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## Mind over matter—implications for general practice

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or centuries, it has been recognised that the mind has power over the body, and experience of external stimuli is subjective and variable. This paper will explore some of the evidence for this, and seek to apply the phenomenon to a health care setting.

In the New Zealand (NZ) primary care environment where patients are increasingly critical of the service they receive, where retention of capitation base is important, and recruitment of appropriate new patients is desirable and, most importantly, where efficient delivery of quality health care is paramount, a good under-

## CORRESPONDENCE TO: Andrew P Corin

CentralMed, 434 Devonport Rd, Tauranga, New Zealand andrewc@centralmed.co.nz standing of the relationship between expectations and experience is vital.<sup>1</sup>

Patients in primary care are increasingly mobile, and many will seek provision of their health care from various sources, depending on the specific problem. This may be due to a desire for confidentiality, an opportunity to seek specialised care, or merely a geographical or temporal convenience. The fourth reason for patient movement is dissatisfaction with care provision, from phone to reception to nursing and doctor involvement. The advent of fully capitated general practice funding in NZ is encouraging patients to seek all their primary care needs from the one provider, as subsidy is enrolment-specific to one practice.

If general practitioners and primary care business owners are able to understand and cooperate with patient expectations, they will have better opportunity to manage patient movement and financial risk, as well as provide improved health outcomes.

Many studies have been undertaken to demonstrate the psychological relationship between the brain's expectation of a sensory input, and the actual report of that experience.<sup>2-7</sup> Most famous are the experiments involving wine tasting and pain stimulation. In these various blinded experiments, different subjects reported variable experiences despite identical sensory challenges. Being told that you are drinking an expensive wine, or about to receive a reduced pain impulse, results in tasting a fine wine or feeling less pain, despite the wine being poor or pain level unchanged, respectively. The conclusions are that the pre-frontal cortex modulates the actual sensory assessment to fit with a pre-determined expectation. Indeed, Magnetic

Resonance Imaging (MRI) analysis demonstrates complex cerebral processes involved in the association of expectation and subjective pain experience. In this study subjects with a positive (more optimistic) expectation of the pain experience reported reduced pain levels. MRI has also been used to demonstrate that altering a subject's expectation of a specific taste will modify brain activity in that related region of the cortex, and so subjectively alter the taste experience.

The relevance to primary care is that if GPs able to understand the expectations of their patients and over time create an expectation set that is one of satisfaction and wellness, the level of health, compliance with treatment and patient retention will be maximised.<sup>8</sup>

More specifically, the following example may help:

Ms D is a 46-year-old woman. She is eight weeks post-laparoscopic cholecystectomy, and suffering severe right subscapula pain, with nausea, weight loss and insomnia. She has been thoroughly assessed in recent weeks by her surgeon as an outpatient and then an inpatient for six days, with no cause for her pain found. She was treated with strong analgesia, without improvement.

Her sister, who is a patient of mine, suggested that a second opinion from me would help her. Examination of Ms D was normal, apart from her anxious and exhausted appearance.

My suspicion was that there was a complex neuralgia process here, heightened by her anxiety, and I recommended cessation of her tramadol, and started a low dose of gabapentin. Reassurance was an important part of the consultation.

At review one week later Ms D reported almost full resolution of her pain, insomnia and nausea after taking one gabapentin dose! At that consult she also confessed to having significant preoperative anxiety regarding the outcome of the surgery.

I believe that the dramatic resolution of her pain syndrome was largely mediated by her state of mind, and the expectation created at the consultation of improvement. In addition, I suspect that her atypical pain behaviour following surgery may well have been due to her anxious expectation of a poor outcome from the operation.

