Summary
Multiple sclerosis (MS) affects the central nervous system, which consists of the brain, spinal cord, and the optic nerves. Surrounding and protecting the nerve fibres of the central nervous system is a fatty tissue called myelin, which helps nerve fibres conduct electrical impulses. In MS, the body’s immune system, which normally helps to fight off infections, attacks myelin. This causes inflammation of the myelin sheath and myelin is lost in multiple areas, leaving scar tissue called sclerosis. When myelin or the nerve fibre is destroyed or damaged, the ability of the nerves to conduct electrical impulses to and from the brain is disrupted, and this produces the various neurological symptoms of MS. It is this nerve damage that causes the accumulation of disability that can occur over time. As the central nervous system links all bodily activities, many different types of symptoms can appear in MS. The specific symptoms that appear depend upon which part of the central nervous system is affected and the function of the damaged nerve; however, several symptoms are more common. These include motor and sensory impairments (numbness, loss of sensation), difficulty with ambulation, loss of bladder or bowel control, visual problems, sexual dysfunction, fatigue, and decline in cognitive function. In addition to its physical symptoms, MS may have profound emotional consequences as well; MS strikes relatively young adults in a life phase when many important changes take place (for example, planning to have children) and because of the diagnosis their world is turned upside down. Patients have to deal with prognostic uncertainty and it is unclear whether plans for the future can be fulfilled. Because of all this uncertainty and the progressive disabling character of the disease, coping with MS is an ongoing process. Historically the management of MS has been predominantly about limiting disability by symptomatic management of acute relapses and attempting to influence the long-term course. Even though this type of management is important, it should be accompanied by an equal effort at improving participation, well-being, and health-related quality of life (HRQoL). HRQoL can be seen as an opportunity to assess and meet previously unmet needs, to predict previously unpredictable outcomes, and to develop broad interventions with beneficial psychological and physical effects.

One main research objective of this thesis is to develop and evaluate a psychosocial intervention program for patients (recently diagnosed) with MS. The intervention program is based on cognitive behavioural and rational-emotive principles and aimed at modifying dysfunctional beliefs, thereby reducing negative emotions, improving adjustment behaviours and ultimately HRQoL in patients with MS. A second main research objective of this thesis is to examine the value of HRQoL in predicting disability status in patients with MS. To investigate these two main research objectives several studies were conducted.

**Chapter 2** provides information on the effectiveness of psychosocial interventions for patients with MS in general. Literature research shows that several effective psychosocial interventions for patients with MS have been developed. A total of 13 studies were identified; four interventions were primarily based on cognitive-behavioural therapy,
two interventions were based on psychotherapy, two aimed at relaxation training, one aimed at teaching coping skills, one was a peer support program, and three interventions incorporated more than one treatment technique (e.g. multi-component programs). The results of these studies show that psychosocial intervention studies for patients with MS can be effective, particularly in improving patients’ well-being, coping behaviour, state anxiety, mood, role performance, social relations, some physical aspects, and adherence to medical treatment.

Chapter 3 describes the results of a study on the development and feasibility of a psychosocial group intervention, based on cognitive-behavioural and rational-emotive principles, for patients recently diagnosed with MS. The results show that a ‘per protocol’ psychosocial group intervention program for patients recently diagnosed with MS is feasible and promising. Participants experienced a significant improvement in the HRQoL domains of Psychological status and Vitality.

Chapter 4 presents the results of a study on the impact of a psychosocial group intervention, based on cognitive behavioural and rational-emotive principles, for patients with MS. Findings show a gradual though nonsignificant increase in HRQoL in three domains (Self-care, Psychological Status, and Mental health) and a nonsignificant increase in the number of positive Social Experiences for patients in the intervention group compared to patients who did not undergo a psychosocial intervention. The findings also reveal a negative trend for HRQoL in the domains of Mobility, Vitality, and Physical functioning. Taking into consideration the recruitment difficulties and the results of this study, the conclusion is that a group intervention program is not the best option for most patients recently diagnosed with MS.

The study in Chapter 5 investigates the impact of a psychosocial intervention, based on cognitive-behavioural and rational-emotive principles, on an individual basis for patients with MS. The psychosocial intervention on an individual basis was compared with the intervention used in groups of patients with MS. The results of this study show that patients in individual counselling had a statistically significant longitudinal improvement in HRQoL in the domain of Vitality and, although nonsignificant, patients tend to report a decrease in depressive symptoms compared to patients in group counselling.

Chapter 6 presents the results of a study on the value of HRQoL in predicting disability course in patients with MS. Findings in this study show that the two HRQoL domains Physical functioning and Role-physical functioning are significant predictors of change in disability status in patients with MS measured over a period of five years. This means that a decrease of HRQoL in the domain of Physical functioning is associated with deterioration in disability status, and an increase of HRQoL in the domain of Role-physical functioning is also associated with deterioration in disability status. The findings also show the absence of an association between self-rated health and change in disability status.
Chapter 7 discusses the main findings of the studies in this thesis from a methodological viewpoint to establish whether methodological choices made concerning the inclusion of participants, the study design, and the measurement instruments might have influenced the validity of the findings. Chapter 7 also describes the relevance of the findings of the current thesis and relates them to the literature on psychosocial interventions for patients with MS. Furthermore, some implications for clinical practice and suggestions for future research are addressed.

In conclusion, this thesis shows that a psychosocial group intervention program is not particularly attractive for most patients recently diagnosed with MS, and that patients who seriously suffer from the burden of having MS, are likely to benefit the most from psychosocial intervention programs, such as the intervention examined in this thesis. Furthermore, the results in this thesis indicate that a patient’s subjectively perceived HRQoL may not only be a clinically and psychosocially meaningful outcome per se, but may also be a predictor of objective outcomes such as change in disability status over a substantial period of time.