

Scientific basis of the STAYAC management strategy

There is evidence from two major studies of acute and subacute low back pain that a pragmatic approach incorporating a range of therapies is more effective than traditional care with respect to pain, disability, mobility, return to work, general (psychosomatic) symptoms, quality of life, and costs. The original study and the partial cross-over study. In my thesis it was demonstrated that a new pragmatic treatment of low back pain was superior to standardized and optimized conventional activity-based treatment by primary health care teams – the stay-active concept (Waddell 1998). The latter approach was the basic management in the experimental group also, but with the addition of a pragmatic multimodal treatment regime. The main items added were manipulation, specific mobilization, steroid injections, muscle stretching, and autotraction. After 1 month of follow-up, the proportion of patients on sick leave was six times larger in the conventionally treated group than in the experimental group. Furthermore, the 4-month follow-up showed considerable differences, again favouring the experimental group, in the two pain scores and the fifteen disability rating scores. Moreover, measurements of mobility and movements causing pain, as well as the results of quality-of-life measurements and the presence of general symptoms of a psychosomatic character, favoured the experimental intervention. Pain drawings also showed substantial differences favouring the experimental group. The thesis provides the first indication in the literature of sick leave reduction (at 8 months) achieved by manual therapy. A 3-year follow-up showed that the reduction of sick leave in the experimental group remained. In addition, the disability rating scores, followed for 2 years, indicated beneficial long-term effects as well. Such short- and long-term effects achieved by the pragmatic method in a population with chronic low back pain were also evident in a controlled partial crossover study of ‘failures’ from the control group of the original study. The reproducibility study Because of the pragmatic design of the first trial, it was not possible to draw firm conclusions about which items in the therapeutic arsenal were responsible for the positive effects. Consequently, a reproducibility study with basically the same pragmatic design as the original study, but with randomization to four groups, was undertaken to evaluate separately some of the components of the complete treatment arsenal. The results were consistent and basically similar to the results of the original study, so it was concluded that the second study was a successful replication of the original study. Consequently, the pragmatic treatment programme can be communicated to other physicians and physiotherapists. In addition, the pragmatic concept, in combination with steroid injections, was shown to be superior to the corresponding treatment programme without steroid injections. In our studies, not only do the differences favour the experimental treatment more substantially (even at 3 days) when compared with other RCT-evaluated treatment strategies, the experimental intervention was also substantially less costly than standardized traditional management based on the stay-active concept within primary healthcare (the original study) and orthopaedic care (our reproducibility study). In addition, since it was shown that the population studied in the second trial was representative of the most severely affected acute/subacute low back pain patients, the results should be valid in other acute/subacute low back pain populations too. Long-term effects were indicated by the fact that many differences in outcomes between the two groups in both studies increased over time, and by the persisting differences in favour of the experimental treatment in the long-term follow-up in the original study and in the partial cross-over study. The treatment programme is one of the few to be reproduced in two subsequent trials according to a state-of-the-art procedure.