EDITORIALS

Promoting evidence-based non-drug interventions: time for a non-pharmacopoeia?

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A compilation of effective non-drug treatments could help increase their uptake in clinical practice

In 2004, the Journal published a randomised controlled trial of graded exercise for chronic fatigue syndrome (CFS). As with several similar trials, this trial found that graded exercise was an effective intervention. But what is graded exercise? In response to numerous emails from both doctors and CFS patients who wanted further details of the exercise program, the authors of the study published a second article that provided the additional “how to” details and addressed different scenarios. I now keep the pdf file of this second article on my general practice computer to give to, and discuss with, CFS patients. The difficulties in accessing information on this simple, non-drug intervention are in stark contrast to the helpful tools available for prescribing pharmaceuticals: formularies, prescription pads, and pharmacies.

The problem is not unique to graded exercise. In a review of studies selected for the journal Evidence-Based Medicine, we found that the adequacy of treatment descriptions in trials and systematic reviews appeared to be worse for non-drug treatments than drug treatments, with only about 30% of non-drug treatments (compared with 66% of drug treatments) being directly replicable from the information given. Fortunately, obtaining additional information from references, searches and authors increased this figure to around 65%. The poor descriptions and lack of easy reference may help explain the slow uptake of some effective non-drug treatments. For example, while the Epley manoeuvre for benign positional vertigo has been known as a simple effective physical treatment for over a quarter of a century, a German survey suggested that it is used in only 8% of affected patients. Though many general practitioners seem to have heard of it, informal surveys of GPs at large educational seminars have shown that few know how to do it and fewer actually use it.

For medicinal treatments, the need for an encyclopaedic collection with clear descriptions of how to prepare them was recognised long ago. Pharmacopoeias date back to at least the first century AD, when Pliny catalogued the herbal medicines in use in ancient Rome (Box). In the United Kingdom, the first list of approved drugs with information on preparation methods was the London pharmacopoeia, published in 1618. In 1864, the British pharmacopoeia (http://www.pharmacopoeia.gov.uk) was published to try to harmonise pharmaceutical standards through the merger of the London, Edinburgh and Dublin pharmacopoeias. Today, we cannot imagine the practice of medicine without a pharmacopoeia and a formulary.

Outside pharmaceuticals, there seems to have been much less compilation and standardisation. This is not for lack of effective non-drug treatments. For example, a survey of 1464 randomised...
controlled trials supported by non-commercial sources in the UK between 1980 and 2002 found that more than half were for non-drug treatments, such as education, surgery, diet, exercise, and physical and psychological therapies. Although some of these are picked up by the relevant professions, many seem to fall between professional boundaries. For example, “bibliotherapy” (providing patients with informative reading material on self-management of their condition) has been used successfully in treating depression and irritable bowel syndrome.

What would a formulary of non-drug therapies look like? Although an extensive compendium of all non-drug treatments would be worthwhile, for clinicians a non-drug formulary should be restricted to interventions shown to be effective by randomised controlled trials or other definitive evidence. As with drug formularies such as the British national formulary (http://www.bnf.org/bnf) or the Australian medicines handbook (http://www.amh.net.au), a non-drug formulary should also contain information on indications, contraindications and precise details of treatment. To be sufficient for a practitioner to replicate the treatment delivered in the trials, the treatment details will commonly need to be longer than the dosage, duration, and titration information typically given for pharmaceuticals. However, with the move to online information access, there are now minimal restrictions on space. Many journals now allow supplements, including video material, to be included with online versions of research articles. For example, the Journal of Visualized Experiments (http://www.jove.com) was established to capture the intricacies of life science research by providing online videos of experimental procedures. For non-drug interventions, it is essential that details of procedures and treatments are not copyright to a specific journal but are made freely available.

Although pharmaceuticals have been central to many breakthroughs in medicine, non-pharmaceutical advances — such as behavioural therapy, exercise therapy and nutrition — also offer many benefits, but their uptake has been less. For GPs, but also for the many discipline specialists, a non-drug handbook would be an important tool to foster a more balanced use of evidence-based treatments. I would like one on my clinic desk tomorrow, please.

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References
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Transcutaneous Electrical Nerve Stimulation (TENS): TENS is a non-invasive analgesic technique that is most often used for pain control and occasionally for neurological and psychiatric conditions, such as drug/alcohol dependency, headaches, and depression. A systematic review combined data from three RCTs in individuals with dementia and found no significant effects on sleep disturbances or behavioral symptoms, evaluated immediately after treatment or at six-week follow-up.