CHAPTER 7

General Discussion
INTRODUCTION

The aim of this thesis was to broaden the knowledge on mental health care use among people with major depression. We examined differences in demographic and need factors between those that received (delayed) health care and those that did not use treatment (Chapter 2 & 4). Furthermore, we examined one specific factor, and its determinants, that was associated with mental health care use more in detail in Chapter 3: depression stigma. Differences in patients’ perceived need for care among people with chronic depression and people with shorter episodes of depression were examined in Chapter 5. Characteristics of actual treatment received in specialized mental health care and the association between duration of treatment and return into mental health care were examined in Chapter 6. In this final chapter, the main findings will be discussed and integrated with previous research results. Furthermore, an overview of the limitations will be presented and conclusions and future research will be discussed.

MAIN FINDINGS AND PREVIOUS RESEARCH

Prevalence and determinants of mental health care use (Chapter 2, 3 & 4)

Chapter 2 showed that 65% of the people with major depression in the general adult population received some form of mental health care in the past six months. A similar percentage was found for the adults who used mental health care in the past 12 months (62%) (Chapter 4). In addition, chapter 4 showed that about one quarter of people (24%) could be defined as no treatment users and 14% as delayed treatment users (e.g. measured over a period of three years) (Chapter 4). The percentage of treatment users was even higher for the people that were recruited within primary or specialized mental health care (85% in the past six months) (Chapter 5). This high percentage of treatment users is in line with earlier research findings in the Netherlands [1-3] but relatively high compared to other high income or European countries [4,5]. Possible explanations are differences in referral and financial policy and sociocultural factors [5]. In all samples, the majority of people received some form of mental health care within both primary and specialized mental health care.

The Andersen & Newman Behavioral Model of Health Service Use was used as guidance to examine determinants of mental health care use. This model describes three factors: predisposing, enabling and need factors [6]. The main focus was on predisposing and need factors, since earlier research findings showed that these are dominant in help-seeking [7,8]. Furthermore, we made the assumption that the role of enabling factors may be less pronounced in the Netherlands due to the relatively good distribution of mental health care [9,10].

Predisposing factors

Of the predisposing factors, only high personal stigma was associated with decreased mental health care use in Chapter 2. This is in line with earlier research findings that showed that personal stigma is associated with decreased help-seeking [11-14]. In contrast to earlier findings, other predisposing factors, like gender, age, education and partner status, were not related to mental
health care use [8,15-17]. A possible explanation is that we recruited a group with relatively high comorbidity, suggesting that the need for treatment in both groups (those who received care and those who did not) was high.

In the next chapter, predictors for personal stigma were examined more thoroughly in two samples: a convenience sample of the general population (study 1) and a population sample that consisted of people with elevated depressive symptoms (study 2). Predictors were not consistent between both groups. In study 1, higher personal stigma was associated with younger age and people without experience with depression in their environment [18-20]. Study 2 showed that a lower educational level was associated with higher personal stigma [18,19]. Possibly, this could be explained by different population characteristics. However, earlier research findings were inconsistent for personal stigma as well [19, 21-23]. Furthermore, this study showed the suitability of one subscale of the Depression Stigma Scale (DSS), personal stigma scale, but we could not confirm the suitability for the perceived stigma subscale of the DSS.

In Chapter 4 predisposing factors like gender, education and partner status were examined as well. Having a partner was associated with no treatment use, which is consistent with earlier research findings [24-26]. There are even some indications that social support is associated with being able to reach remission without professional help [27-29]. In contrast to other studies that examined delayed and no treatment use among people with common mental disorders in the general population, we did not find any other predisposing factors related to mental health care use. A possible explanation for this is our differing research design; other studies examined life-time treatment contact or examined the time between the onset of the disorder and first treatment contact [30,31].

