

Summary

Scientific studies have demonstrated unequivocally that evidence-based healthcare interventions generally take far too long to be implemented in practice. Such delays could undermine the efficacy of treatment and thus place patients at a disadvantage. Moreover, potentially sub-optimal interventions will place an unnecessary strain on the healthcare budget and therefore on society as a whole. This problem could be solved by applying treatment guidelines, systematically developed standards that enable the results of scientific research to be translated into concrete recommendations for the treatment of specific disorders.

Since 2003, fifteen disorder-specific *multidisciplinary* guidelines have been published for the treatment of various psychiatric problems in the Netherlands. Indeed, the Dutch are front-runners in the development of guidelines for the treatment of mental health disorders. But these guidelines have not escaped criticism. For example, some critics question the value of adopting the medical model with DSM-IV diagnostic classifications as a starting point. Others argue that too much attention is paid to treatments that have proven efficacious in studies and not enough to practical experience: as the populations for efficacy studies are often subject to stringent selection criteria, the external validity of the results is limited.

The implementation of treatment guidelines is a challenge – which poses an underlying question. Will adherence to treatment guidelines actually pay off in general terms? This thesis focuses on the implementation of treatment guidelines for patients with anxiety disorders. The anxiety disorders in DSM-IV represent a phenomenally wide range of psychological conditions, all characterized by frequent, excessive and irrational feelings of anxiety and/or fear, which lead to suffering and disability. With an estimated 1.3 million sufferers, anxiety disorders are among the most prevalent psychiatric conditions in the Netherlands and a drain on the healthcare system. At the start of this PhD project, no research had been conducted on even the implementation of treatment guidelines for this patient population, let alone their effectiveness.

The thesis answers the following questions:

- 1) Is it feasible to implement the Dutch multidisciplinary guidelines for anxiety disorders in everyday clinical practice and, if so, what kind of implementation strategy can be helpful in doing so?
- 2) Would adherence to these guidelines deliver better results than non-adherence?
- 3) Would active and systematic implementation of multidisciplinary guidelines for anxiety disorders go hand in hand with better adherence to these guidelines and better healthcare results as opposed to passive dissemination?
- 4) Is it possible to predict which patients with an anxiety disorder will not respond to treatment in accordance with the guidelines and which patients will retain functional impairments?

Chapter 2 reports a case study that sought to determine whether the guidelines for treating anxiety disorders can be implemented in everyday mental healthcare practice and to identify the most effective ways of achieving this. The guidelines were systematically implemented in an ambulant team that treated anxiety disorders. This team, consisting of 16 professionals from different disciplines with varying degrees of seniority, formed part of a second-line treatment setting in Almelo. It applied Grol and Wensing's stepped implementation plan, which consisted of a diagnostic analysis at baseline (prior to implementation), the formulation of goals, and a specifically chosen combination of implementation strategies. The effects were monitored regularly, so that any necessary adjustments could be made along the way. The aim each time was to deliver a tailor-made programme based on the chosen implementation strategies and to evaluate the outcomes for the desired effect.

One important tool in the implementation was a set of process indicators, which was developed with input from members of the Dutch Knowledge Centre for Anxiety and Depressive Disorders (NEDKAD). The indicators took information from patient files in order to measure how far the main treatment steps in the guidelines had been applied properly. Another important tool was a newly compiled questionnaire for determining where the professionals stood with regard to the different constructs from the Theory of Planned Behaviour. The ultimate aim was to identify facilitative and impeding factors in the implementation. Five actions were eventually defined for the plan-do-check-act cycle: 1) Reorganize the care process so that the treatment plan is drawn up by the coordinator of the treatment team and not the intaker (who comes from an intake team); 2) Develop and disseminate instructions for care workers and patients about the recommended treatment in accordance with the guide-

lines; 3) Organize instruction sessions to discuss the content of the guidelines and the scope of the recommendations; 4) Train professionals in the skills required for proper application of the guidelines; 5) Measure regularly the extent to which the interventions are actually applied. The fifth action figured in the discussions on the treatment plan between individual care workers and the coordinator and in the feedback sessions with the entire treatment team. These sessions were held every few months to co-evaluate the progress of the project and to identify new areas of treatment.

A comparison of the results in the files of 150 patients who were treated in the anxiety disorder team prior to implementation with those of 181 patients who were treated in the same team after implementation pointed to significant improvements in adherence to the main recommendations in the guidelines. This demonstrates that it is possible to implement guidelines in a team that treats patients with anxiety disorders in a clinical setting. A stepped approach turned out to be useful here as it allowed specific obstacles to be addressed with tailor-made interventions.

