential marriage between them. Rolfe et al. (2001) have reported on a survey of 400 recently-qualified medics and suggested that they are able to nominate and prioritise areas that they consider are required for practice.

Obviously, there are also senior clinicians who may also have valuable views about the core competences that are required for course graduates. These clinicians are responsible for the ongoing training of graduates, and are in a position to observe skills in the clinical environment. However, perhaps they are more conservative in their views and may be in more likely in a wish to retain the ‘status quo’.

An interesting finding has been reported by Upton (2005) in a study of dietetic students across the four years of their study, and subsequent first year of practice. The study asked for the value of psychology and of various other topics in the dietetic timetable to be rated on value to the student. The results, as highlighted in Figure 1, indicate that at the outset students did not consider psychology to be of value whereas biochemistry was considered for more important. However, during the years of study there was a change in opinion: students came to recognise the value of psychology and thought that the biochemistry was of less value. An interpretation of this result is that at the outset psychology was not seen as value due to the timetable commitments and the ‘hidden’ curriculum as indicated above. The timetable, which was heavily loaded in favour of biochemistry (three times as much time compared to psychology) indicated to the students the perceived value of biochemistry compared to psychology and this was reinforced by educators and timetable designers. However, as the students progressed through the course and became more involved in clinical activity, the students’ appreciated the value of

Figure 1: Value of psychology and biochemistry across the years of study.



psychology in their communication and dealing with patients and clients.

Patients/clients are also an important consumer group. While patients will not usually be in a position to make decisions about how much specific discipline content is necessary in a curriculum, they are able to provide useful feedback on the care they receive from graduates. The results of patient satisfaction surveys suggest that patients will usually report high levels of satisfaction (Williams et al., 1998). They also report that patient groups are able to identify communication as a source of dissatisfaction (Donovan et al., 1989). Patients often want more information about a range of issues including the cause of their illness, its prognosis without treatment, the different treatment approaches, and some of the costs and benefits of each treatment option. This type of information can be used to argue for greater emphasis on communication skills training in an undergraduate course

(Schofield et al., 1994). Which takes us back to the central argument of this paper: patients (the ultimate consumer in the health care system) want a greater emphasis on psychological skills training.

Conclusion

Ultimately, therefore, we have evidence that allied health care professionals have a curriculum bereft of psychology. We have the evidence that the allied health care curriculum is over stocked with basic science. We have evidence that patient satisfaction is driven by the communication and psychological skills of the practitioner. We have evidence that psychosocial factors are key to health and illness. We have evidence that psychological factors are of central importance to patients and students. If it quacks like a duck, if it walks like a duck, then it safe to assume that it is a duck. The current health care professional curriculum looks, sounds and acts like a duck.

Those traditional, status quo loving educationalists will argue that in order to deal effectively with their professions they need the basic sciences; they need the core clinical skills. But does this bring success? It is irrelevant how good the clinical skills of the practitioner if they cannot communicate their intervention to the patient/client. It is irrelevant how good an understanding of basic science a practitioner has if the patient's condition is caused by poor health behaviour. It is irrelevant how strong the professional's core clinical skills are if they cannot maintain a good therapeutic relationship (or indeed understand what this means) with their client.

Based on the material presented in this paper it is argued that in order to better serve our students and their patients we need to increase the psychological content of health care professional training. Rather than being viewed as a 'supplementary' subject, psychology should be core. It should be seen as a golden thread that runs through the whole of the degree and as a core commitment in the continuing professional development of practitioners. Educational tutors and timetable designers need to recognise both the current and the future needs of patients and tutors and increase and maximise the psychological content of their programmes.

Correspondence

Professor Dominic Upton

University of Worcester,

Henwick Grove,

Worcester WR2 6AJ.