**Need factors**

Several need factors were associated with treatment use. In Chapter 2, longer episode duration was associated with increased mental health care use, which is in line with earlier research findings [32,33]. This suggests that people tend to wait and see how their symptoms develop over time [32]. Other need factors were not related to treatment use in this study, which contrasts with research findings [2,34-36]. A possible explanation is that need for treatment in both groups (those who received care and those who did not) was high, since both groups showed similar comorbidity rates and symptom severity.

Need factors were also examined in a longitudinal and prospective general population study in Chapter 4. Early treatment users were categorized by more severe and persistent depressive symptoms, compared to no treatment users. Furthermore, delayed treatment users were categorized by relatively mild depressive symptoms and were more likely to report a persistent or new 12-month major depression after three years. These results are in line with previous research findings that showed an association between symptom severity and increased mental health care use [2,4,29,32,34,35,37].
Perceived need for care (Chapter 5)

Although patients’ need is another important factor that influences treatment use [8], relative little attention has been paid to patients’ need for care and especially to the need for care among people with chronic depression. Earlier research findings has shown that receiving mental health care may influence patients’ need for care. Therefore analyses were performed on two groups, patients who received mental health care in the past six months and those who did not. This study showed no differences in perceived need for care among people with chronic depression and people with shorter episodes of depression, 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 [36,38,39]. 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.

Characteristics of received treatment in specialized mental health care and return to mental health care (Chapter 6)

Finally, in Chapter 6, characteristics of received treatment were examined. Supportive therapy was the most registered treatment (44%), which is in contrast to national and international multidisciplinary guidelines that indicate that Cognitive Behavioral Therapy (CBT), Cognitive Therapy (CT) and Interpersonal Therapy (IPT) are the preferred treatments [40,41]. Possible explanations for this are that practitioners work eclectically [41] or that psychiatrists report their consults as supportive therapy. Furthermore, the majority of people did not return into mental health care (86%); this high percentage was not expected, especially since several studies have shown that relapse rates for major depression are high [42,43]. There was a small association between duration of treatment and return into mental health care, but not for people who received medication only.

STRENGTHS AND LIMITATIONS OF THIS DISSERTATION

Strengths

Strengths of the data

In order to provide a comprehensive view on the process of mental health care use, we tried to examine various perspectives using different datasets. We used both cross-sectional and longitudinal designs in this dissertation, which provided the opportunity to examine mental health care use in relation to time. Furthermore, a strength of this dissertation is the use of Nemesis-2 and NESDA studies, both large and high quality studies on the general population. A strength of the study that aimed to examine return into mental health care (Chapter 6) is that we examined a naturalistic cohort. Furthermore, it was a large sample and included specialized mental health providers in the Netherlands.

Furthermore, we tried to make a nuance in treatment use among people with major depression by examining not only people who received mental health care for their symptoms, but by examining characteristic of delayed and no treatment users as well. Moreover, since we found
indications that among people with chronic depression other determinants were associated with mental health care use, we decided to examine patients’ perceived need for people with chronic depression and people who were not chronically depressed.

Limitations

Mental health care use
In all chapters regarding mental health care use (Chapter 2, 4, 5), treatment use was assessed with a self-reported questionnaire. This could have led to a social desirability bias [44]. Furthermore, a recall bias could have occurred, since earlier research findings showed that accurately retrieving events from the (sometimes distant) past is difficult for many people [45,46]. There is a possibility that people may have underrated or overrated their actual mental health care use. Moreover, we only know whether people made at least one contact with a professional caregiver, but frequency and intensity is unknown. Therefore, we had no possibility to examine if people received enough or helpful treatment.

Predisposing and need factors
This thesis mainly focused on predisposing and need factors. Enabling factors were considered less important in the Netherlands, since all Dutch residents have basic health insurance which covers mental health care costs. However, there is a possibility that governmental decisions in the past few years have influenced mental health care use as well.

Furthermore, it could be difficult to compare predisposing and need factors between the different studies (Chapter 2 and 4), since different research designs were used. Chapter 2 was based on a cross-sectional design, which means that no causal inferences can be drawn. In addition, the sample size of this study was relatively small and the participation rate of this study was relatively low. Moreover, the sample that we recruited consisted of relatively old people, who tend to have a more chronic course, characterized by high comorbidity.

