Chapter 1

General Introduction
In this introduction I shall provide background information on the main theme of this dissertation: how to improve the psychological treatment of primary care patients suffering from depression and/or anxiety. The burden of disease for depression and anxiety disorders is described followed by psychological treatment options in primary care and the organization of primary care in the Dutch health care system. Subsequently, I shall describe the objective and outline of this dissertation.

**Common Mental Health Disorders**

Depressive and anxiety disorders are both highly prevalent\(^1\,^2\) with European lifetime prevalence rates of approximately 14%\(^3\). The probability of developing major depressive disorder during one’s lifetime is 16.6%\(^4\). Depression is among the top three causes of burden of disease worldwide\(^5\) and is expected to have become the disorder with the greatest disease burden in high-income countries by the year 2030\(^6\). Anxiety disorders are also common with estimates for the 1-year and lifetime prevalence of 10.6% and 16.6% respectively and a large number of people experience anxiety disorders on a continuing or recurring basis with high personal and societal burden of disease.\(^7\) For example, pure generalized anxiety disorder (GAD) is associated with impairment in role functioning and social life, which is comparable to the impairment caused by major depression.\(^8\) Furthermore, almost half of those who have ever suffered from a psychiatric disorder have had multiple disorders. Comorbid anxiety is the rule rather than the exception in depression with up to 60% of patients with major depressive disorder also suffering from an anxiety disorder.\(^9\)

Anxiety and depression can cause serious functional impairment and reduced quality of life.\(^10\,^11\) Depression is also associated with increased mortality rates; the mortality risk for depressed individuals is 1.81 higher than for non-depressed individuals.\(^12\) Moreover, depression and anxiety lead to huge economic costs due to health care utilization and productivity losses.\(^13\,^15\) The annual per capita excess costs of depressive disorders and anxiety disorder are respectively 5,009 and 3,587 euros.\(^16\) Anxiety disorders are more prevalent and therefore the total costs for anxiety disorders are higher in society. The bulk of costs (85%) are related to production losses.\(^16\) Given the high prevalence, personal disease burden and economic costs, accessible treatment for anxiety and depression is essential.

**Psychological Treatment and Guidelines**

Psychological treatment has undergone many changes over the past hundred years. From psychoanalysis developed by Sigmund Freud, which was probably the first school of psychotherapy in the early 20\(^{th}\) century, to modern Internet interventions of today. During the 1990s guidelines for mental disorders started to appear. Evidence-based clinical guidelines contain criteria for clinicians for diagnosis, management and treatment. Treating patients according to guidelines leads to better results and is therefore beneficial for society as a whole.\(^17\,^19\) In 1999 the National Institute for health and Clinical Excellence (NICE) was founded in the United Kingdom and it publishes guidelines on the appropriate treatment of and care for people with specific diseases and conditions, including depression and anxiety. In the Netherlands, the Dutch Institute for Health care Improvement (CBO; Centraal Begeleidings Orgaan) started in 1982 with the development of multidisciplinary guidelines in various medical...
In 1994 they published the first multidisciplinary guidelines on depressive disorders, which still had a strong mono-disciplinary character. These standards and protocols mainly focused on one or only a few aspects of treatment. Due to increased patient-centered perspectives and focus on the care process, there was a need for integrated guidelines. These integrated guidelines were to describe the coherence and interaction between several professions and also between several phases of the care process.

As a reaction on this need, the National Guideline Steering Group (NGSG; Landelijke Stuurgroep voor Richtlijnontwikkeling in de GGZ) published the multidisciplinary guidelines for anxiety disorder in 2003 and the multidisciplinary guidelines for depressive disorders in 2005 (together with commissioner ZonMW; ZorgOnderzoek Nederland/Medische Wetenschappen). For primary care specific guidelines were developed next to those of the CBO. The first guidelines for depression and anxiety in primary care were published in 1994 and 1997. These guidelines are a combination of diagnostic criteria based on psychiatric classifications and management guidelines for the treatment of anxiety and depression in general practice. Revised versions were published in 2003 for depression and in 2004 for anxiety disorders. The guidelines from 1994 and 1997 were more medically oriented and psychological treatment was hardly mentioned, however, the revisions put more emphasis on psychological treatment in primary care.

