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Economic Implications of Improving Access to Psychotherapy in Germany: Advantages and Policy Recommendations

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Abstract:

This thesis aims to provide a cost-benefit assessment of mental health treatment in Germany, focusing specifically on the example of the treatment of depression and anxiety disorders with psychological therapy. Through an extensive literature review of relevant international literature and secondary data, relevant factors to consider for the calculation of the cost-benefit of mental health treatments are identified. Considering the limitations of the study and the applicability of international research to the German context, the results demonstrate that mental health interventions, such as increased access to psychotherapy, can yield cost-efficiency in Germany. Therefore, the analysis highlights the potential economic advantages and challenges of increasing access to psychological treatments and alludes to the economic advantages of investment in mental health treatment in general.

Keywords: Mental health economics, Healthcare expenditure, cost-benefit analysis, psychotherapy, Germany

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1. Introduction

Mental health issues, particularly anxiety disorders, and depression, have emerged as a significant global health priority, necessitating urgent attention. Historically, mental disorders were often overlooked in favor of so-called communicable diseases, which can be transmitted from one person to another, and other non-communicable diseases (NCDs) such as cancer or cardiovascular disease (Whiteford et al., 2013).

However, in recent decades, research and data highlighted and continually uncovered the substantial impact of mental health conditions on global health. ADs and depression, in particular, have proven to be major contributors to the global burden of mental illnesses. These conditions not only have a profound impact on individuals' quality of life but also exert a significant economic burden on societies. Individuals suffering from ADs and depression often experience impaired functioning, reduced productivity, and increased healthcare costs (Chisholm et al., 2016).

Consequently, the economic implications of these conditions are far-reaching and warrant careful consideration. The COVID-19 pandemic has further amplified the prevalence and severity of anxiety disorder and depression and therefore the associated economic burden. Initial projections indicate a substantial increase of 26% in major depressive disorders and 28% in anxiety disorders (AD) within a single year (WHO, 2022a). The pandemic's impact on mental health has been multifaceted, resulting from factors such as social isolation, economic instability, and increased psychological distress.

Despite Germany's reputed robust economy and healthcare system, it is not immune to the substantial challenges posed by anxiety disorder and depression. Despite ranking second in Europe for positive mental well-being scores, almost 30 % of adult Germans experience at least one mental

ailment annually (DGPPN, 2023; Velten et al., 2022). However, the rate of seeking mental health treatment remains disappointingly low, with only a fraction of those diagnosed with mental disorders actively seeking appropriate care (Mack et al., 2014). On top of that, the COVID-19 pandemic uncovered how underfunded and poorly structured in their service delivery the mental healthcare systems in most nations are (Vigo et al., 2016).

Studies have shown that among other forms of treatment psychological therapy, particularly cognitive-behavioral therapy, can play a vital role in effectively managing and treating conditions such as depression and anxiety (Layard et al., 2007). However, the accessibility and affordability of psychotherapy remain significant challenges, limiting the potential impact.

Recognizing the substantial burden and the need for effective interventions, the German Association for Psychiatry, Psychotherapy, and Psychosomatics (DGPPN) has advocated for graded care methods based on the severity of mental conditions. This approach aims to address the treatment gap and ensure individuals receive timely and appropriate care (DGPPN, 2018). To consider similar policy changes and investments in mental health infrastructure, it is necessary to comprehend the economic implications and evaluate the cost-effectiveness of possible measures. The arguments resulting from these deliberations can support informed decisions on which measures should be implemented or which priorities should be set.

For my objective of determining an economic cost-benefit-assessment of investments in mental health treatments in Germany, I will focus on the domain of the cost-effectiveness of psychotherapy treatments for anxiety disorder and depression, as they are becoming more common and increasing in the amount of societal excess costs they incur both globally and in Germany (WHO, 2022a; WHO, 2022b).

First I will give an overview of the economic impact of various mental health issues based on international case studies during a comprehensive literature review and draw conclusions for the German mental health system (chapter 2.1 and chapter 2.2). After that, I will assess the cost-benefit of various treatment options for depression and anxiety disorders, including their effectiveness and cost-effectiveness (chapter 2.3). From there on out I will primarily be emphasizing forms of psychological therapy (chapter 2.4) since these forms of treatment for depression and anxiety disorders can be as effective as pharmacotherapy while sustaining lower dropout rates (Cuijpers et al., 2011).

Next, I will outline some characteristics of the current mental health care environment in Germany and point out some areas of improvement where measures to improve access to psychotherapy can be introduced (chapter 3). I further mention which effects legal changes in addition to financial investments can have on the quality of mental care (chapter 3.1).

Additionally, I will examine some further barriers to equal access to quality psychotherapy for all people's needs and the factors that contribute to the underutilization of mental health services in Germany (chapter 3.2).

