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Subjective Dermatology Outcomes: How You Frame the Question May Not Be That Important After All

How you frame a question may determine the response. For example, if someone asks me about my mild eczema by preceding the question with certain value-laden phrases indicating that it should be perceived as a negative “medical” problem, then I am perhaps more likely to respond in a stereotypical way that agrees with the researcher – that my condition is a problem that impacts on many aspects of my quality of life (whereas in reality it is a mild problem that I only think about occasionally). Even questions such as “how long have you been suffering from eczema?” implies that I am *suffering* from a “disease”, a question stem that may colour my subsequent responses about the effects of eczema on my quality of life. And if the questions had been preceded by a film about other people with quite severe eczema, would that have affected the way I then answer a questionnaire about quality of life? You would think that there would be lots of research to show how such influences would affect my responses, but the reality is that very little scientific work has been done to explore the effect of such “framing biases” and how they might affect responses to commonly used patient-reported outcomes in dermatology, such as the Dermatology Life Quality Index (DLQI).

In this issue, Murray & Rees (1) report on some fascinating experiments to test the degree to which affective biases can result in different results for the DLQI, the Global Health Question and the visual analogue scales that seem to be so popular in dermatology studies for assessing symptoms such as pain and itch. They studied an opportunistic sample of 215 patients, mainly with psoriasis, who were attending phototherapy, and conducted three experiments to determine how words or images could affect questionnaire responses. They conducted three experiments that measured responses to subjective health outcome questions after randomizing groups of patients to: (i) mood-affecting words such as “worry”; (ii) watching a film clip (or not) about living with a severe skin problem; and (iii) a reframing of the DLQI questions using more neutral words. The overall hypothesis was that framing biases would change the way people respond to health questions, but the results were surprising.

Despite their best attempts at influencing the responses by prior visual information or word framing, there were no significant differences between any of the groups in terms of median scores for DLQI, the Global Health Question and visual analogue scales. Thus, although scales such as DLQI might have their limitations (2), perhaps these “subjective” outcomes are more robust than we might imagine. That does not mean that we should endorse blatantly leading questions such as “You are feeling better, aren’t you?”, but it does mean that agonizing over the neutrality of language used in some patient-reported health outcomes may be unnecessary.

What was good about this study was the way in which the authors strove to minimize biases by randomizing

groups of patients to the interventions, including the order in which the framing biases were delivered, and by describing them in a sufficiently non-specific way in the patient information so as not to unblind the study hypothesis. The main study limitations, acknowledged by the authors, were the limited power to exclude smaller but important differences, and the fact that the experiment might not have reflected how the questions might be delivered in real life. Hats off to *Acta Dermato-Venereologica* for publishing what some might incorrectly interpret as a “negative” study – I can just imagine other journals turning down the manuscript because “none of the results were significant”, thereby contributing to the publication bias in favour of “positive” studies, which distorts the scientific record within the biomedical literature.

My own reflection on this interesting paper is that it adds more impetus to the need to ask patients what they think about our treatments in studies. I was recently involved in a review of 125 randomized controlled clinical trials published in five leading dermatology journals that regularly publishes trials, to determine how many trials mention patient-reported outcomes and how prominently they were mentioned (3). Disappointingly, only a quarter of trials mentioned patient outcomes, and even when such information was recorded, it was often poorly and incompletely reported and given low prominence within the trial report. It has always puzzled me why doctors are so reluctant to ask patients what they think of the treatments that we use; perhaps there is a general belief that subjective equates to unreliable and not valid, whereas in reality many of the so called “objective” scales that are used in dermatology are very subjective to elicit and clinically difficult to interpret (4).

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*Hywel Williams, Professor of Dermato-Epidemiology,
Centre of Evidence-Based Dermatology,
King's Meadow Campus, University of Nottingham,
Lenton Lane, Nottingham NG7 2NR, United Kingdom
E-mail: Hywel.williams@nottingham.ac.uk*