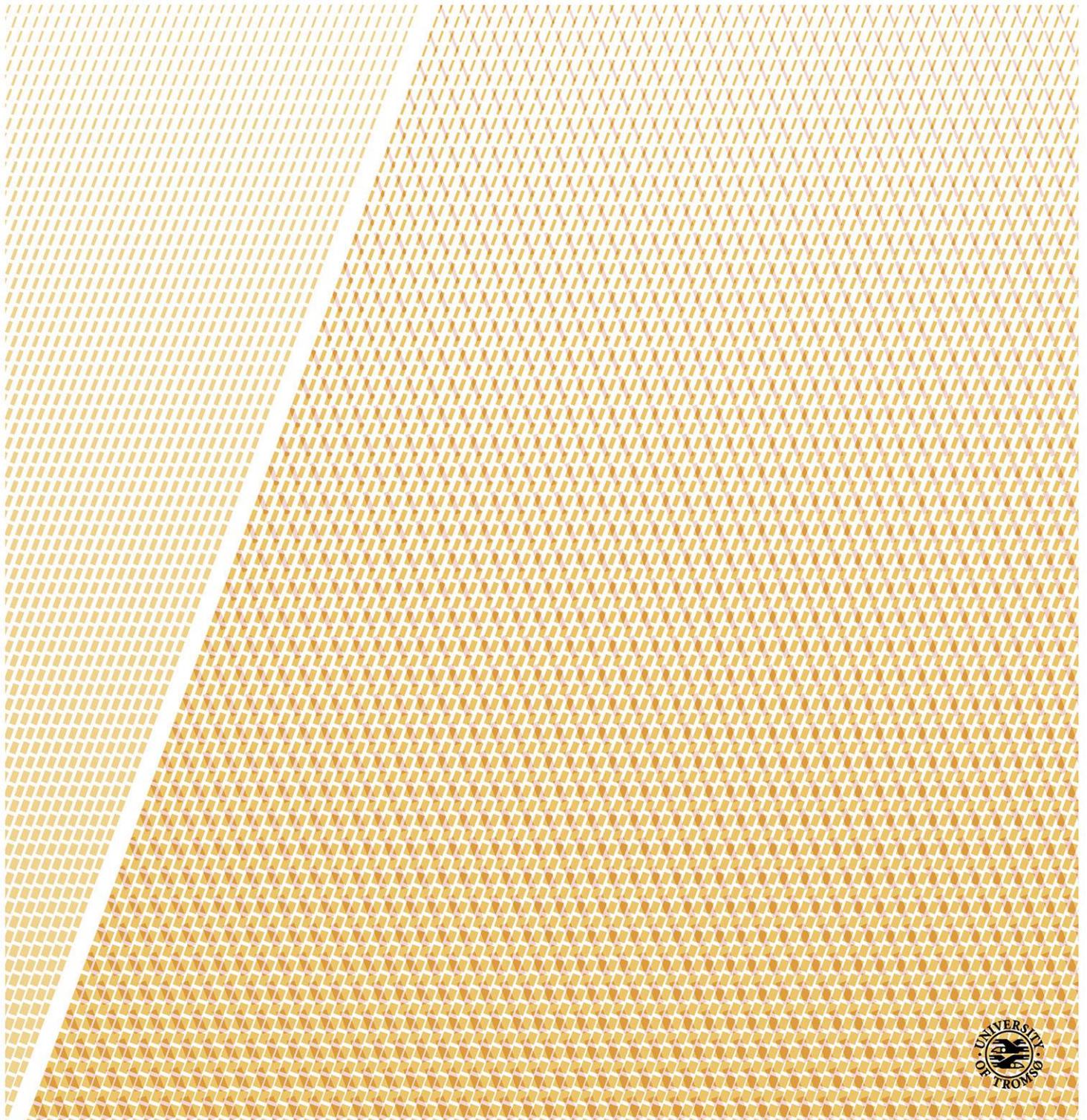


“Light my fire” - Perspectives on Motivation, Helpfulness and Implementation of Guided Internet-based Cognitive Behavioral therapy.

Maja Wilhelmsen

A dissertation for the degree of Philosophiae Doctor – October 2014



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DEDICATION

This work is dedicated to my husband, Thomas and my boys; Snorre and Birk. Without their support, understanding, encouragement, and love it would not have been possible to finish this work.

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Foreword and acknowledgement

From winter 2010 until autumn 2014, I have had the joys and challenges of planning, conducting and interpreting interesting interviews, and writing this thesis. Most of my work has been part-time combined with working as a general practitioner. From autumn 2013, I have had the opportunity to focus fully on research to understand better the treatment of depression. I have learned an enormous amount and could never have completed this project without some fantastic helpers.