In the following chapter, I will summarize my findings on the cost-benefit-ratio of the investment in psychological therapy as a treatment for anxiety and depression in Germany and discuss, to which extent the self-financing argument could hold true in this case (chapter 4). To that goal, I will discuss calculations of the costs and effectiveness of psychotherapy for individuals with mental health issues in Germany, by examining medical, and non-medical direct and indirect excess costs from these conditions referring to secondary data from relevant case studies (Gustavsson et al., 2011) (chapter 4.1).

I will reexamine the consideration of treatments being self-financing in the way of providing a positive return on investments (Layard, 2006; Layard et

al., 2007) by looking into the financial benefits of improved access to mental health treatments and successful treatment resulting in added government revenue for society compared to the costs. This analysis will consider factors such as treatment costs, access, waiting times, and success rates of treatment. Moreover, I will consider what the requirements for improved treatment outcomes and cost-effectiveness of improved mental health treatment access would be. I will also discuss recommendations for policymakers and stakeholders (chapter 4.2).

I will conclude with a discussion of the limitations of the study and suggestions for future research (chapter 5).

2. Literature Review on the Economic Impact and Effectiveness of Psychological Therapy for Anxiety Disorders and Depression

In this chapter, I will discuss international and national case studies and examine key aspects related to the economic burden of mental disorders and the effectiveness of psychological therapy. The literature review confirms that mental disorders account for a significant portion of the global disease burden, with depressive disorders and ADs being the leading contributors, which is why I will consequently focus my research on these disorders.

In chapter 2.1, I present the results of cost-of-illness studies that indicate substantial economic costs associated with mental disorders, including direct healthcare costs, social benefits costs, and productivity losses. The strain on healthcare systems and the broader societal costs highlight the need for adequate resource allocation and improved access to mental health services. The literature review further discusses the prevalence and costs of mental disorders in Germany specifically, where mental health issues affect a significant portion of the population.

In chapter 2.2 the review emphasizes the cost-effectiveness of psychological therapy, supported by studies demonstrating positive outcomes and the economic benefits of investing in such interventions. Evidence-based psychotherapy, particularly cognitive-behavioral therapy, has shown promise in effectively treating depression and AD.

The UK has been at the forefront of cost-effectiveness analysis, with Richard Layard's work highlighting the economic and societal advantages of psychotherapy. The findings have informed policy decisions and led to resource allocation changes, with a focus on expanding psychological therapies within healthcare systems.

In chapter 2.3 I will present different factors that can impact the cost-effectiveness of psychological therapy for depression and anxiety disorders and in chapter 2.4 the focus lies on the aspects of access and adherence to psychological therapy.

2.1 The Economic Burden of Mental Disorders: Global Perspectives and the Case of Germany

Whiteford et al. (2013) provide significant insights into the global burden of mental disorders using data from the Global Burden of Diseases (GBD), Injuries, and Risk Factors Study 2010, a comprehensive reanalysis to estimate the burden of mental and substance use disorders in terms of disability-adjusted life years (DALYs), years of life lost (YLL) to premature mortality, and years lived with disability (YLD). incorporating an extensive number of disorders, with improved definitions, data collections, and methodology, across 20 age groups for men and women in 187 countries segmented into 21 regarding proximity and epidemiological similarity.

The data covers findings from the study in 1990 and subsequent World Health Organization (WHO) updates, providing the most comprehensive assessment of the burden for mental and substance use disorders, incorporating an expanded number of disorders as well as improved definitions, data collection, and methodology. The study found mental and substance use disorders accounted for 183.9 million DALYs in 2010, representing 7.4% of the total disease burden worldwide. Within this group, depressive disorders contributed the most DALYs, followed by ADs.

Mental and substance use disorders were the leading cause of YLD globally, accounting for 175.3 million YLD in 2010. Depressive disorders were the largest contributor to the non-fatal burden, followed by ADs.

To further understand the economic burden of mental disorders, it is essential to examine specific cost-of-illness studies that estimate the economic impact of these disorders. For instance, a study by Olesen et al. (2012) estimated the costs of mental disorders in 30 European countries, including Germany via estimates derived from systematic literature reviews of subject experts by considering direct health care/medical costs (e.g. medical treatments, medicine, hospital visits) direct non-medical costs (e.g. early pension, social care), and indirect costs (e.g. loss of revenue due to absence from work)(Gustavsson et al., 2011).

They found that the total cost of mental and neurologic disorders in Europe was €798 billion, or approximately 7-8% of the Gross domestic product (GDP), with ADs and major depression combined totaling the largest share of €166.3 billion with direct healthcare costs for these conditions constituting a significant portion of 42% (Olesen et al., 2012).

Mental health disorders place a substantial strain on healthcare systems, affecting the allocation of resources, availability of specialized services, and the capacity to meet the growing demand for mental healthcare. Underfunding, fragmented care delivery, and inadequate access to mental health services are prevalent challenges. For example, a study by Knapp and Lemmi (2016) highlights the economic case for improving mental health services and the impact of mental health disorders on education, and social welfare systems, underscoring the broad societal costs and consequences. Accordingly, the authors argue that the need for adequate resource allocation among various societal resources, such as social care, housing, education, or criminal justice, beyond health to address the complex burden of mental health disorders.

