

The science of changing providers' behaviour: the missing link in evidence-based practice

Behavioural sciences can make a substantive contribution

THERE IS CONTINUING EVIDENCE of the failure to translate clinical research findings into existing practice: it is thought that 30%–40% of patients do not receive treatments of proven effectiveness and, more disturbingly, 20%–25% of patients receive care that is not needed or is potentially harmful.^{1,2} However, the mere existence of evidence is not sufficient to ensure the adoption of best practice into routine clinical care.³ It is not surprising, then, that there is a growing interest in making knowledge transfer from research into clinical practice more effective.⁴

Many approaches to changing clinical practice revolve around idiosyncratic beliefs and tradition rather than scientific evidence.⁵ Evidence is needed on which interventions are the most cost-effective for changing clinical practice and healthcare delivery.

A recent systematic review of 235 evaluations of guideline dissemination and implementation strategies concluded that “the majority of interventions observed modest to moderate improvements in care”.⁴ However, the quality of reporting of important aspects of the studies reviewed (such as details of the study interventions and contextual factors) was poor, and often the rationale for the choice of intervention was obscure. Further, only 30% of studies provided any economic data. The results of this review should therefore be interpreted cautiously, as the methodological quality of

many of the contributing studies, and of research in this area more generally, is poor.⁴

There is growing interest in developing strategies to encourage the adoption of best evidence into practice, including efforts to change behaviour. The effectiveness of these efforts is likely to depend on a complex interaction between the nature of the clinical activity to be changed and the costs and benefits of adopting the change for the healthcare professionals, patients and organisations involved.

At a recent National Institute of Clinical Studies meeting, involving multidisciplinary experts in the field of promoting the uptake of research evidence,⁶ these issues were discussed. Delegates agreed that behavioural scientists, working within multidisciplinary teams of researchers, are important players in the process of understanding how change in healthcare providers' behaviour may be achieved. Behavioural science refers to a broad range of disciplines, including psychology, sociology, management science and education. This disciplinary group may contribute in several ways to the scientific study of changing healthcare providers' behaviour.

Use of behavioural change theories. Behavioural scientists have developed a number of theoretical frameworks to explain how behavioural change is achieved. These include

persuasive communication, diffusion of innovation,⁷ social influences, adult learning theory⁸ and social cognition.⁹ Such models can provide useful overviews of issues to be considered when attempting to change healthcare providers' behaviour. The development of theoretical models for predicting when targeted individuals are likely to respond to different types of intervention would be of considerable benefit.

The development of accurate and acceptable measures. Without adequate measurement of relevant clinical behaviour it is difficult to provide accurate feedback to health professionals and to evaluate the effectiveness of any interventions. Behavioural science has addressed issues about how human behaviour can be effectively, accurately and acceptably measured. Techniques include the use of direct observation, examination of the accuracy of self-report by healthcare providers and patients, as well as more controversial strategies such as the use of "simulated" patients. The discipline has also been involved in developing a wide range of other potentially relevant outcome measures, such as satisfaction scales, patients' perceived needs, quality of life and other indices that may be used to measure the quality of healthcare delivery.

Examination of the prevalence of certain behaviours, and the incentives and barriers to the adoption of best-evidence practice. Behavioural science has a long history of exploring variables that may explain why individuals and groups may or may not engage in specific behaviours. There has also been a substantive examination of variables correlated with the performance of behaviours of interest. Strategies to determine the potential prevalence of different behaviours include the use of qualitative group methods such as focus groups, self-completed questionnaires, open-structured interviews with key informants, and a wider representation of the target group. Behavioural science has also examined methodological strengths and weaknesses of the various approaches designed to determine barriers and incentives.

Development, implementation and evaluation of interventions designed to change human behaviour. Strategies effective in changing human behaviour have been derived from educational research, health promotion, and other fields in behavioural science. Change strategies that have been evaluated include modifying individuals' knowledge, attitudes and skills; the social environment surrounding the individual; and the organisational or sociopolitical structure in which individuals operate. The last includes changes in the financial costs and benefits, organisation structures, and more effective ways of communicating information. While the majority of this research has not focused specifically on healthcare providers, many of the principles are likely to be generalisable to healthcare providers.

In essence, the behavioural sciences can make a substantive contribution to our understanding and implementation of behavioural change in healthcare providers. This is critical to the process of translating evidence into clinical practice. To achieve the potential that the behavioural sciences can offer to this process, we need to actively involve behavioural scientists in efforts to change provider behaviour and evaluate such interventions. As in other areas of

healthcare research, the involvement of multidisciplinary teams working on a common problem is more likely to achieve positive results.

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