My first acknowledgement, of course, goes to my supervisors Nils Kolstrup and Mette Bech Risør, who have contributed equally with their profound knowledge, endurance and interest. Nils, you have contributed to my progress through your unique understanding of the challenges and advantages of combining research and clinical practice. Mette, I have strongly valued your deep understanding of methods, methodology and epistemology. The members of the interdisciplinary research group comprising my two supervisors, Knut Waterloo, Martin Eisenmann, Kjersti Lillevoll and Ragnhild Høifødt, have added their knowledge about eHealth and were important for ensuring the continuity of my research. Ragnhild and Kjersti, you both provided a warm and inspiring way to include me in the community of Ph.D. students and thus gave me a valuable feeling of belonging.

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Summary of thesis

Depression is common and imposes tremendous burdens for patients, their family and society. Implementation of internet-based cognitive behavioural therapy (ICBT) within general practice is recommended. Better results have been shown for treatment with ICBT when support is given. Therefore there is interest in exploring guided ICBT as an affordable alternative for treatment in the early stage after the onset of depression. General practitioners (GPs) have shown positive attitudes towards ICBT; although it is currently rarely used in regular care in general practice.

This thesis is based on two studies: a patient study and a GP study. This has resulted in three papers that explore guided ICBT using an online intervention called MoodGYM combined with short module follow-up consultations. This treatment approach was designed to be compatible with general practice in Norway.

The patient study was embedded in a randomized controlled trial that investigated the effects of the programme on the symptoms of depression. Semi-structured interviews and a phenomenological–hermeneutical approach enabled us to explore in depth how the 14 patients gave meaning to their lived experience from both working with an online intervention and being supported with short consultations inbetween the online modules. Paper one explores the patients' motivation and identifies a sense of relatedness as the most important aspect. The need for relatedness was satisfied if the patient could identify with the online material, achieve feelings of being valued by an important other and feel connected to the therapist. Paper two explored those aspects perceived by patients to be helpful. The findings indicated the importance of MoodGYM as a structured approach to working with the patient's depression and the patient as an active agent. The patients valued a trusted professional to whom they could self-disclose feelings and from whom they could receive feedback.

In the GP study, GPs were provided with a training package in guided ICBT and they were asked to implement guided ICBT into regular care. Eleven GPs were interviewed. We used a thematic approach to investigate their experiences. Paper three presents the patterns identified in the interviews. GPs valued ICBT as a structured approach for supplementing their treatment of depression. They also valued ICBT as a tool for enabling patients to become an

active agent in their own health care. It was coherent with their role to recommend ICBT, but module follow-ups were difficult. The most important aspects in treatment for depression were to open up for patients and allow them to ventilate their feelings and sustain a trusting relationship. GPs did not find strategies to combine these human aspects with module follow-ups, they instead returned to standard treatment.

Overall, the two studies that explored the treatment of depression from the perspective of patients and GPs show that a theory-based online supplement is perceived as positive because it adds structure to the consultation and engages patients. However, it is also important that the therapeutic setting provides patients with the opportunity to self-disclose and ventilate their feelings about their problems and develop a relationship with the GP built on engagement with the patient as a unique person. I suggest that treatment of depression in general practice would benefit from a flexible approach in which GPs recommend self-help while continuing to use the patients' stories as a starting point for dialogue. This would benefit both patients and GPs.

Norsk sammendrag

Depresjon er svært utbredt og fører til enorme byrder for pasienter, deres familier og samfunnet. Det er anbefalt å implementere internettbasert kognitiv atferdsterapi (ICBT) i allmennpraksis. Det er vist bedre resultater om behandlingen er støttet og derfor utforsker vi guided ICBT. Dette vil man kunne tilby på et tidlig stadium i forløpet av depresjon og det vil være et rimelig alternativ. Allmennleger har vist positive holdninger til ICBT. Imidlertid er ICBT sjelden brukt i vanlig behandling i allmennpraksis.

Denne avhandlingen er basert på to studier; pasientstudien og allmennlegestudien. Ut fra disse studiene har vi skrevet tre artikler som utforsker guidet ICBT som denne avhandlingen er basert på. Artiklene utforsker bruken av den internettbaserte intervensjonen MoodGYM kombinert med korte oppfølgingskonsultasjoner. Denne behandlingsformen er designet for å være kompatibel til allmennpraksis i Norge.

Pasientstudien var i forlengelsen av en randomisert kontrollert studie som undersøkte effekten av MoodGYM på depresjonssymptomer. Semi-strukturerte intervjuer og en fenomenologisk hermeneutisk tilnærming ble valgt for å utforske i dybden hvordan de 14 pasientene ga mening til deres levet erfaring. Vi ønsket å få innsikt i både hvordan det var å arbeide med det internettbaserte programmet og det å bli støttet med korte konsultasjoner mellom nettmodulene.