There are two issues which should be considered and addressed by a GP concerned about the realities of maintaining a successful medical practice. Firstly,

and waiting environment, being given opportunity to talk and be listened to by the doctor, having clear communication and a management plan from the doctor, a focus on preventative medicine, and having confidence in the professionalism and skill of the doctor. Patients gave higher priority than GPs to availability and accessibility of the practice and seeing the same GP.<sup>10</sup>

A review of the literature on patient priorities found that the most common priorities were informative-ness, 'humane-ness', and competence/accuracy. Other aspects included involving patients in decisions, time for care, availability/accessibility, exploring patients' needs, good communication and availability of special services.

## Part of an effective clinical and consultation relationship involves assessing expectations and agendas, and educating the patient where those expectations and agendas are inappropriate

they should seek to have an understanding of the expectations of their patients. This will often not be immediately obvious or volunteered, and a relationship of trust may be necessary before honest expectations are volunteered. Secondly, they should aim to create a set of expectations that are associated with patient satisfaction, and thus achieve business growth, patient health and staff gratification. The expectation of the patient can reasonably be influenced by their understanding of the dynamics of the medical practice they attend. If the staff consistently provides prompt, informative and professional health care, this will become the expectation and, indeed, the experience, even when occasionally the quality of care is substandard.

Issues to consider here are acceptable access and cost, acceptable waiting times

Webb and Lloyd identified two strong factors which influenced the management behaviour of GPs in two North London practices. The first was the patient's level of anxiety. If a given patient presented with a problem about which they were particularly anxious, they were more likely to receive either a prescription or hospital referral. The second was patient expectation. This suggests that the patient also communicated the expectation of either prescription or referral.

A medical practitioner needs to balance patient expectations with the realities of clinically appropriate and responsible practice. It is obviously not appropriate to prescribe antibiotics at every patient request, nor order every test a patient demands, nor refer without restraint. Part of an effective clinical and consultation re-

lationship involves assessing expectations and agendas, and educating the patient where those expectations and agendas are inappropriate. The GP and their team are well placed and generally respected opinion-holders, such that in the space of a consultation unreasonable expectations can be identified and modified.

Newsomel and Wright present an excellent summary with exhaustive references relating to the theories of satisfaction.13 In particular, the 'zone of tolerance' seems to fit the medical model. Here patients have a zone of expectation from the health care contact. If the actual service delivery falls within this zone, or above it, then satisfaction is experienced. The more important the health experience, the more narrow the zone of tolerance. If the expectation levels are too high, the patient is more likely to be dissatisfied more often. However, the theory propounded to under promise to achieve higher levels of satisfaction is not well supported.

Clearly, it is important to understand what the zone of expectation is for a patient, reinforce this when it is appropriate, and seek to adjust it when inappropriate. GPs, by virtue of their training and experience, are generally adept at adapting style and structure in the consultation to suit the needs of the patient and doctor. Thus, it should present no significant challenge to suggest that the GP assesses the expectations of the patient on a regular basis, and adjusts the interaction accordingly. Two patients who receive identical care may evaluate the consultation differently, according to their expectations.14,15

A recent US survey of physician attitudes to prescribing 'placebos' revealed a reasonably widespread acceptance of the role of exploiting the patient's expectation of a treatment by using a pharmacologically neutral substance to achieve a therapeutic outcome.<sup>16</sup>

The opening gambit of a consultation such as 'What can I do for you?' or 'how can I help today?' provides opportunity for the patient to verbalise and GP to assess the agenda and expectation set for the interaction. In addition, during and at the end of the consultation there can be opportunity to reinforce the management message. This can take the form of simple repetition, or may include positive suggestion such as 'I am sure you will improve with this medication'. Whilst this is not medico-legally binding promise-making, it can be a very powerful tool to turn the pre-frontal cortex activity into one that supports the optimal health goals of the doctor and patient.

In summary then, understanding patients and their expectations from the health care experience is important in targeting intervention and management. Such an understanding will provide opportunity for maximising the success of health care, from building location and design, to staffing and training, to education strategies and models of chronic care delivery, as well as to the nuances of the individual consultation.

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