Moreover, a study by Evans-Lacko et al. (2013) conducted across 27 European countries found that economic adversity resulting from the recession was associated with a vast increase in the disparity of

unemployment rates and reduced employment opportunities for individuals without mental health issues compared to those with mental health problems. Considering the severe consequences regarding the prevalence of mental health concerns due to the corona pandemic, this element indicates a further concern, especially for economic and social exclusion, given the expected economic downturn.

An American study by Lerner et al. (2010) investigated the work performance of employees with depression using a longitudinal cohort study and found that increases in absences and at-work limitation (presenteeism) were significant (two to three times higher) compared to healthy controls demonstrating the extensive economic costs in terms of absenteeism and productivity losses due to mental illness.

There are now more elements than ever that contribute to poor mental health as a result of the COVID-19 epidemic. Santomauro et al. (2021) aimed to determine how the COVID-19 pandemic would affect the high prevalence and global impact of major depressive disorder and anxiety disorder in 2020. In a thorough analysis of data published between January 1, 2020, and January 29, 2021, the authors reported the prevalence of major depressive disorder and ADs during the COVID-19 pandemic. They gathered data in a meta-regression in order to evaluate changes in the prevalence of major depressive disorder and anxiety disorder between the pre-pandemic and mid-pandemic levels via COVID-19 impact indicators. According to their estimates, the COVID-19 pandemic was responsible for an increase of 532 million cases of major depressive disorder and 762 million cases of ADs globally. Together, major depressive disorder and anxiety disorder caused 49.4 million DALYs in 2020 or 44.5% of all DALYs worldwide.

Additionally, they connected a rise in severe depressive disorders and ADs to decreased human mobility and daily SARS-CoV-2 infection rates. They

predicted that the areas most affected by the pandemic in 2020 would see the biggest rises in the incidence of ADs and major depressive disorders.

Drawing a parallel to the German landscape, mental health is a major public health issue in Germany as well. A mental health disorder will affect about 30 % of Germans at some time in their lives, according to the German Federal Ministry of Health (OECD, 2018).

In Germany, mental health issues have a significant financial cost. The Organization for Economic Co-operation and Development (OECD) estimated costs of approximately 4,8 % of Germany's GDP, or about €146 billion annually on direct health, and social benefits costs as well as indirect costs on the labor market in 2015 (OECD, 2018). Moreover, the DGPPN has declared that almost 28 % of Germany's adult population is living with a mental health condition which equates to 17.8 million people. However, only 18.9 % of these individuals have sought assistance from service providers for the betterment of their condition (DGPPN, 2023). Thus, the financial burden of mental disorders on the German healthcare system and the economy underscores the need for effective interventions and improved access to mental health services.

2.2 The Cost-Effectiveness of Evidence-Based Psychotherapy for Depression and Anxiety Disorders: International Perspectives and the Case of the United Kingdom

Evidence-based psychotherapy has emerged as a crucial component in the treatment of depression and anxiety disorders, offering effective interventions to alleviate symptoms and promote recovery. Several forms of psychotherapy have been extensively studied and shown promising results in improving mental health outcomes.

Cognitive Behavioral Therapy is one of the most widely researched and recommended forms of psychotherapy for both depression and anxiety disorder. cognitive-behavioral therapy focuses on identifying and modifying negative thought patterns and beliefs and fostering positive and healthy patterns instead (Hofmann et al., 2012; Layard et al., 2007). Numerous studies have demonstrated the effectiveness of cognitive-behavioral therapy in reducing symptoms and preventing relapse in individuals with depression and anxiety disorder (Hofmann et al., 2012; Layard et al., 2007).

The review of meta-analyses of Hofmann et al. (2012) validated the effectiveness of cognitive-behavioral therapy in treating various anxiety disorders, while the results for treating depression were somewhat mixed. While the effectiveness gained may vary depending on the specific population and context in which cognitive-behavioral therapy is provided, the findings indicated that cognitive-behavioral therapy can be both a clinically and cost-effective treatment option for anxiety disorder and depression.

However, another examination of meta-analyses by Cuijpers et al. (2011) on the effects of various psychotherapeutic interventions treating depression found that the mixed results for treating depression might be due to publication bias in certain low-quality studies overestimating the treatment effect, although they found that psychotherapy, including cognitive-behavioral therapy, interpersonal therapy, and psychodynamic therapy, were, in fact, effective in reducing depressive symptoms

Overall, the empirical evidence from numerous studies and meta-analyses supports the use of evidence-based psychotherapies as essential interventions in the comprehensive treatment of depression and anxiety disorders.