The current guidelines for the treatment of anxiety and depression focus on pharmacological treatment, psychological treatment (cognitive-behavioral) or a combination of both. Despite these multidisciplinary guidelines the application of the recommendations in primary care is not optimal. Previous editions were considered too globally formulated, giving practitioners insufficient tools for applying the recommendations in daily practice. The multidisciplinary guidelines for depression (2005) recommend investigating supportive and structuring care for patients. Recently several care models were introduced to structure and manage the care process, including stepped care.

**Stepped Care**

The objective of Stepped care is to initiate interventions at the right time as adequately as possible, at the lowest possible cost. Care is offered not earlier or more intense than necessary and not later or less intense than needed. In a stepped care model all patients start with a low intensity evidence-based treatment as a first step. Progress is monitored and patients who do not respond adequately can 'step up' to a subsequent higher intensity treatment. An important feature of the stepped care model is that the model is self-correcting. Self-correcting means that the results of treatments and decisions about provisioning of treatments are monitored systematically and where necessary changes are made ('stepping up') if current treatments are not achieving significant health improvement. The assumption of stepped care is that many patients benefit from low-intensity treatments and do not need further treatment. It can be a way to meet increasing care demands and to improve allocation of scare resources. The objective of stepped care is to improve efficiency by standardizing systems and procedure. Several stepped care models have been developed for health care, e.g., smoking, weight control, eating disorders (such as bulimia nervosa), generalized...
anxiety disorders\textsuperscript{[37]}, panic disorder\textsuperscript{[38]}, obsessive compulsive disorder\textsuperscript{[39]} and alcohol problems.\textsuperscript{[40]}

Stepped care requires treatments of differing intensity. A suitable minimal intervention that can be used as a first step is (guided) self-help.\textsuperscript{[41,42]} Brief face-to-face therapies might also be regarded as minimal interventions for one of the first steps in the stepped care model. An example of a brief therapy is problem solving treatment (PST) for primary care that is a six-session therapy. Several studies show that PST is an effective treatment for major depression as well as for more general emotional disorders containing depressive and anxiety symptoms.\textsuperscript{[43-46]} For implementation in a stepped care model it could be an advantage to use different therapies based on the same theoretical framework, \textit{e.g.}, for the consistency between therapies. However, this also might have disadvantages, namely when a certain approach does not work for a patient it is questionable to refer this patient to a related.\textsuperscript{[37]} A stepped care model has no requirements regarding the theoretical framework of interventions because different treatments might address different aspects of the patient’s problem.

In order to meet increasing care demands, stepped care tries to reduce the amount of therapist contact. Currently, only eight sessions in primary mental health care are covered by health insurance companies in the Netherlands, therefore this should be taken into account and used as the maximum time in terms of providing a certain treatment. Thus, treatments of a stepped care model should take no more time than the therapist is able to provide. The first results of studying stepped care seemed promising but large-scale, good quality randomized trials of the effectiveness of full stepped care models are scarce.\textsuperscript{[30]}

\textbf{Self-Help}

As mentioned, (guided) self-help may be a suitable intervention for stepped care models. Self-help can be defined as a standardized psychological treatment that can be worked through by a patient on his/her own, possibly with minimal guidance.\textsuperscript{[47]} Most self-help interventions are based on cognitive-behavioral therapy (CBT).\textsuperscript{[42]} CBT techniques are straightforward and easy to reduce into smaller steps. Most used CBT techniques in self-help interventions include psycho-education, relaxation, graded exposure, cognitive restructuring, and anxiety management.\textsuperscript{[48]} Nowadays other types of treatment (\textit{e.g.,} problem solving treatment (PST) and interpersonal therapy (IPT)) have become available as (guided) self-help interventions as well. Self-help interventions are available via books (bibliotherapy) and via the computer (web-based, CD-ROM, DVD) and can be pure self-help or guided self-help. In pure self-help interventions patients work on the course by themselves while in guided self-help they receive feedback on their assignments, for example from a psychologist or psychiatric nurse. This guidance can differ in format (\textit{e.g.,} via telephone, face-to-face or through the Internet) as well as in intensity (\textit{e.g.,} once a week or only on request).

