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Editorial Open Access

Measuring Patient Adherence to Physiotherapy

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Editorial

Patient adherence to physiotherapy is less than optimal, with poor treatment outcomes being a consequence [1]. In other areas of healthcare undetected poor treatment adherence is reputedly one of the main reasons of poor treatment outcomes [2]. Physiotherapists frequently interpret poor treatment outcomes as evidence of their treatments being inadequate, which in turn leads to them making unnecessary treatment changes. Hence when assessing patients' progress, physiotherapists should also include a measure of patient adherence. However measuring adherence is not simple [3], as adherence is not a unitary behaviour, it is multifaceted with patients being required to attend clinic appointments, and follow the clinic- and home-based components of the treatment [4].

Like other health care professionals, when physiotherapists suspect their patients are not adhering adequately to their treatment they tend to make subjective judgements about the cause and extent of the problem, which may be incorrect. Relying on patients' verbal feedback about how they have been coping with their home exercise programme may also be erroneous [5]. Patients' feedback may be inaccurate due to overestimation of their level of adherence, and physiotherapists may not elicit adequate information from patients about their treatment behaviours. Similarly basing judgements on observations of the accuracy of patients' exercise performance can be flawed as it may not be a true indication of their adherence to the prescribed exercise dose. There are many reasons for correct and incorrect exercise performance, which may be due to factors other than poor treatment behaviours. For example, patients may be unable to perform the exercises correctly because of symptoms they are experiencing, or earlier in the course of physiotherapy the physiotherapists may not have provided patients with adequate feedback about whether they are doing the exercises correctly or not. To help overcome these potential adherence problems physiotherapists need to employ reliable and valid measures of adherence that have been specifically developed for use in physiotherapy [3].

In research, clinic attendance has been assessed by calculating the percentage of clinic appointments attended [6]. While keeping a record of the appointments attended is important for funding purposes, poor attendance has been associated with poor treatment outcomes [1], suggesting regular attendance may facilitate continuity of care. Punctuality at clinic appointments is also considered to be an important indicator of adherence [7]. However clinic attendance does not reflect the patients adherence behaviours during the clinic-based physiotherapy [8]. Two reliable and valid measures of clinic-based adherence are the Sport Injury Rehabilitation Adherence Scale (SIRAS, 8) and the Rehabilitation Adherence Measure for Athletic Training (RAdMAT, 7). The SIRAS is a three item tool which makes it quick and easy to use [8]. It measures the intensity with which the patients exercise, the extent to which they follow their physiotherapists' instructions and their receptivity to new advice. The brevity of the SIRAS has led to criticism for it not capturing all the behaviours that contribute to adherence [7]. In response, Granquist et al. [7] developed the Rehabilitation Adherence Measure for Athletic Training (RAdMAT), a 16 item questionnaire, which consists of three subscales (attitude/effort, attendance/participation and communication). The RAdMAT has only been validated by athletic trainers treating injured American college sportspeople [7], and has yet to be tested within the context of physiotherapy where not all movement disorders are injury based.

Adherence to home-based physiotherapy can be measured either by the use of electronic devices, or patient self-reports. Despite there being mixed success with electronic devices such as pedometers, and accelerometers [9], they are not appropriate for measuring all forms of home-based physiotherapy activities. Devices have been secreted into exercise videos and DVDs and activated when these are played, but these are prone to breakdown and there is no guarantee that patients are exercising when these are playing [10]. Self-reports such as exercise diaries and questionnaires have been used with success, but are prone to biased responding. Additionally diaries are known to enhance adherence, which is advantageous, but may weaken their ability to measure adherence [3]. Questionnaires about the patients' adherence to their home-based physiotherapy have the advantage of being able to be completed at each treatment session and need only include the prescribed activities for each individual patient [3].

Finally physiotherapists need to bear in mind that adherence behaviours are not static, with patients adhering to some aspects of their physiotherapy and not others, and that these behaviours may also fluctuate over the course of the treatment [7]. If physiotherapists think patients are not adhering to their treatment programmes or aspects of these, then they should not make judgements solely on their observations and patient verbal reports, but confirm their suspicions by the use of reliable and valid tools designed to establish the type of poor adherence and the extent and reasons for it.

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