Numerous studies have demonstrated the cost-effectiveness of psychotherapy for the treatment of depression and anxiety disorders. The United Kingdom has been at the forefront of providing extensive research and cost-effectiveness analysis of psychotherapy treatments for mental health conditions, particularly depression and anxiety disorders. The availability of vast data and non-fragmented health provision in the UK has allowed for rigorous economic evaluations and the generation of insightful results, leading to significant changes in treatment provision. One notable economist who has made significant contributions to this field is Richard Layard.

Richard Layard, an economist, and pioneer in the field of mental health economics, has emphasized the economic and societal benefits of investing in psychotherapy treatments. Layard et al. (2007) found that the benefits of standard treatment costing £750 would be multifold for society in the considered two-year period even if assumptions about the effect of improved mental health on employment are halved, the treatment remains cost-effective. The authors provide evidence that proposed therapy programs could reduce the number of mentally ill people on incapacity benefits by 160,000, saving the Exchequer £1.4 billion annually, and those savings exceed the government costs within five years.

Average costs and benefits per person treated (£) (includes only benefits in the first two years)	
Costs	750
<i>Benefits to society</i>	
Extra output	1,100
Medical cost saved ^(b)	300
Extra QALYs	3,300
Total ^(b)	4,700
<i>Benefits to Exchequer</i>	
IB/IS/HB/CT ^(a) + Taxes	900
Medical costs saved ^(b)	300
Total ^(b)	1,200

Source: Layard et al., 2007

Notes: (a) IB = incapacity benefit; IS = income support; HB = housing benefit; CT = council tax benefit.

(b) Approximate.

Table 1: Layard et al. (2007)

This substantial and robust evidence supporting the cost-effectiveness of psychotherapy had a profound impact on the provision of mental health services in the UK. The findings have informed policy decisions and led to significant changes in the allocation of resources, with a greater emphasis on the expansion of psychological therapies, including CBT, within the National Health Service (NHS) with the launch of the Improving Access to Psychological Therapies (IAPT) initiative of the UK NHS.

This program was aimed to increase the availability and accessibility of evidence-based psychological therapies, with a focus on CBT, for individuals with common mental health disorders, including depression and anxiety disorders, reflecting the recognition of the economic value of

investing in evidence-based psychological interventions for depression and anxiety disorders.

Internationally, the attractive cost-benefit ratio of a sizable expansion of psychotherapy services has received considerable attention, whereby these investments have only been realized in a few instances. Overall, the literature review examines the economic impact of mental disorders, the effectiveness of psychological therapy, and the specific context of Germany. These findings could contribute to a better understanding of the cost-benefit ratio of investing in psychological therapy for anxiety disorder and depression in Germany and the formulation of recommendations for policymakers and stakeholders.

Now that it is established that psychological therapy can lead to the successful treatment of depression and anxiety disorders, I will relay which factors can influence the effectiveness of the treatment in the next chapter.

2.3 Exploring the Impact of Treatment Factors on the Cost-Effectiveness of Psychotherapy for Depression and Anxiety Disorders

Psychotherapy treatments provide a valuable treatment approach for individuals with depression and anxiety disorders, and understanding the factors that influence its outcomes is crucial for assessing its cost-effectiveness. The factors that I will present in these chapters are treatment duration and intensity and treatment modality and approach.

Tolin (2010) conducted a meta-analysis to examine the effectiveness of CBT in comparison to alternative forms of psychotherapy and the link between differential outcomes and specific study variables. He found no relation between treatment duration and differential treatment effect,

indicating that shorter CBT could be superior to short-lasting alternative psychotherapies.

The therapeutic alliance, characterized by the collaborative and trusting relationship between the therapist and the client, is a critical factor influencing psychotherapeutic outcomes (Flückiger et al., 2012; Lambert et al., 2002). A positive therapeutic alliance enhances treatment engagement, adherence, and overall satisfaction, leading to better treatment outcomes (Ackerman & Hilsenroth, 2003). Therapists' empathy and warmth contribute to the effectiveness of psychotherapy (Ackerman & Hilsenroth, 2003; Lambert et al., 2002).

There has been an academic debate about the actual link and the effect size of the link between the alliance and treatment outcomes, especially regarding standardized, evidence-based treatments, such as cognitive behavioral therapy. However, multiple meta-analyses and a multilevel longitudinal meta-analysis by Flückiger et al. (2012) support the existing evidence, also across treatment types, such as CBT, and different types of disorders. By fostering a collaborative and trusting relationship, the therapeutic alliance contributes to symptom reduction and functional improvement in individuals with anxiety disorder and depression. These positive outcomes can result in individuals being better equipped to participate in the workforce, potentially generating economic benefits that may offset the costs of their treatment.

