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Editorial Comment

Self-efficacy: understanding a psychological concept which can improve the quality of health care

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EVIDENCE-BASED MEDICAL PRACTICE DEPENDS upon the randomised placebo controlled trial. What the trial does is dissect the specific effect of a physical intervention from the non-specific, or placebo, effects inherent in any interaction between physician and patient. It is important to realise that, whilst we would wish all medical interventions to have a specific effect, many do not, and all have an inherent placebo component.

The effect of the placebo is extraordinarily powerful, and comprises at least three elements: expectation, conditioning and self-efficacy. These elements are psychological formulations which the physician can readily manipulate to improve the outcome for the patients. In the accompanying article,[1] Bar-Mor and his colleagues have investigated the roles of self-efficacy and physical activity in the setting of adolescents with congenital cardiac malformations. In this comment, I will outline the background and context of self-efficacy, a concept which is crucial to the success of the 'patient-centred' model of care.

History and rationales

In early 1970, when psychologists were rejecting many of the principles of behaviourism, the trend was for behaviourists to extend principles of learning to include cognitive processes. The most influential of the theories at that time was described as social learning theory, or social cognitive theory as it later became known by Bandura.[2,3]

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Self-efficacy is a psychological concept developed from these theories which has, in recent years, been adopted by health professionals because it has been found to be relevant when attempting to improve the management of patients and evaluate cost effectiveness in health care.

Once this research was established, it was demonstrated that beliefs in efficacy are important moderators in a number of health-related behaviours. To put it simply, the more strongly the patient believes that they are capable of doing something, the more likely it is that they can do it. Thus, self-efficacy broadly refers to the degree to which patients feel able to affect their disease process and its management.

We now know that self-efficacy is a phenomenon that can not only be identified in patients, but which can be enhanced and augmented by their carers. Research has repeatedly demonstrated that patients with high self-efficacy feel in control of their situation. The outcome of their illness will thus be positively affected. Conversely, paternalistic medical practice, with little involvement of the patient in the decision-making process, is now known to produce less positive outcomes.

In a recent thorough review, Crow et al,[4] evaluated in detail the role of self-efficacy and its use in the delivery of health care. The conclusions that were made incorporated the findings of many studies, and it was evident that the relevance of enhancing self-efficacy could not be ignored.

This has contributed to the development of 'patient centred care'. This is the process whereby patients are appropriately informed at all stages of their illness and medical management. The flow of information between patient and physician is such that the patient is empowered to make appropriate decisions as and when necessary.

The research in this area has developed a consistent sound theoretical basis, and has provided

interesting and relevant findings in relation to improving the cost effectiveness of care through the relatively simple techniques of increasing the awareness of involving patients in their management through skills training and other related techniques.

Definitions

Self-efficacy can be divided into patient-related self-efficacy, and process, or treatment-related self-efficacy.

Augmenting the confidence of the patient contributes to self-efficacy, and is part of the skills of good practice. Thus, enhancing self-efficacy is one of the most important components of any health care intervention. Based on this, patient-related self-efficacy has been developed into two categories: interaction self-efficacy and management self-efficacy.

Interaction self-efficacy

This is promoted when patients are more involved in making decisions regarding their care. It is achieved by actively involving the patient in the whole process of their management.

Management self-efficacy

This is promoted by teaching the patient skills for coping with, or managing the effects of, treatment or the disease.

Treatment related self-efficacy has been subdivided into three categories for the purpose of systematic research.

Process expectancy

This refers to expectations about medical interventions created for patients either with no knowledge of an unfamiliar medical procedure, or when they are presented with inaccurate expectations about the process involved.

Positive-outcome expectancy

This refers to expectancies created by practitioners when they convey their own faith and enthusiasm in treatment, thus going further than simply providing accurate information about what experience a patient can expect.

Negative-outcome expectancy

This refers to those expectancies created when the practitioner conveys uncertainty in a procedure, or when possible negative consequences are conveyed to the patient.

How is it possible to augment self-efficacy?

It is evident that there is overlap between the concepts outlined above. In practice, awareness of the psychological principles involved can open up challenging and exciting new ways of interacting with, and helping, patients.

Augmenting interaction self-efficacy is important when there is no single clear course to be taken in the management of a particular case. What is important for the individual patient? What are their fears and worries? What do they want from their treatment, and perhaps more importantly, what do they not want? Having ascertained these facts, the physician can give a clear description of the available options for treatment, and then help the patient choose what is right for them.

Whilst this interaction is taking place, management self-efficacy can be increased, by the practitioner providing the patient with skills to cope with their condition, or with the possible treatments which they might choose.

Process expectancy can be augmented, thereby augmenting self-efficacy, by providing the patient with clear, digestible information, and checking back with them that they understand clearly what has been said.

Findings justify the creation of positive outcome expectancies in conjunction with administering medical treatment where the practitioner is confident that the treatment needed is effective. Positive expectancies are created when the physician is able to communicate enthusiasm in relation to the treatment. The enthusiasm must, however, be backed up by adequate personal audit, and patients must be appraised of potential morbidity or mortality where appropriate.

Future directions

Augmenting self-efficacy produces improved outcomes across a range of health care interventions. The challenge now is for the research to identify the most effective interventions in specific clinical circumstances.

It is important to evaluate current research in this field with caution. It has been common for studies to be correctional in design. Whilst significant correlations between pairs of variables are frequently reported, the amount of variance which any research accounts for in predicting behaviours remains generally not reported. This may respect the need for a simplification in reporting of subjective phenomenons, but the cost may be too high.

There is a need to invite comprehensive discussion whenever complex behaviour is the

subject of investigation to invite alternative theoretical accounts of any finding, particularly when significant levels of variance are revealed in the sample.

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