It has been demonstrated convincingly that guided self-help is effective for depression and anxiety.\textsuperscript{[40,49]} Previous RCTs on the effectiveness of (online) self-help treatment with varying types and amount of guidance\textsuperscript{[50-52]} were performed on community samples. Earlier conducted research, testing (online) self-help in primary care, shows varying results. Research examining guided self-help compared to a waiting list control group for patients with anxiety and depression, shows that guided self-help did not provide additional benefit compared to patients.
on a waiting list. Another study found no differences between computerized cognitive-behavioral therapy (CCBT) for depression, treatment as usual (TAU) and combined CCBT and TAU in primary care. They found medium improvement effect sizes (standardized mean difference; a measure of the strength of the relationship between two variables) in depressive severity for all interventions. A comparable study on a computerized cognitive-behavioral therapy program in primary care, led to significant improvement on all response variables (depression, anxiety, work and social adjustment) measured. Besides, a review showed that while self-help CBT is effective for depression, there is a lack of evidence that specifically considers self-help CBT for treating depression in primary care. Based on these studies we can conclude that it is unclear whether self-help for treating anxiety and depression is effective when it is carried out in primary care.

**Primary Care**

In the Netherlands, there is no centrally organized mental health care service but instead there are centers for prevention, primary mental health care, specialized mental health care, addiction treatment, and also independently operating psychologists, psychotherapists, and psychiatrists. General practitioners provide the majority of care for patients with common mental disorders. They act like gatekeepers to the (specialized mental) health care system. Nowadays, some primary care practices arise with primary care psychologists that are also accessible without referral. Primary care is financed via private mandatory insurance and for which people get a core universal insurance package in return. Most insurance packages allow patients to choose where they want to be treated. This makes primary care easily accessible: almost every individual the Netherlands is registered at a primary care practice. The government specified in the insurance guidelines that any specialist in non-acute care could start treatment only after receiving a formal written referral by a general practitioner (GP). This is true for somatic disorders but since patients are relatively unfamiliar with primary psychologists, this often applies to referral to specialized mental health care as well. This illustrates the importance of the GP as a first contact in care in general and for referral to specialized mental health care.

A recent development in Dutch primary care is the presence of a practice nurse. These nurses are employed by a primary care clinic for several hours a week but are often posted at a mental health care facility. For most GPs who deliver increasingly complex care for many multimorbid and older patients, the time to provide treatments competes with other demands and usually they are not fully trained to treat psychiatric illness. There is evidence that nurses can be trained to provide psychological treatments successfully. Nurses have, for example, used behavioral methods to treat phobic patients and provide PST in primary care effectively.

Practice nurses support GPs in diagnosing mental health problems and provide brief psychological interventions when needed. This way of organizing care could be referred to as the consultation - liaison model or the replacement/referral model. It is the policy of the Dutch Health care to intensify primary mental health care to prevent long waiting lists and excessive, expensive treatment in specialized mental health care.

The majority of patients with symptoms of anxiety or depression are seen in primary care and only 10.4% are referred to specialized mental health care. According to the European Study of the Epidemiology of Mental Disorders (ESEMED), only 23% of all patients that were
treated for anxiety and depressive disorders were treated adequately in primary care.\cite{61} However, the Dutch general practice is of good quality and the Dutch health care in general is rated as Europe's best.\cite{62} Therefore, the fraction of patients that are treated adequately in primary care in the Netherlands might be higher.