Therefore, therapeutic alliance, as a critical factor influencing psychotherapeutic outcomes, holds relevance in the context of understanding not only the clinical effectiveness but cost-effectiveness of treatment. A positive therapeutic alliance promotes treatment engagement, adherence, and overall satisfaction, factors that can contribute to improved treatment outcomes and there improve cost-effectiveness by reducing

quality-adjusted life years (QALY) and non-medical costs given improved productivity and absenteeism.

There are various different modalities and approaches to psychotherapy treatments, including cognitive-behavioral therapy, psychodynamic therapy, and interpersonal therapy. The choice of treatment modality should consider the specific needs and preferences of the individual, as well as the empirical evidence supporting the efficacy of the chosen approach for the target disorder. For instance, cognitive-behavioral therapy has shown effectiveness in treating various ADs and depression, making it a widely used and recommended treatment approach (Hofmann et al., 2012).

In the assessment of past meta-analyses on the effectiveness of psychotherapies for depression, Cuijpers et al. (2011) found that the efficacy of different psychotherapy types is very similar, also in comparison to pharmacotherapy but provides lower dropout rates for patients. Their results also suggest that combined treatment provides even higher clinical effectiveness, rendering psychotherapy the recommended treatment for mild to moderate depressive symptoms rather than for chronic or severe symptom profiles. Besides the treatment determinants based on clinical effectiveness such an allocation is also reasonable from a cost-effectiveness perspective, due to considering not just potential medication-related adverse effects but the impact on healthcare resource utilization of combined treatments.

I have therefore determined that psychotherapy is a cost-effective treatment method for depression and anxiety disorders and that there are different factors that can be considered to improve the efficacy, such as the improvement of the therapist-patient relationship, the choice of a fitting therapy modality and improved access to therapy in general, which I will elaborate on in the next chapter.

2.4 Investigating Barriers to Access and Adherence in Psychotherapy: Implications for Cost-Effective Mental Healthcare Delivery

Ensuring adequate access to and adherence to psychotherapy treatments is essential for optimizing treatment outcomes and cost-effectiveness. However, several factors contribute to the constrained access and limited adherence observed in psychotherapy interventions. This chapter will explore these factors, shedding light on their impact on treatment accessibility and adherence.

Additionally, while most empirical analyses about therapeutic alliance exclude patients who terminated treatment early (Flückiger et al., 2012), it is likely that therapeutic engagement and alliance enabling active participation and collaboration between both parties is crucial for sustaining treatment adherence and reducing dropout rates.

Practical barriers can also hinder treatment adherence and contribute to dropout rates. These barriers may include logistical challenges such as scheduling conflicts, transportation issues, and financial constraints. However, due to statutory health insurance in Germany where psychotherapeutic treatments are free, this is not a major hindrance (Singer et al., 2022).

Limited availability and inadequate access to psychotherapy services pose significant challenges in achieving optimal treatment outcomes. In Germany, timely access to psychotherapy remains a pressing issue due to various factors (Singer et al., 2022; Wietersheim et al., 2019). To enhance access and mitigate the challenges of limited availability, also during the COVID pandemic, alternative delivery models have been introduced and studied. A systematic review and meta-analysis found interventions through internet-based cognitive-behavioral therapy to provide similar treatment

outcomes as the face-to-face format, with the benefit of increasing access to psychotherapy services and reducing waiting times (Andersson et al., 2014).

While research on mediators of outcome for internet-based cognitive-behavioral therapy is still lacking, the authors' results indicate that the effect of therapeutic alliance in these treatment forms might be of lower or no significance. Thus, internet-based cognitive-behavioral therapy can be an effective, and cost-effective treatment option with low access limitations providing more access cost-effectiveness by reaching a larger population in need. Future studies will be essential to test the effectiveness and treatment preferences in more practical contexts (ibid.).

Access to outpatient psychological healthcare can be difficult for patients since they may have urgent and unique treatment demands. However, since the physical condition may quickly deteriorate if the mental disorder is not treated, this group of patients needs psychotherapeutic care in particular. A prospective study on the predictors of health-seeking behavior in Germany found that only 22.5 % of persons with mental health problems sought support for them (Doll et al., 2021).

In this chapter, I conclude that there is a high impact expected from the treatment of depression and anxiety disorders through psychological therapy, and there also is a high demand for psychological care. I further explained that there are different factors like scheduling or transportation issues that contribute to adherence, hence the potential for the success of psychological therapy.

To avoid the negative consequences associated with a deteriorating supply system of mental health care for people in need, a concrete overview of the mental health care system and its challenges is necessary. In the next chapter, I will outline the specifics of the German mental health care

environment in contrast to systems such as in the UK and will elaborate on the costs and barriers associated.

