CHAPTER 1

General Introduction
Major depression is a highly prevalent [1, 2] and disabling mental disorder which is associated with a high relapse rate and chronic course [3-5]. Although effective and evidence-based treatments for depression are available, many people do not seek or receive help [6-8]. Furthermore, a delay in help-seeking for depression is reported in several studies [9-12].

Professional treatment use may not be required for everyone with a major depression. Findings from the general population show that 50% of the people with a major depressive episode recover spontaneously within three months [13]. Furthermore, several longitudinal population studies have shown that the majority of people (50%-80%), reached remission after some period without receiving professional help [14-16]. These findings may imply that at least some people are able to deal with their problems without professional care. However, recovery rates decline rapidly after three months [13], suggesting that people may develop more severe symptoms when they postpone or put-off help-seeking for too long. For this reason, it is important to make sure that people who need mental health care the most, are the ones who receive it. In order to address this topic, it is not only relevant to examine which people will seek help for their problems, but also what characterizes delayed or no mental health care users.

This thesis aims to provide more insight into this process of treatment use and actual treatment received among people with depression. This chapter consists of a general background and provides an overview of the following chapters.

MAJOR DEPRESSION

In the Netherlands 5.2% of the adult general population suffers from a depression annually [17], and 18.7% will suffer from a major depressive episode once in their life-time [17]. A major depressive episode is characterized by a depressed mood and/or loss of interest or pleasure in daily activities nearly every day, for more than two weeks [18]. Furthermore, people have to experience at least 3 of the following symptoms to meet the criteria of the diagnosis: significant weight change or change in appetite, sleep disturbances, change in activity level (e.g. psychomotor retardation or agitation), loss of energy, feelings of guilt or worthlessness, diminished ability to concentrate and/or suicidal thoughts [18]. Major depression causes significant distress for the individuals who suffer from it, due to its significant impact on daily functioning and reduced quality of life [3-5]. Furthermore, major depression is associated with high economic costs for society [19], mainly due to productivity losses [20]. Unfortunately, major depression is a disorder with a poor prognosis; in about 20%-30% of major depressive episodes it becomes a chronic depression [13,21].

MENTAL HEALTH CARE USE

A large scale global study carried out by the World Health Organization (WHO), showed that treatment rates for mental health problems in the past 12 months vary considerably, with percentages ranging from 1.6% in Nigeria to 18.7% in the USA [8]. In the Netherlands,
a prospective and population-based study (NEMESIS-2) showed that about 11.4% of the Dutch
general adult population received some form of help for mental health problems (general health
care, specialized mental health care or informal care) [22]. The percentages of treatment users
among people with depression was much higher in this study: about 60% of the people with a
major depression utilized mental health care in the past 12 months for their symptoms [22], and
this is a relatively high percentage compared to other mental disorders, like anxiety or substance
use disorder [8,22]. Although an initial treatment delay is often reported, two population-based
studies showed that the majority of people with common mental disorders (80%) will eventually
come in contact with professional help at some point during their life [9,12].

UNDERSTANDING VARIATIONS IN TREATMENT USE

Research on the reasons why some people receive help and others do not, is often guided by
the Behavioral Model of Health Service Use developed by Andersen and Newman [23,24]. As
shown in Figure 1. this model explains health care use by three interrelating factors: predisposing,
enabling and need factors [23]. Predisposing factors can be described as demographic factors,
health beliefs (e.g. attitude and knowledge towards mental health care), and social structure [23].
Research findings among people with depression identified several groups who are more likely to
use professional health care. For example, being female, not having a partner and low perceived
social support are associated with increased mental health care use [6,25-27]. Factors associated
with decreased mental health care use are attitudinal beliefs like the belief that the symptoms
will abate [28] or the desire to handle problems by themselves [29,30]. Another relevant factor,
although it has received not as much attention in the Andersen model, is stigma [31]. Stigma
refers to ‘a mark of shame, disgrace or disapproval which results in an individual being rejected,
discriminated against, and excluded from participating in a number of different areas of society’s
[32]. Stigma in depression is common [33,34] and include the belief that people with depression
have a weak character or that they are responsible for their own condition [35-37]. Depression
stigma may limit help-seeking behavior individuals’ willingness to seek help [34,35,38]. Research
on delayed treatment use among people with common mental disorders showed that men, older
age groups and people who had an earlier age of onset, report longer treatment delays [9,12].