As mentioned earlier, clinical guidelines are available for the treatment of depression and anxiety disorders in primary care\cite{25,26} but the initiation of, and adherence to effective treatment is usually poor.\cite{1,63-64} An important problem is the underrecognition of these disorders.\cite{65} For depression approximately half of all patients are not recognized as having psychological problems by their own GP.\cite{66,67} For anxiety disorders this percentage lays around 75%.\cite{68} Panic disorder, social phobia, agoraphobia, and generalized anxiety disorder are the most common anxiety disorders in primary care. In case patients are recognized as having anxiety and/or depression, many GPs tend to prescribe antidepressants or benzodiazepines. When prescribed adequately these are effective\cite{69} but also have undesirable side effects. Besides, antidepressants are often prescribed in relatively mild cases even though there is no evidence that medication is effective for this group.\cite{28,70} Furthermore, the majority of patients prefer psychological treatments themselves.\cite{71} This demonstrates that treatment of common mental health disorders is not always applied consistently with the guidelines. In addition, primary care psychologists are relatively unknown to patients while they have easy access to their GP. Therefore it is not surprisingly that psychological treatment in primary care requires improvement.

**Need for Care**

Although there are many types of effective, evidence-based, treatments for patients with depressive and anxiety disorders, many patients do not seek help. It is estimated that this is true for about 40% of cases.\cite{72,73} There might be several, personal reasons why patients do not want to receive treatment for their symptoms. For example, no self-perceived mental health problems ("I don’t need help, there is nothing wrong with me"), negative experience with mental health care, or the influence of stigma on help-seeking behavior. Research demonstrates that most patients with anxiety or depression perceive that they need counseling or information while medication, practical support, skills training and a referral, are less often perceived to be needed.\cite{74} A study on the reasons and determinants for not receiving treatment for common mental disorders concluded that GPs should pay more attention to patients whose need for care is unmet.\cite{73}

Seeking help for depression and/or anxiety disorders is related to the coping-style of the patient. People with high neuroticism use more coping actions in general (including relaxation, praying, seeking professional help and engaging in pleasant activities) than people with low scores.\cite{75} They concluded that actions taken to cope with depression and their helpfulness differ considerably for subjects with differing personality traits. The association between personality and psychopathology has been established in many studies. Higher neuroticism is associated with greater use of mental health services.\cite{76,77} Other studies demonstrated that neuroticism has an independent effect on whether or not people use primary care and specialized mental health care for mental health problems.\cite{78,79} After entry into primary care, neuroticism had no effect on the number of visits.\cite{76} Concluding, personality traits are associated with coping actions and
utilization of mental health care services. This raises the question whether personality traits have impact on the perceived need for primary mental health care.

Objectives and Outline of this Dissertation

As pointed out, there are some opportunities to improve mental health care in primary care. One important objective of this dissertation is to evaluate the effectiveness of stepped care for anxiety and depression in primary care in a randomized trial. Besides the effectiveness of stepped care, the effectiveness of psychological treatment for anxiety in primary care is examined in a meta-analysis. During the recruitment of patients for the stepped care program, it was noticeable that many patients reported a certain level of symptom severity but did not want to participate in the study. This raised the question whether patients with the same level of symptom severity but a different perceived need for care, also differ on personality traits. This question was assessed in one of the studies in this dissertation.

The general outline of this dissertation is as follows: Chapter 2 presents the study protocol, which describes how the effectiveness of a stepped care program in primary care for patients with depression and/or anxiety will be tested in a randomized controlled trial. Chapter 3 gives an overview about stepped care in general practice: what should be offered and how. Chapter 4 provides the results of a randomized controlled trial comparing (guided) self-help (the second step of the stepped care program) with care as usual for patients with depression and/or anxiety in primary care. In Chapter 5 the results of the randomized controlled trial testing the effectiveness of stepped care for depression and anxiety in primary care are presented. Chapter 6 describes a meta-analysis of the effectiveness of psychological treatment of anxiety disorders in primary care. In Chapter 7 we examine the influence of personality traits on perceived need for care for primary care patients. Finally, Chapter 8 provides the conclusions of this dissertation, their clinical implications and suggested directions for future research.
References


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