Brazilian Journal of Physical Therapy 2017;21(5):305–306

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Associação Brasileira de Pesquisa e Pós-Graduação em Fisioterapia

Brazilian Journal of Physical Therapy

https://www.journals.elsevier.com/brazilian-journal-of-physical-therapy

EDITORIAL

An E-Pain intervention to spread modern pain education in Brazil

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Available online 19 August 2017

Pain, especially chronic pain, is considered to be one of the major public health problems worldwide and is highly associated with disability and high costs. Clinical outcomes from previous studies about pain education and self-management strategies vary from poor to excellent and include improvements in pain intensity, cognition and physical performance, increased pain thresholds, improved outcomes of therapeutic exercises and reductions in widespread brain activity.[1,2] In addition to pain education, self-motivated coping strategies (SMCS) have also demonstrated consistently positive outcomes. SMCS focuses specifically on educating people about cognitive and behavioral skills to cope with pain and helping them to become more actively involved in managing their pain.[3]

In 2015, the International Association for the Study of Pain endorsed a ''call to action'' embraced by the Declaration of Montreal, which recognized an urgent need for all countries to improve access to pain management. Recently, E-pain technologies (i.e., internet based or mobile device based) was considered as a possibility to expand the availability of pain self management for the public.[4]

In this context, an internet-delivery intervention for chronic pain patients called ''Caminho da Recuperação'' (*Road to Recovery*) was developed in Brazil. The first step of the development process was to systematically review the literature searching for Internet-delivery interventions on topics relevant to pain education. After this process, a team composed of experienced physical therapists, psychologists and physical therapy students decided to address nine main points on ''Caminho da Recuperação'' including: (1) acceptance, (2 and 3) education about pain, (4) sleep hygiene, (5) recognizing stress and negative emotions, (6) increasing positive coping in lifestyle, (7) exercises, (8) communication and (9) relapse prevention. The ''Caminho da Recuperação'' online tool is hosted in a web portal called ''Pesquisa em Dor'' at the following URL: www.pesquisaemdor.com.br/?page_id=59.

We decided to present the E-Pain intervention points in an interactive manner. Therefore, we created a character, called David, who suffers from chronic low back pain. David

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http://dx.doi.org/10.1016/j.bjpt.2017.06.020

describes all modifications in his life along a figure of a road (an inverted S-shaped design) that follows the standards of a board game. Some of the boxes on the figure were filled with a number from one to nine. Each number shows a link to a slide presentation document. When accessing the links the participant is directed to the content of the E-Pain interventions. The slides consist of text varying from one to three sentences and a figure to illustrate. The presentations are programmed automatically to change in every 5 s and the participant can advance or rewind at any time.

The majority of traditional face-to-face pain education programs highlight their utility especially in pain-related variables (e.g., pain duration, pain condition, sites of pain) and psychological variables (e.g., baseline levels of anxiety, depression, catastrophising, self-efficacy, fears of movement and re-injury).[1] The results of these programs remain unclear as to whether it is possible to generalize in an Internet-delivered pain self-management program. However, previous systematic reviews and clinical trials found evidence that Internet-based treatments reduced pain, anxiety, depression and promoted significant improvements in disability.[5–7]

There is an increasing interest in the innovative delivery of pain-related information, programs and services through the Internet. Despite the considerably varied magnitude of improvements across studies, E-Pain interventions might have significant public health potential when carefully designed and administered especially in large and low-income countries such as Brazil. However, some aspects need to be addressed such as the best format of delivery, ethical aspects, cost-effectiveness and the profile of patients who would benefit most from this intervention.

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