Need factors can be described as individuals’ perspectives on health and functioning
(perceived need for care) and professional judgment of people’s health status (evaluated need for
care) [23]. People who experiences themselves as having a problem and report a perceived need
for care [26,39,40] are more inclined to use professional help. Earlier research findings suggest that
need factors are of great importance in explaining service use as well. People with more severe
and persistent depressive symptoms, who report comorbid physical conditions or comorbid
mood or anxiety disorders are more likely to seek help for their problems [8,41-44]. In addition,
research in a general population among people with a 12-month mood and/or anxiety disorder
showed that people who reported more functional impairments in several areas (e.g. work or
household) were more likely to utilize mental health care for their problems [43].
However, relatively little attention has been paid to patients’ perspectives on care [45], while it is important to know if the field of mental health is offering patients the care they want. Furthermore, research findings suggest that adapting treatment preferences may result in better treatment outcomes, at least in primary care [46,47].

Enabling factors relate to organizational and logistical aspects of mental health care such as location and distribution of mental health care facilities [23]. From the patients’ perspective, this factor relates to financial income, health insurance and knowledge about accessibility of mental health care [23]. In the Netherlands, all Dutch residents have basic health insurance which covers mental health care costs. For this reason, everyone should be able to receive appropriate mental health care when needed, although people might not always know that mental health care is available, or can be unsure where to turn.

![Behavioral model of Health Service Use](image)

**Figure 1 | Behavioral model of Health Service Use [43]**

**IMPROVING MENTAL HEALTH CARE USE**

Recently, several initiatives have been undertaken to improve access to mental health care in the Netherlands, including better recognition of mental health problems by the primary caregiver [48,49] and better collaboration between primary and specialized mental health care [49-51]. In addition, several initiatives have been developed for reducing stigma attached to mental disorders in society [52,53] and to improve access to mental health care by offering low intensity treatment as a first step in the treatment of mild to moderate depression [54], often provided through the internet [55]. At the same time, there is increasing pressure on mental health care providers to offer brief therapies, while retaining high quality and cost-efficiency [56]. Although there is evidence that brief therapies are effective [57-62], a concern might be that patients improve but do not fully recover [63] and consequently are at higher risk for returning into mental health care. This may lead to a tension between the quality and the accessibility of mental health care.
Inevitably, due to limited capacity of services, it is impossible to provide mental health care to everyone with mental problems in society, and based on earlier research findings this may not be necessary. One widespread view is that people with the most severe symptoms should be receiving the most intense mental health care \cite{54}, implying that the influence of other factors should be negligible in seeking help. Alternatively, one can argue that people who may not satisfy the criteria for a mental disorder, but who do experience significant problems in daily life, should benefit from effective and available treatments, especially since many people with mild symptoms who used mental health care, experienced prior mental disorders \cite{64}.

**MAIN FOCUS OF THIS THESIS**

Although earlier research findings showed that several factors are associated with mental health care, reasons for not receiving care remain unclear. This thesis aims to provide more insight in the underlying concept of receiving mental health care by examine the following research questions:
1. Which determinants are associated with mental health care use among people with depression?
2. Which determinants are associated with depression stigma, and is the Depression Stigma Scale (DSS) a reliable instrument for assessing stigma in the Netherlands?
3. Which demographic and need factors distinguish early, delayed and no treatment users?
4. How do people with (chronic) major depression view their own need for care?
5. Is duration of treatment related to return to mental health care?

**OVERVIEW OF CHAPTERS**

*Chapter 2* provides an overview of determinants of help-seeking in a sample of a Dutch general adult population. *Chapter 3* will focus on one specific determinant associated with help-seeking; stigma. In this chapter, we examine predictors for depression stigma and investigate the suitability of the Depression Stigma Scale (DSS) in the Dutch population \cite{61}. *Chapter 4* will address the third research question; in a dataset from a longitudinal and prospective general population study (the Netherlands Mental Health Survey and incidence Study-2 (NEMESIS-2), factors that distinguish early, delayed and no treatment users will be examined. *Chapter 5* provides an overview of patients’ own perceived need for care and examined if people with chronic depression had others need, using data from the Netherlands Study of Depression and Anxiety (NESDA). Finally, in *Chapter 6*, the relationship between duration of treatment and return into mental health care will be examined in a dataset that consists of registered data, provided by Statistics Netherlands (CBS). *Chapter 7* consist of a general discussion were the findings from Chapter 2-Chapter 6 will be discussed. The Chapters 2, 3, 4, 5 and 6 are separate journal papers. These can be read independently.
REFERENCES