

Summary

Major depression is a highly prevalent mental disorder worldwide and is associated with decreased quality of life and substantial impact on daily and social functioning. Several evidence-based treatments for major depression are available, yet many people with a major depression do not seek professional help. These people may be at risk for developing more severe symptoms. However, there are some indications that about the half of people with a major depression in the general population recovers within 3 months, what may imply that professional help is not needed by every person with depression. For this reason, it is of great importance to make sure that the people who need mental health care the most, are the ones who receive it. Therefore, it is not only relevant to examine which determinants are associated with increased mental health care use, but also what characterize delayed and no treatment users.

The aim of this thesis was to provide more insight in determinants that are associated with (no) treatment use. Furthermore, peoples' need for care is examined as well, because this is another important factor that is associated with mental health care use. Finally, actual received treatment will be examined for people in specialized mental health care to provide an overview of the administered care when people decided to seek help for their problems.

Chapter 1 presents the general introduction of this thesis. In this chapter, the definition of major depression and mental health care use are discussed. The Behavioral Model of Health Service Use developed by Andersen and Newman is used to define a theoretical model for understanding variations in mental health care use. Finally, the scope and outline of this thesis will be presented.

Chapter 2 examine determinants of mental health care use among people in the general population with a diagnose of major depression in the past six months. Mental health care use was assessed in the same period. About 65% used some form of mental health care. People with a longer symptom duration were more likely to use professional treatment, suggesting that people tend to wait how their symptoms develop over time. Furthermore, higher personal stigma was associated with decreased mental health care use.

Since Chapter 2 showed that personal stigma is associated with decreased treatment use, personal stigma was examined more thoroughly in *Chapter 3*. First, we examined the suitability of a translated version of the Depression Stigma Scale (DSS) in the Netherlands. The DSS is developed in Australia and measures two types of stigma: personal and perceived stigma. High test-retest reliability and validity is reported in several studies. The present study showed that one of the scales of the Depression Stigma Scale (DSS), the personal stigma scale, may be suitable for use in the Netherlands, although we could not confirm the suitability for the perceived stigma scale of the DSS. Perceived stigma seem to be a difficult construct to measure and more research is needed to examine the use of this scale in the Netherlands.

Next, personal stigma is examined within two samples of the general population: 1) a convenience sample which consisted of relatively healthy people and 2) a random sample which consisted of people with elevated depressive symptoms. Higher personal stigma was associated with people who were younger and people without knowledge of depression in their

environment in the relatively healthy group. Lower educational level was associated with higher personal stigma in the group with elevated symptoms of depression.

Chapter 4 examine variations of treatment use in the general population, using a prospective longitudinal design. In this study, a dataset from the Netherlands Mental Health Survey and incidence Study-2 (NEMESIS-2) was used. Major depression was defined as having a major depressive episode in the past 12-months prior to baseline measurement. Mental health care at baseline was assessed during this same period. People were followed for three years and mental health care use was examined in this period as well. The following groups were distinguished: 1) *No treatment users* (people who did not report any contact with primary or specialized mental health care in the past 12 months prior to the first measurement and at follow up); 2) *Delayed treatment users* (people who did not report any contact with primary care or specialized mental health care contact in the past 12 months before the first measurement but who reported contact at follow up) 3) *Early treatment users* (people who reported primary or specialized mental health care contact in the past 12 months before the first measurement). The data showed that about 65% used some form of mental health care in the past 12 months (early treatment users). Early treatment users were, compared to no treatment users, distinguished by more severe and persistent symptoms. Furthermore, they were more likely to have no partner. Delayed treatment users had relatively mild symptoms and were more likely to report a persistent or new major depressive episode at follow up, compared to early users. Moreover, the majority of no treatment users reached remission after three years.

In *Chapter 5* peoples' perceived need for treatment is examined among people with chronic and shorter episodes of depression. A dataset from The Netherlands Study of Depression and Anxiety (NESDA) was used in this study. Since research has shown that receiving mental care may influence perceived need for care, analyses were performed on two groups: persons who received mental health care in the past six months and those who did not. This study showed that there were no differences between people with chronic depression and people who were not chronically depressed regarding the need of six service types (information, medication, counselling, practical support, skills training or referral), except for a higher need for practical support among people who received care. In both groups, symptom severity and comorbid anxiety were related to higher need for care. The data suggest that perceived need for care is mainly driven by other illness factors like severity of symptoms and having a comorbid anxiety disorder.

In *Chapter 6*, characteristics of received treatment in specialized mental health care are examined. Furthermore, the relation between duration of treatment and return into mental health care is assessed. In this chapter, a dataset that consisted of registered diagnoses and treatments of mental health care providers in the Netherlands was used in collaboration with Statistics Netherlands (CBS). The most registered therapy was supportive therapy (44%). The majority of people did not return into mental health care (86%, measured in three years). There were some indications that people with brief therapy (5-250 min; 251-500 min and 751-1000 min) were slightly more likely to return (reference group: >1000 minutes), this relationship was not found for people who used only medication.

Chapter 7 summarizes the main findings and draws on the results from the previous chapters. Furthermore, strengths and limitations of the studies, conclusions and recommendations for future research are to be discussed. The results of this dissertation suggest that mental health care is used by 60% of the people with major depression. Moreover, mental health care is merely defined by need factors. Furthermore, most people in the general population without professional help, reach remission within a period of three years. However, not everyone reached remission and even in the general population, some people report a high disease burden. Future research should be identifying reasons and determinants for not using mental health care among this specific group. For these people, early or low-intensive treatment may provide a window of opportunity to prevent further disease progression. Furthermore, it is worrying that stigma is still associated with decreased help-seeking and more effort is needed to reduce stigmatizing ideas in society.