3. Understanding the Mental Health Care environment and regional barriers in Germany

Different to, e.g., the mental health system in the UK, the service offering in Germany is highly fragmented across various types of in- and outpatient providers and heterogeneity across the different federal states (Mueller-Stierlin et al., 2022). Mueller-Stierlin et al. argue that the implementation of novel treatment approaches has been hindered by the complex German healthcare framework. The authors conducted a cost-effectiveness analysis for non-medical community mental health care facilities (in German Netzwerk psychische Gesundheit or NWpG) which were reimbursed by public health insurances since 2009 in an effort to improve the effectiveness and cost-effectiveness of treatment. Due to very low levels of NWpG service usage and a lump-sum case payment structure, fees for individual consultations and therefore the cost-effectiveness proved to be quite poor (Mueller-Stierlin et al., 2022).

As acute psychiatric care is primarily provided via inpatient treatment in Germany, the 2013 "Flexible and Integrative Treatment Models" (FIT64b) regulations were introduced to promote flexible and integrative treatment in mental health care by providing hospitals with global treatment budgets to provide improved integrative psychiatric care (Schwarz et al., 2020). The results of the author's qualitative analysis indicate that the change in legislation allowed for the reallocation of resources from inpatient to outpatient settings, simplification of the fragmented system, and improved therapeutic alliance.

In Germany, long waiting times are a widely discussed issue when it comes to obtaining mental health services. While a systematic collection is missing or reliable on this topic quite scarce, Wietersheim et al. (2019) examined waiting times for admission to inpatient treatment facilities for patients for which outpatient treatment is considered insufficient. They found the

average waiting time for an initial consultation to be 25 days and additional 56 days (81 days in total) until admission, although these vary widely (Wietersheim et al., 2019). For day treatments, where patients sleep at home, they found waiting times to be considerably longer. It is advised to frequently evaluate and report these waiting times.

The findings of Doll et al. (2021) emphasize the significance of early help-seeking for mental health issues as a way to lessen the strain of mental illness, avoid relapses, and improve social functioning and quality of life. However, they discover that stigma, which spans different aspects and is defined by preconceptions, unfavorable stereotypes, and the desire for social distance from people with mental illness, is a substantial barrier to such behavior, ultimately only 22.5 % of people with mental issues seek treatment. This illustrates the considerable losses in health and economic welfare caused not by treatment factors, but also by social and societal components.

While the most significant predictors of future help-seeking conduct, according to Doll et al. (2021), are functional impairments and prior help-seeking activity, they consider further research on the factors of anticipated stigma to be of importance to increase help-seeking behavior even for lower levels of functional impairments faced.

Public health insurance covers the cost of psychotherapy sessions in Germany at a rate of €82.30 per psychotherapy session of 50 minutes. A regular short-term treatment public insurance grants 25 hours of therapy (European Association for Psychotherapy, 2021). In this chapter, I clarified the costs of mental health treatments, focusing on psychological therapy. I further determined which investments in the German mental health care provision are necessary. In addition to purely financial investments, policy changes can have a great impact on access to therapy and therefore increase the cost-benefit immensely.

3.1 Assessing the Impact of Legal Changes on Access to Psychotherapy in Germany

To improve access to psychotherapy, a significant amendment to German law was undertaken in April 2017 to improve access to psychotherapy (Singer et al., 2022). Thus, patients are no longer obliged to get a reference from their primary care physician after the psychotherapy law was passed in 1999 (Bundespsychotherapeutenkammer, 2018).

In the past, patients had to go through a complicated referral system to access psychotherapy services, which often involved getting a referral from their primary care physician. This referral system created barriers to access for many people, especially those who had mental health issues but were not necessarily aware of the need for psychotherapy. To address this issue and to improve access to psychotherapy, the German government passed a significant amendment to the law in April 2017. The amendment allowed patients to directly access psychotherapy services without first obtaining a referral from their primary care physician (ibid.).

This change was a significant step forward in improving access to psychotherapy for all German citizens. However, there is still work to be done to ensure that everyone who needs psychotherapy can access it. For example, there is a shortage of psychotherapists in some parts of the country, and long waiting times for appointments can still be a barrier to access for some people (ibid.).

Despite these challenges, the fact that psychotherapy is covered by statutory health insurance in Germany is a positive step towards improving access to mental health services. That means that everyone in the country has the right to access psychotherapy services, regardless of their income level or social status.

The previous law required numerous consultations between patients and therapists to decide whether outpatient treatment was necessary and to create a professional rapport (Singer et al., 2022). In order to be reimbursed, patients had to submit a form and accompanying materials to their health insurer, which were then reviewed by a subject-matter expert in a blinded manner (ibid.). There was a cap on paid sessions, necessitating a fresh application for additional sessions (ibid.).

However, the new law brought about adjustments meant to increase access to psychotherapy, as therapists now must set aside time for phone consultations with new patients and making appointments over the phone, with frequent updates given to the regional healthcare authorities regarding availability (ibid.). While only one report is required for the initial application, the necessary forms must always be completed (ibid.). Four probationary sessions are the maximum, and the first session must at least be a consultation session (ibid.). Sessions for probationary purposes may be added and paid for children and young people under 21 (ibid.). Notably, the new rule permits reimbursement for 12 50-minute therapy sessions without the health insurance provider's previous approval, and these sessions are compensated more favorably than the probationary sessions (ibid.).