Concerning Chapter 4, people who were younger (18-24 years old), had insufficient understanding of the Dutch language, and people with no fixed address were underrepresented. Moreover, it was not possible to examine whether no treatment users were deprived, or reluctant to use help.

In Chapter 3, predictors for personal stigma were examined more thoroughly. Although several predictors were found, the variance explained by the models was relatively low, and the effects were small. In addition, the design was cross-sectional. Another limitation of this study was the lack of a clinical diagnostic instrument to assess depression status in study 1. Moreover, when examining the Depression Stigma Scale (DSS), no clear factor structure was found for the perceived stigma scale. Therefore, we used only the personal stigma scale in our study. Clearly, more research is needed to demonstrate the usability of the Depression Stigma Scale (DSS) in the Netherlands.
Perceived need for care
Although the study in Chapter 5 provided information on need in general (medication, information, counselling, practical support, referral, skills training) there was no possibility to examine specific needs (e.g. dosage of medication, different type of medication, more consultations). Furthermore, we considered people as not having a chronic depression if they did not report an episode duration of 24 months or longer. There is a possibility that these people had multiple episodes or chronic depression in the past (before baseline measurement). Another limitation is the cross-sectional design of the study, meaning that no causal inferences can be drawn.

Received treatment in specialized mental health care
Data used in this study was registration data and consisted of registered diagnoses and treatments of mental health care providers in the Netherlands. This system was not designed for scientific research purposes. Therefore, there was no control over the registration of the data (e.g. there was no possibility to check for registration errors or misclassifications) which could have influenced the results. Furthermore, variability may exist in how practitioners organize and close the treatments. Moreover, this design provides only information on return into mental health care by the same provider. This could have led to an underestimation of return. Therefore, it is not possible to draw conclusions about causal relationships between duration of treatment and return into mental health care in this study.

CONCLUSIONS AND IMPLICATIONS FOR FUTURE RESEARCH
Keeping the abovementioned limitation in mind, this dissertation provide several conclusions regarding mental health care use among people with major depression.

Treatment use and determinants of treatment use among people with major depression
This dissertation showed that two-third of the people in the general population with major depression received some form of mental health care and suggest that access to treatment in the Netherlands is mostly based on need factors and less dependent on predisposing factors. People whose depressive symptoms persist longer and are more severe were more likely to receive mental health care. People who did not use professional mental health care had relatively mild symptoms and tend to use treatment when depressive symptoms did not abate. Finally, the majority of people who did not use professional mental health care reached remission in a period of three years (85%). These findings are accordant with the widespread view in society that the patients’ with the most severe symptoms, need the most intense treatment.

This is of course good news, but even in the general population, some people report a chronic course of depression and high comorbidity. Moreover, 11% of people who did not use mental health care reported a major depressive episode after three years. Clearly, this issue deserves the fields’ attention. Future research should identify reasons and determinants for not using mental
health care in this specific group, by for example performing in-depth interviews. Possibly, this group was deprived from mental health care due to unknown reasons, or their need for care may differ from other treatment users. Alternatively, there is a possibility that some people will not use mental health care. Possibly, these people are able to cope with their problems on their own or receive help from within their personal environment, allowing them to function, at least to a certain degree, within society. For this reason, more research is needed on experienced distress. There is a possibility that some people who meet the criteria of major depression, feel that they do not significantly suffer from it or at least not enough to warrant professional treatment. Incorporating questionnaires that address this topic in future research, will provide the opportunity to examine this association.

However, two other factors seem to be important in explaining variations in mental health care use: having a partner and personal stigma. Possibly, people with a partner receive more support or help and this may help to deal with problems without seeking professional help. This suggests that people without a partner could be more vulnerable. However, we did not find a relationship between partner status and mental health care use, as reported in Chapter 2. Furthermore, it is worrying that people with higher personal stigma were less likely to use mental health care. By examining personal stigma more thoroughly, indications were found that predictors for personal stigma may vary across different samples.