Chapter 3 reports a study in which the treatment results were determined for anxiety disorder patients who were incorporated in the study after the guidelines had been implemented in Almelo. The aim was to ascertain whether adherence to the guidelines delivered better results. After one year the treatment results for 81 patients among whom the guidelines had been adhered to were compared with those of 58 patients among whom the guidelines had not been adhered to. The reduction in symptoms for the patients where the main guidelines had been adhered to was significantly greater than for the patients where they had not been adhered to. No significant difference in improvements to quality of life was found between the two groups. The group where the guidelines had been adhered to were, however, more satisfied with the treatment than the other group. The number of treatment contacts was also smaller in the group where the guidelines had been adhered to. The study concluded that the guidelines would be applicable to 87% of patients. Adherence to the guidelines can therefore lead to better results and more efficient healthcare. The study also showed that the recommendations in the guidelines can be applied across a broad spectrum.

Chapter 4 presents the results of a study which compared the cohort of patients from Almelo, who were included after the start of the implementation, with a cohort that was treated in a similar setting in Amsterdam, where the guide-

lines were disseminated only among the care workers that were employed there. The Amsterdam patients were part of the NESDA study (Netherlands Study on Depression and Anxiety). The aim of this comparative study was to ascertain whether systematic implementation of the guidelines – as described in Chapter 2 – would lead to better adherence and better treatment results than just passive dissemination. As the NESDA study was limited to patients with a primary diagnosis of panic disorder with or without agoraphobia, social phobia or generalized anxiety disorder, only patients with the same diagnosis were selected from the Almelo cohort for comparison. After a year of treatment it appeared that adherence to the main treatment recommendations was greater for patients in the treatment setting where the guidelines were systematically implemented (intervention condition). After a year, the responses to a questionnaire indicated a significantly stronger decline in anxiety symptoms for the patients in the intervention condition than for the patients in the control condition. After two years, however, this significant difference had disappeared; presumably because more patients in the control condition had been treated for a longer period of time. No difference was found between the two conditions for a decline in comorbid depressive disorders. These results suggest that if the guidelines were better applied, there would be opportunities for further improvements in the care outcomes. The conclusion is that systematic implementation of the anxiety treatment guidelines can improve the quality and possibly also the efficiency of healthcare.

Chapter 5 presents the results of a study on the possibility of predicting unfavourable outcomes for the group of 81 patients from Almelo where the guidelines were adhered to. The aim was to determine which patients with an anxiety disorder would not respond to treatment and which patients would retain functional impairments after one year of treatment in accordance with the guidelines. The predictive value of variables which had been shown in another study to be capable of influencing the treatment prognosis for patients was examined. Typical examples were age, gender, ethnic origin, educational background, working situation, income, motivation for treatment, motives for secondary gains, the existence of a comorbid depressive disorder, a comorbid anxiety disorder or a comorbid personality disorder, and the level of satisfaction with the accessibility of the care. The stepped selection procedure for developing a predictor of non-response to treatment delivered a model with only gender and motives for secondary gain as predictive variables. The likelihood of non-response to treatment after a year was slightly greater among

men and – surprisingly – smaller among patients with a secondary motive for seeking help. The predictive value of this model for non-response to treatment turned out to be very limited. The stepped selection procedure for developing a predictor of lasting functional impairments delivered a model with gender, a comorbid anxiety disorder, and satisfaction with the accessibility of the healthcare as predictive variables. The likelihood of lasting functional impairments after one year was greater among men and patients who were dissatisfied with the accessibility of the healthcare and smaller among patients with a comorbid anxiety disorder. The results indicate that this model, with its three predictive variables, is perfectly capable of distinguishing between patients with a greater or smaller likelihood of lasting functional impairments after one year. The conclusion for the time being is that, when we measure the outcomes on the basis of a response to treatment, it is not yet possible to predict which clients will not sufficiently benefit from treatment in accordance with the guidelines. This implies, at the same time, that with the current knowledge, there is little reason to deny such treatment to someone with an anxiety disorder as a primary diagnosis. To preclude long-term disability the care services should take on board the problems some people experience when trying to gain access to healthcare. Home visits or E-health interventions could offer a way forward in such cases.

Chapter 6 draws together and discusses the results of different subsidiary studies. It is difficult to draw definite and hard causal conclusions from these studies, since they were observational in nature. Follow-up research on the implementation of guidelines for the treatment of anxiety should take the form of a multi-centre, cluster-randomized, controlled experiment. It would also be useful to look into the added value of offering the successive recommended treatment steps in the guidelines. Ideally, better predictors of the success of the different treatment steps should be developed as more knowledge in this area would further improve healthcare efficiency.

