The Systematic Activation Method: 
a Nursing Intervention Study for Patients with Late Life Depression.

Summary
The prevalence of severe later life depression (LLD) varies between 1-5%. Depression has a huge impact on the daily functioning of people. Those people affected by depression often feel trapped in a circle of severe somberness, anhedonia, inactivity and loss of faith in their ability to change anything about the situation. In order to break out of this circle, a multidisciplinary approach is necessary in which “activation” is an important focus of treatment. Due to their direct and intensive contact with the patient, nurses can play an important part in this process. However, research into the effectiveness of nursing care for patients with depression in later life is very limited. Most publications in the field of nursing care are regarded as being Class IV evidence, which means that “evidence” is based on the opinions of the authorities in the areas concerned (in our case, mental health nursing). This doctoral thesis aims to contribute to the body of scientific knowledge in the field of mental health nursing. It concerns the development and testing of the Systematic Activation Method (SAM) used as a nursing intervention in patients with severe late life depression.

Chapter 1 is the general introduction to the thesis. It includes a description of the integrated depression theory of Lewinsohn, Hoberman, Tery & Hautzinger (1985) on which the SAM is based. One of the main propositions of this theory is that a certain event can lead to a depression which is followed by a drop in the number of positive reinforces. This limitation in the number of positive reinforces can maintain or even worsen depression. This theory forms the basis of a form of therapy that is known as Behavioral Activation (BA). Studies have demonstrated that behavioral activation is effective in patients with severe depression. The SAM was developed as an accessible form of behavioral activation that can potentially be applied in the daily practice of nurses. Chapter 1 gives an overview of the structure and content of the SAM.

It closes with a description of the three main aims of this thesis: 1) the testing of the effects of the Systematic Activation Method as a nursing intervention in patients with severe late life depression, who have been admitted to hospital, 2) research into the factors that influence the implementation of the SAM in practice, and 3) obtaining more understanding of the unfulfilled care needs and satisfaction of care in patients with late life depression.
By way of an introduction to the main study Chapter 2 of this thesis describes a meta-analysis of psychological treatments in depressive adults who have been admitted to hospital. A total of twelve studies were included in this meta-analysis. The results show a significant overall effect size of Hedges’ g=0.29 (95% CI: 0.13 – 0.44; p<0.001) in favor of psychological therapies (cognitive behavioral therapy (CBT), behavioral activation (BA) and other therapy forms) on comparison with a control condition. The sub-group analyses show that cognitive behavioral therapy, BA and the other forms of therapy are all effective. Additional subgroup analyses demonstrate striking differences in effect sizes, whereby the effect of BA (Hedges’ g=0.56) is larger than the effect of CBT (Hedges’ g=0.19) and also of the other forms of therapy (Hedges’ g=0.30). The conclusion is that psychological interventions have a small but robust effect on depression in a clinical population. It should be pointed out that the patient populations in the individual studies mainly comprised adult patient populations, a limited number of whom were elderly, which means that the results cannot be automatically generalized to patients with a LLD.

Chapter 3 goes on to describe a case report of the implementation of SAM in daily practice. The SAM was designed to be a prescriptive and systematic intervention to last for seven weeks during which time, six themes would be covered. The SAM is based on a previously-developed “Coping with depression course”, which is also based on the principles of BA, but has been adapted to become an intervention that can be delivered by nurses in clinical practice. In this case report, the situation of a patient called Susan shows that the SAM is focused on an important symptom of late life depression, i.e., a lack of interest in almost all activities and the inactivity that results from this. This case report shows that the intervention is easy to understand and that it can be effectively delivered in nursing practice. The keeping of a Mood Diary offers the possibility of giving the patient insight into the positive effects that activity has on the mood.

Chapters 4 and 5 describe the study into the effectiveness of the SAM, tested in a pragmatic multicenter randomized trial (RCT). In the research protocol (Chapter 4), we postulated a group size of 102 patients in total, equally distributed over the experimental group and the control group. Outcome variables were depression (BDI), anxiety (HADS-A), mastery (PMS), quality of life (SF-36), costs (TiC-P), and the level of activation (measured by means of an inventory list which was part of the SAM). Measurements were taken at three time points, i.e., baseline (T0), post-intervention (T2 = 2 months after T0), and a follow-up measurement (T2 = 6 months after T0).
In Chapter 5 the results of the RCT are described and discussed. During the study it proved that the number of assessment instruments discouraged people from taking part in the study. On the basis of this interim finding, after approximately six months of inclusion it was decided to stop administering the SF-36 and the TiC-P.