Using mental health care is complex and people who suffer from major depression, should not be hindered by stigmatizing ideas. More research is needed on depression stigma to examine which interventions will be helpful in diminishing stigma in society. Despite efforts to increase awareness and several anti-stigma campaigns in the past years, more efforts are needed. A way of improving this is to expand anti-stigma campaigns to develop more awareness in society. By developing these campaigns, it may be important to articulate goals of anti-stigma campaigns for specific groups. Younger people, without knowledge of depression in their environment should be targeted for increasing awareness of stigma in members of the society. However, if we want to reduce stigma among people with elevated symptoms of depression, this campaigns should also be targeting people with a lower educational level. Furthermore, mental health professionals should be made aware of stigmatizing ideas, already during their educational programs. This is also important for the education program of general practitioners, because they are likewise the first person where people will turn to if they experience a mental health problem. Stigma is a difficult construct to measure, as our findings confirm with respect to the perceived stigma scale. To fully understand stigma in society and its influence on mental health care use, future research should design a comprehensive study, including different populations, to examine the suitability of the Depression Stigma Scale (DSS) in the Netherlands.

**Perceived need for care among people with (chronic) depression**

Chapter 2 showed that among people with relatively high comorbidity and chronic symptoms, other factors may be important in explaining service use, suggesting that they might have other needs as well. However, no indications were found in Chapter 5 to support this hypothesis. Perceived need for care seem to be mainly determined by other illness factors, like severity of
symptoms and comorbid anxiety. However, for the majority of people their perceived need for care was only partially met. This suggest that it could be relevant to examine perceived need for people with more severe symptoms more thoroughly.

**Actual received treatment and return into mental health care**

When looking at actual treatment use in specialized mental health care, the most registered treatment was not in line with treatments that are recommended in the multidisciplinary guidelines for depression. This may seem striking, but is not necessarily an undesirable outcome. It is common to work eclectically in specialized mental health care, and people received probably other forms of therapy as well. Most people did not return to mental health care within a period of three years. Although a positive explanation of these results is that the offered treatments might be highly effective, an underestimation of return in our sample is more likely. Moreover, our study about patients’ need for care in this thesis showed that many people, especially those suffering from a chronic depression, reported an unmet need for counselling, suggesting that treatments could be improved. Furthermore, some indications have been found that brief therapy is not sufficient for everybody with a major depression: some people benefit from a longer treatment duration.

Future research on return into mental health care should replicate the findings from this study. Preferably, in a dataset of registration data where researchers have access to individual patient data. This offers the opportunity to examine the pathway of mental health care use by different mental health providers for each person individually. Furthermore, specific treatment characteristics (e.g. duration, intensity, frequency, time-frame) and characteristics of patients’ needs (e.g. received helpfulness and specific needs) should be examined in one comprehensive study, to help us fully understand the interaction between received treatment, patients’ needs and return into mental health care.

**MAIN CONCLUSION**

Mental health care in the Netherlands seems to be used by two-third of people with major depression and seems to be in line with the widespread view that people with the most severe symptoms are the ones that should receive mental health care. It seems that not everyone with a major depression needs professional help to recover. At the same time, the prevalence of major depression, and the negative consequences of this disease for the individual, did not decline in the past years. The important question on how to cope with this problem still remains after completing this dissertation. In addition, a group of people with major depression do not receive professional help and do not reach remission as well. In those patients, an early, low intense or easily accessible treatment might provide a window of opportunity to prevent further disease progression. Although this thesis provided only limited evidence for explaining service use among people with depression by examining predisposing and need factors, we tried to present a comprehensive overview of the process of mental health care use, the treatment received when
people used mental health care and return into mental health care after closing their treatment. By doing so, we tried to provide insight to assure that people who need care actually receive this care.
REFERENCES