E-mail: d.upton@worc.ac.uk

References

- Abraham, C. & Michie, S. (2005). Contributing to public health policy and practice. *The Psychologist*, 18, 676–679.
- Ah-Chan, J.J., Sanderson, G., Vote, B.J. & Molteno, A.C. (2001). Undergraduate ophthalmology education survey of New Zealand ophthalmologists, general practitioners and optometrists. *Clinical and Experimental Ophthalmology*, 29, 416–425.
- Bhasale, A.L., Miller, G.C., Reid, S.E. & Britt, H.C. (1999). Analysing potential harm in Australian general practice: An incident monitoring study. *Medical Journal of Australia*, 169, 73–76.
- Davies, P. (1999). What is evidence-based education? *British Journal of Educational Studies*, 47, 108–121.
- Donovan, K., Sanson-Fischer, R. & Redman, S. (1989). Measuring quality of life in cancer patients. *Journal of Clinical Oncology*, 7, 959–968.
- Ellis, P.M. & Tattersall, M.H. (1999). How should doctors communicate the diagnosis of cancer to patients? *Annals of Medicine*, 31, 336–341.
- Ewan, C. (1998). Social issues in medicine: A follow-up comparison of senior year medical students' attitudes with contemporaries in non-medical faculties. *Medical Education*, 22, 375–380.
- Flaatan, H. & Hevroy, O. (1999). Errors in intensive care unit (ICU): Experiences with an anonymous registration. *Acta Anaesthesiologica Scandinavica*, 43, 614–617.
- Geller, J.J., Brown, J.M., Fischer, W.H., Grudzinskas, A.J. Jr. & Manning, T.D. (1999). A national survey of 'consumer empowerment' at the state level. *Psychiatric Services*, 49, 498–503.
- Greiner, A.A. & Knebel, E. (Eds.) (2003). *Health Professions Education: A bridge to quality*. Washington: The National Academies Press.
- Hafferty, F.W. (1998). Beyond curriculum reform: Confronting medicine's hidden curriculum. *Academic Medicine*, 73, 403–407.
- Harden, R.M., Grant, J., Buckley, G. & Hart, L.R. (1999). BEME Guide No. 1: Best evidence medical education. *Medical Teacher*, 21, 533–561.
- HPC (2003). *Standards of Proficiency Dietetics*. HPC: London.
- Kutner, J.S., Steiner, J.F., Corbett, K.K., Jahigen, D.W. & Barton, P.L. (1999). Information needs in terminal illness. *Social Science and Medicine*, 48, 1341–1352.
- Parsall, G. & Bligh, J. (2001). Recent perspectives on clinical teaching. *Medical Education*, 35, 409–414.
- QAA (2001). *Subject benchmarks: Occupational Therapy*. London.
- QAA (2001). *Subject benchmarks: Prosthodontics and Orthotics*. London.
- Rolfe, I.E., Pearson, S., Sanson-Fischer, R.W. & Rigland, C. (2001). Identifying medical school learning needs: A survey of Australian interns. *Education for Health*, 14, 395–404.
- Rolfe, I.E., Pearson, S.A., Sanson-Fischer, R.W., Rigland, C., Bayley, S., Hart, A. & Kelly, S. (2002). Which common clinical conditions should medical students be able to manage by graduation? A perspective from Australian interns. *Medical Teacher*, 24, 16–22.
- Sanson-Fischer, R.W., Redman, S., Walsh, R., Mitchell, K., Reid, A.L.A. & Perkins, J.J. (1991). Training medical practitioners in information transfer skills: The new challenge. *???* 25, 322–333.
- Sanson-Fisher, R. & Rolfe, I. (2000). The content of undergraduate health professional courses: A topic largely ignored? *Medical Teacher*, 22, 564–567.
- Schofield, M.J., Walsh, R. & Sanson-Fischer, R. (1994). Training medical students in behavioural and cognitive strategies. *Behavioural Change*, 11, 6–18.
- Upton, D. (2005). *How is psychology taught and to whom?* Presentation to the Higher Education Academy- Health Sciences and Practitioners, July.
- Van der Vleuten, C.P.M., Dolmans, D.H.J.M. and Scherpbier, A.J.J.A. (2000). The need for evidence in education. *Medical Teacher*, 22, 246–250.
- Wanless, D. (2004). *Securing good health for the whole population*. London: HMSO.
- Williams, R.M., Coyle, J. & Healy, D. (1998). The meaning of patient satisfaction: An exploration of high reported levels. *Social Science and Medicine*, 47, 1351–1359.