



## EDITORIALS

## CHRISTMAS 2017

# Hope is a therapeutic tool

Don't be afraid to use it

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Everyone who has been a patient, or accompanied a relative to see a doctor, recognises the importance of the doctor-patient relationship. At its heart is the patient's need to understand what is wrong, be understood, and be offered hope. Although it is common sense that hope is a fundamental element of overcoming any illness, the clinician's role in encouraging hope has been framed as one of the distinctive elements of the "art of medicine," relying on personal experience and instinct.<sup>1-4</sup> However, hope is in fact a practical therapeutic tool that can be optimised just like any other management approach.

Despite the considerable attention given to the doctor-patient relationship during medical training, hope has traditionally been neglected. Many doctors still don't have a clear idea about how to use hope as therapy while at the same time being realistic and truthful about uncertainty and the potential for poor outcomes. Communication skills training tells us to avoid saying, "You are going to get better," because there is rarely such certainty and, in the case of poor outcomes, unfulfilled expectations will erode trust. Clinicians are apprehensive about offering false hope and can end up ignoring the question of hope altogether. This is particularly challenging for those of us caring for patients with chronic and progressive diseases—we fear looking incompetent when we have no curative treatments to offer.<sup>5</sup>

## Hope versus optimism

When tackling these difficulties, it is important to differentiate hope from optimism. Optimism is an individual's confidence in a good outcome, whereas hope is a goal oriented way of thinking that makes an individual invest time and energy in planning how to achieve their aims. It consists of two interactive components: firstly, pathways or routes to achieve the desired goals and, secondly, agency, or the individual's goal directed intention and persistence.<sup>6</sup> For example, an optimistic person with asthma would expect few attacks and not carry their inhaler,

while a hopeful person would aim for good outcomes but still make sure their inhaler was available if required.

A study using the Children's Hope Scale showed that hope was a powerful predictor of adherence to asthma treatment in children—measured by electronic monitoring of the use of their metered dose inhaler.<sup>7</sup> Another more recent study<sup>8</sup> followed young people (aged 10-16 years) with type 1 diabetes over six months to explore the associations between patients' hope and optimism—measured with validated scales—and treatment adherence. The authors found that change in hope (but not change in optimism) was a significant predictor of improvement in both glycaemic control and self monitoring of blood glucose levels.

## Biological explanation

Therapeutic benefits are biologically plausible if hope is viewed as a kind of placebo effect. We know that placebos are sometimes associated with therapeutic benefits across a range of diseases. Effect sizes can be large, as observed in studies of pain management and Parkinson's disease, and a neurobiological basis is emerging. Studies using positron emission tomography and functional magnetic resonance imaging (MRI) suggest that placebos are associated with a change in neurotransmitter levels and activation of brain regions involved in reward and attention.<sup>9</sup>

Hope has been shown to protect against anxiety, and a recent study of functional MRI in 231 adolescents reported that it also mediates the association between anxiety and activity in the orbitofrontal cortex.<sup>10</sup> This part of the cortex aids motivation, problem solving, and goal directed behaviours—brain functions relevant to pathways and agency, the two core elements of hope.

Can clinicians influence a patient's hope? There is preliminary evidence that brief, hope based intervention using guided imagery, goal-directed and pathways thinking can be effective in pain management.<sup>11</sup> However, doctors often believe that

patients expect substantial improvement or cure and do not always see a patient's capacity to process disability and adapt their treatment goals.<sup>5</sup> This is evident in the treatment of schizophrenia, for example. Whereas psychiatrists are preoccupied with reducing symptoms and attaining previous functioning, the patient's perspective is more on achieving independence and maintaining hope. Encouraging hope means negotiating a clear understanding of the aims of treatment through dialogue, mutual understanding, and a process of adjustment and acceptance.<sup>5-13</sup>

Hope may be one of most powerful therapeutic aspects of the doctor-patient relationship.<sup>2-13</sup> Framing the concept as part of the art of medicine risks making it intangible and potentially unattainable. Understanding that hope is a measurable psychological construct, associated with a plausible neurobiological mechanism and clinical benefits, should help clinicians prioritise the required skills and use hope to its full potential in all clinical encounters.

Competing interests: We have read and understood BMJ policy on declaration of interests and have no relevant interests to declare.

Provenance and peer review: Commissioned; externally peer reviewed.

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