

How Effective is that Treatment?



As a patient and a consumer of the medical community, one should always be informed of the good, the bad, and the ugly out there with respect to available treatments. For example, if you are seeking treatment for your low back pain, you need to know what treatments are the most effective or helpful for your type of condition. Many of us turn to Dr. Google for answers, while others seek the opinion of their healthcare provider(s). Either way, you can empower yourself to find the answers that satisfy your curiosities by following some key steps. Look for information (from medical websites, medical journals, or your healthcare provider) that can answer the following points:

- 1) What type of trial/study was used to provide the information regarding treatment effectiveness? Randomized controlled trials are at the top of the list when it comes to providing strong evidence as to the effectiveness of a treatment.
- 2) In studies that look at how effective treatments are, there are often two groups of patients in the study: one that received the treatment of interest and one that received little to no treatment. Both of these groups should be similar in key characteristics at the start of the study (ie: age, gender, duration of symptoms, etc). If not, the results of the study may be biased (not telling us the real truth).
- 3) In studies that examine how effective a treatment is, it is important to note whether the patients received solely that treatment or if they sought other types of treatment at the same time. If patients sought treatment outside of the treatment being investigated, we do not know which treatment was the effective one.
- 4) Throughout a research study, patients may drop out of the study for a variety of reasons. If the reasons for dropping out of the study are related to the type of treatment (ie: side effects, treatment too time consuming, etc), then we are less confident in the results of the study.
- 5) One should ask, how large the treatment effect was in the study? There are many numbers that illustrate treatment effect. Treatment effect could be described by any of the following examples: a) those that received the treatment were 10 times more likely to return to sport; b) those that received the treatment

reduced their risk of death by 30%; or, c) those that received the treatment were equally as likely to experience a reduction in pain intensity compared to those that performed exercises on their own at home. All of this information may mean something different to the reader or give a different set of questions for a healthcare provider.

- 6) Other points to consider:
 - a. Cost of the treatment vs effectiveness of the treatment.
 - b. How many sessions will it take to experience benefit given the type of condition I have?
 - c. When was the study published? Newer research is more up to date and may be more pertinent to your questions
 - d. Are there numerous studies published examining the treatment in question? Multiple studies telling us the same thing gives us more confidence in determining how effective a treatment is.

As you can see, there are a lot of points to consider when seeking information regarding the effectiveness of a certain treatment. If you have a sharp critical eye and want to learn more, you can refer to the centre for evidence-based medicine's website and let us know how effective you think this newsletter article was!

<https://www.cebm.net/2014/06/critical-appraisal/>

An informed patient will find the best care available and be confident in their choices.

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Geoff is a clinical specialist in musculoskeletal physiotherapy. He is a partner at Evidence Sport and Spinal Therapy and Centric Health in Calgary, Alberta. Geoff is an adjunct assistant professor in the Department of Radiology, Cumming School of Medicine, at the University of Calgary. He also holds adjunct faculty appointments at Andrews University and the University of British Columbia in their respective Departments of Physical Therapy. Following completion of his Bachelor of Health Science in Physiotherapy from McMaster University, Geoff completed his Fellowship in Manual and Manipulative Therapy (FCAMPT) in 2002. He also became certified in GunnIMS in the same year. Geoff completed his doctoral studies (DSc) from Andrews University. His research involved cervical spine facet joint mediated pain and its effect on sensory hypersensitivity in chronic whiplash patients. He has presented at numerous conferences and clinical rounds and has taught post-graduate courses across Canada and the United States. He is a co-developer and instructor of a modular based, evidence-based course in the management of whiplash associated disorders. Geoff has a strong interest in clinical epidemiology, in particular diagnostic accuracy in cervical spine disorders. As a result, he is pursuing further doctoral studies, a PhD, at the University of Calgary in the Faculty of Medicine. He completed his PhD in May 2013 and his research involved the derivation of a clinical prediction guide in the diagnosis of facet joint mediated pain in the cervical spine. Geoff was awarded a CIHR doctoral research award Canada Graduate Scholarship. Geoff has published numerous peer-reviewed papers in the area of musculoskeletal pain. He completed a postdoctoral fellow at the University of Alberta. His postdoctoral research is in the area of advanced physiotherapy practice and spine care management. Through his passion for life-long education, his vision is to see physiotherapists continue to advance their involvement and expertise in multidisciplinary environments for the betterment of patient outcomes world-wide.