Singer et al. (2022) found indications for social inequality of access being reduced following the law amendments leveling out waiting time differences that were to the disadvantage of people with lower educational backgrounds. However, the authors find, to a smaller extent, the leveling differences between privately insured and publicly insured patients increasing, as the law only affects publicly insured patients and eases access without increasing the supply of actual providers, this provides an expected development.

Therefore, policy or legal adjustments to the mental health system in addition to financial investments can contribute to fairer access to mental

health treatment and decrease barriers for some. In the next chapter, I will present further barriers to benefiting from mental health treatments and possible areas of investment in the German mental health infrastructure that will increase the cost-benefit of psychological therapy.

3.2 Bridging the German Gaps in Mental Health Services: An Assessment of both Barriers and Solutions

In our previous literature review, I examined, among other things, the critical importance of help-seeking behavior for the uptake of mental health treatments and the importance of trusting therapist-client relationships for successful treatment outcomes.

While free mental health care is available to the most sizable portion of the population, refugees, for instance, only have limited access to such treatment options (European Union Agency for Fundamental Rights, 2019). As countries like Germany have received and continue to receive a sizable number of migrants seeking refuge in an international comparison but hardly repatriate those migrants in a limited time, this consideration is important not only from a humanitarian but also from an economic point of view.

Refugees face severe vulnerability to mental health issues due to factors such as persecution, discrimination, and separation from family members while having restricted healthcare entitlements during their first 18 months compared to German citizens (European Union Agency for Fundamental Rights, 2019).

However, other factors such as language disparities, and social exclusion as well as the insecurity of stay or poor reception conditions can further increase vulnerability and impede access to treatment (ibid.). This prioritization of efficiency and medium-term savings nevertheless also can incur longer-term excess costs with the occurrence of mental health

impediments or increases in severity, increasing indirect costs such as productivity losses and absenteeism, or increased treatment or social welfare costs for the government.

There is a major gap between the public and mental health care, and there needs to be more awareness among the people and proper training should be provided to make the treatments as successful as they can get. The DGPPN recommends graded care methods to treat mental illnesses based on severity to be facilitated within regional care systems to optimally navigate the existing complexity both for patients and the various fragmented health service providers. (DGPPN, 2018).

In addition to the successes achieved in facilitating access to psychotherapy services, such as through the 2017 legislative amendment, there is a significant need for additional personnel to reduce the excess costs of considerable waiting times. Considering the importance of the therapeutic alliance for treatment success, it is also critical that patients have the opportunity to choose suitable therapists within a sufficient offer, that is not limited to a sole available option.

In this chapter I summarized, that there are also societal barriers that can impact the access to or success of psychological therapy, such as the stigmatization of mental health issues, there are problems connected to the lack of supply of therapists (e.g. quality of therapists can be unsatisfactory, fewer therapists with foreign language skills available). It becomes evident how necessary the transformation of societal discourse and awareness regarding the importance of adequate mental health care for everyone is. Furthermore, the argument can be made that large-scale measures that improve access to mental health care for disadvantaged groups could be highly cost-effective.

In the next chapter, I will gather all my information about the costs of the treatment of depression and anxiety disorders through psychological therapy in Germany, to draw a conclusion regarding the cost-effectiveness of the treatment method.

4. Conclusion

In this chapter, I will answer the question, of whether or not the investment in the access to psychotherapy for anxiety disorders and depression in Germany can be considered cost-effective (chapter 4.1). I will also draw conclusions regarding the usefulness of cost-effectiveness studies for the formulation of policy recommendations (chapter 4.1 and chapter 4.2).

4.1 Is the investment in the access to psychological therapy in Germany cost-effective?

In my thesis, I strived towards examining an economic cost-benefit-assessment of investments into mental health treatments in Germany, in order to determine if there is a case for increasing treatment investments in a way that societal welfare gains or even solely the government returns will more than compensate for the additional investment expenditures.

A large body of scientific literature has confirmed the clinical effectiveness and cost-effectiveness of evidence-based therapies such as CBT for one of the major contributors to societal excess costs through the prevalence of anxiety disorders and depression and has brought to light a number of internationally salient new interventions and policy reforms. Despite evidence of such effective interventions, there has been no decline in the global prevalence or burden of these disorders since 1990 (Patel et al., 2016).

The DGPPN recommends graded care methods to treat mental illnesses based on severity (DGPPN, 2018). Cost studies on mental illnesses are scarce, and the expenses have not yet been fully quantified on a wider scale for the fragmented and complex German healthcare system. Such data can inform health policy decisions and bridge gaps in mental health care systems that are underfunded and poorly structured. Mental health disorders are a leading cause of global health burden, with depression and

anxiety causing a loss of \$1 trillion in output and 12 billion productive days worldwide (WHO, 2022b). The data presented confirms that mental health problems have significant impacts on healthcare spending, productivity, and family finances (Knapp & Wong, 2020). Conducting an economic evaluation using techniques such as cost-benefit analysis can determine the value of mental health interventions and help identify the most cost-effective use of healthcare resources (Knapp & Wong, 2020). Such analyses can inform policy decisions and improve the allocation of mental health resources, which are currently underfunded globally (Vigo et al., 2016).