We carried out the study on ten units (five experimental and five control units). Ultimately, 55 patients were included (n=30 experimental group and n=25 control group). The results demonstrate that on comparison with the baseline measurements, the patients significantly improved on the BDI, HADS-A and PMS on T1. This was true for both groups. The differences between the experimental group and control group were not significant. The differences on T2 were not significant between the groups in relation to T1. We found an average effect size in the drop in BDI scores on T1 in favor of the experimental group over the control group (Hedges’ g=0.35), but this was not significant.

In conclusion it can be stated that the SAM does not have a significant additional effect on the improvement of a depressive disorder when compared with usual care.

Chapter 6 describes the results of a qualitative evaluation of the implementation of the SAM by nurses who participated in the RCT in the experimental group. We interviewed the nurses in groups per setting. A total of twelve nurses, divided into four groups, took part in these interviews. Using semi-structured interviews, barriers and facilitators of the SAM were studied. These were analyzed on the level of the nurses, the patients and the context of treatment. The following facilitating factors emerged: the nurses’ positive attitude towards SAM, the opportunities to adapt SAM to the specific circumstances of patients and their environment, team support for the implementation of the intervention, the degree of integration of SAM into multidisciplinary treatment, and the active involvement of the unit manager. Important barriers were: the complexity of the intervention, lack of time, severity of depression and other patient-related characteristics (such as strongly dependent behavior). The delivery of the SAM proved to be more complicated than initially expected. It was concluded that intensive training and supervision was necessary during the implementation and delivery of the SAM.

Chapter 7 describes a cross-sectional study in 99 ambulant elderly patients with severe depression, the aim of which was to gain insight into the provided care relating to reported unmet care needs. The level of satisfaction concerning the provision of care in this group of patients was also examined. We used the Camberwell Assessment of Needs of the Elderly (CANE) for these purposes. It emerged from this study that
two-thirds of patients had one or more unmet care needs. Care was provided for 80% of these unmet care needs. Generally, there was a high level of satisfaction with the available care, with the exception of social care needs. Further, on six items we found a significant association between satisfaction with the care offered and the severity of the depression. These are the items ‘household skills’, ‘financial benefits’, ‘memory’, ‘behavior’, ‘alcohol’ and ‘daytime activities’. Dissatisfied patients had significantly higher depression scores than satisfied patients (p<0.05). The conclusion is that regular monitoring of care needs is vitally important, and the level of satisfaction in relation to the available care must be identified. All this is aimed at providing qualitatively high-grade care to the target group that is consistent with their individual care needs and preferences.

In Chapter 8 the results of the aforementioned studies are discussed further. The meta-analysis shows that psychological treatment methods, implemented mainly in adults in a clinical setting, have a small but robust effect in relation to a control condition. However, this effect could not be demonstrated in the delivery of the SAM to the elderly in a clinical setting. Two main explanations are purported for this, i.e., too small a sample and incomplete implementation. The study into care needs presented in this doctoral thesis shows that the patients with a chronic disease profile had unmet care needs in almost all life domains. Their level of dissatisfaction with care needs in the social domain, in particular, was high. The intensive support in relation to activating activities, as incorporated into the SAM, may potentially contribute positively towards fulfilling these social care needs. The SAM was developed to be an accessible intervention for both patients and nurses, however, in many cases motivating patients to participate proved to be a complicating factor. In addition, the studies show that nurses adhered closely to a traditional manner of unstructured working and had difficulty in implementing the SAM fully. Despite the fact that the effect of the SAM could not be adequately shown, we are of the opinion that the SAM can be effective as long as it is properly implemented. Investment in training and supervision in order to further develop nursing competencies (including the domain of motivating strategies), is expected to contribute to better implementation and, in this way, to increase the effectiveness of the intervention. In respect of the clinical setting, the results show that only limited use was made of multidisciplinary cooperation. Future research will show if the complete implementation of SAM is more effective than usual care. Facilitating and restricting factors should be translated into an effective implementation strategy, with a particular focus on adequate training and supervision and on the optimal embedding of the SAM into the multidisciplinary treatment program.