Richard Layard's cost-benefit analysis of psychological therapy, presented in his book "Happiness: Lessons from a New Science" (2006), demonstrated that funding mental health care can lead to significant financial gains. Layard found that the benefits of providing psychological therapy to individuals with depression and anxiety outweighed the costs, resulting in a return on investment of £2.50 for every pound spent on therapy. Layard argued that therapy had a positive impact on social functioning and individual well-being, in addition to economic outcomes. Layard's analysis drew from research by the UK government's National Institute for Health and Care Excellence (NICE), which found cognitive-behavioral therapy to be a cost-effective treatment for anxiety and depression. Another study Layard drew from was a US National Institute of Mental Health trial, which found that 50 % of patients who received psychotherapy showed improvement compared to 20 % who received a placebo.

As mental health is a major public health issue in Germany, with about 30 % of Germans experiencing a mental health disorder at some point in their lives costing an estimated 4.8 % of Germany's GDP in direct and indirect costs only in 2015 (OECD, 2018). Long latency periods, a shortage of mental health experts, and the stigma associated with seeking treatment can all affect access to mental health care in Germany. As mental health

issues persist, there is a need for efficient and effective treatments to meet the demand for mental health care in Germany. Given these factors, a cost-benefit analysis of psychological therapy in Germany provides insightful information about the financial consequences of funding mental health care and aid in identifying the most practical and efficient forms of therapy for mental health conditions.

The studies presented indicate that providing psychotherapy is cost-effective for improving mental health outcomes and reducing healthcare costs in Germany (Mueller-Stierlin et al., 2022), similar to what has been found in the UK. However, direct comparisons between the two may be difficult due to differences in healthcare systems and cost-effectiveness standards (see chapter 3). Overall, psychotherapy is considered a cost-effective strategy to enhance mental health outcomes and lower healthcare expenditures in Germany.

4.2 Potential Benefits of Increased Access to Psychotherapy

Numerous potential advantages for people, communities, and society can result from increased access to psychotherapy. The improvement of mental health outcomes is a significant advantage of increasing access to psychotherapy. According to numerous studies (Cuijpers et al., 2013; Layard et al., 2007), psychotherapy is an effective treatment for a variety of mental health problems even going beyond anxiety, and depression, such as post-traumatic stress disorder and substance use disorder among others. Such effective treatment options can improve the functioning and well-being of affected individuals, improving life quality and therefore also productivity and societal and economic welfare.

While there have been efforts and policy changes to improve access to psychotherapy treatment forms, effective measures to expand access and

utilization of marginalized groups are important to mitigate leveling differences in health outcomes in order to realize the broadly available economic potential. Thus, considering factors like language differences or cultural barriers among marginalized communities, culturally responsive treatment options offered by diverse or trained service professionals can facilitate an environment to address unique needs and challenges (American Psychological Association, 2017). This can also improve treatment outcomes and effectiveness by improving the therapeutic alliance and cooperative effort between clients and therapists so proper communication of therapy goals, and relapse prevention should be discussed and implemented which may help in the successful treatment of the illnesses.

Further economic benefits consist of lower costs compared to pharmacotherapy treatments and lower dropout rates (Cuijpers et al., 2011). And last, more people having access to psychotherapy can have wider societal and economic advantages. Psychotherapy may, for instance, assist decrease presenteeism and absenteeism at work by enhancing mental health outcomes, which would increase output and spur economic growth (see Lerner et al., 2010).

5. Working Towards the Establishment of Mental Healthcare: Limitations of the Study and Suggestions for the Future

The need for more development is highlighted by this gap and the growing economic impact of mental illness (Jacobi et al., 2014; Whiteford et al., 2013). A further transfer of resources from inpatient to outpatient care is anticipated to have a major positive impact on the efficacy and efficiency of the German mental health care system (Karow et al., 2012). In line with the findings from Schwarz et al. (2020), that the financial security and versatility provided to inpatient facilities with global treatment budgets, paved the path towards a more integrative treatment, a further assessment of the effectiveness of adding upon this proves to be suitable. Moreover, a further assessment of the cost and effectiveness benefits of providing graded care methods based on severity could be suitable for the German context to address the burdens of complexity and fragmentation of the health system.

However, the cost-effectiveness of treatments in Germany plays a major role in placing it as one of the top contenders for the provision of mental healthcare facilities. This demonstrates that an individual in Germany can easily regain the amount spent on such treatments and receive effective solutions for such mental health conditions.

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