I første artikkel ble motivasjon utforsket. En følelse av tilknytning ble identifisert som det viktigste aspektet for å fremme motivasjon. Behovet for tilknytning ble tilfredsstilt dersom pasienten kunne identifisere seg med det nettbaserte innholdet i programmet. Dersom de følte at de ble verdsatt av sine kjære og følte at de etablerte god kontakt med terapeuten, styrket også dette følelsen av tilknytning. I andre artikkel utforsket vi aspekter pasientene oppfattet som hjelpsomme i behandlingen. Våre funn indikerte at MoodGYM var til hjelp i form av å være en strukturert tilnærming når pasientene tok tak i sin depresjon og pasienten dermed var en aktiv aktør i behandlingen. De så verdi av å ha en profesjonell de kunne åpne opp for og snakke om følelser med, samt at de kunne motta tilbakemeldinger.

I allmennlegestudien ble allmennlegene gitt en opplæringspakke i guidet ICBT. Intensjonen var at dette så skulle implementeres i vanlig klinisk praksis. 11 allmennleger ble intervjuet og vi brukte tematisk tilnærming i analysen av deres erfaringer. I den tredje artikkelen

presenteres mønstret som vi identifiserte i intervjuene. Legene verdsatte ICBT som en strukturert tilnærming for å supplere sin depresjon behandling. De satt også pris på ICBT som et verktøy som gjorde det mulig for pasientene til å bli en aktiv aktør i sin egen helse. Det samstemte med deres rolle som allmennpraktikere å anbefale ICBT, men modul oppfølginger var vanskelig. Viktigst i depresjon-behandlingen var å åpne opp for pasienter slik at de kunne ventilere følelser og dermed opprettholde de et tillitsfullt forhold. Allmennlegene fant ikke strategier for å kombinere disse menneskelige aspektene med modul oppfølging. Legene valgte i stedet å vende tilbake til standard behandling etter anbefaling.

Samlet viser disse to studiene, som utforsker depresjon-behandling fra perspektivet til pasienter og fastleger, at et nettbasert program som er basert på anerkjent teori oppleves som positivt fordi det gir struktur til konsultasjon og engasjerer pasientene. Det er likevel viktig at den terapeutiske tilnærmingen åpner opp for at pasientene selv kan fortelle fra sitt liv og luften sine problemer. Lege-pasientforholdet bør bygge på et engasjement i pasienten som en unik person. Jeg foreslår at behandling av depresjon i allmennpraksis bør inkludere anbefaling av nettbasert selvhjelp, men tilnærmingen må være fleksibel og legene må fortsette å ha pasientenes historier som utgangspunkt for dialogene. Dette vil gagne både pasientene og legene.

List of papers

Patient Study

Paper 1 “Motivation to persist with Internet-based cognitive behavioural treatment using blended care: a qualitative study”

Wilhelmsen, M., K. Lillevoll, M. B. Risor, R. Hoifodt, M. L. Johansen, K. Waterloo, M. Eisemann and N. Kolstrup (2013). BMC Psychiatry **13**(1): 296.

Paper 2 “Patients’ Experiences of Helpfulness in Guided Internet-Based Treatment for Depression: Qualitative Study of Integrated Therapeutic Dimensions”

Lillevoll, K. R., M. Wilhelmsen, N. Kolstrup, R. S. Hoifodt, K. Waterloo, M. Eisemann and M. B. Risor (2013). J Med Internet Res **15**(6): e126.

GP Study

Paper 3 “Norwegian General Practitioners’ Perspectives on the Implementation of a Guided Internet-based Cognitive Behavioural Therapy of Depression: A Qualitative Study”

Wilhelmsen, M., R. S. Hoifodt, N. Kolstrup, K. Waterloo, M. Eisemann, R. Chenhall and M. B. Risor (2014). J Med Internet Res **16**(9): e208.

Abbreviations

CBT: cognitive behavioral therapy

CCBT: Computer-based cognitive behavioral therapy

DSM: Diagnostic and Statistical Manual of Mental Disorders

GP: general practitioner

ICBT: Internet-based cognitive behavioral therapy

ICD: International Classification of Diseases, Injuries and Causes of Death

NICE: National (England and Welsh) Institute of clinical excellence

NPT: normalization process theory

RCT: randomised controlled trial

SDT: Self-determination Theory

WHO: World Health Organisation

WONKA: World Organisation of Family Doctors

1 Introduction

1.1 Background

Symptoms of mental health disorders are very common. Every year, one-third of the European population is estimated to experience a mental disorder, of which depression and anxiety are the most frequent (Wittchen, Jacobi et al.2011). In Norway, the same tendencies as in the rest of Europe are found. The annual prevalence is about one in three for symptoms of mental disorders and about half of the Norwegian population will have a mental disorder during their life (Kringlen, Torgersen et al.2001, Mykletun, Knudsen et al.2009). Mental disorders, of which depression is one of the most frequent, are one of our biggest health challenges because of deficiencies in available treatments and poor service provision (Nutting, Rost et al.2002, Wittchen, Jacobi et al.2011). Rethinking of treatment modes is needed, and internet-based intervention is a promising way to increase the accessibility of evidence-based treatment (Johansson and Andersson2012, Richards and Richardson2012).

1.2 Depression

Depression has troubled humans in all times and its documentation goes back to ancient Greek descriptions (Gruenberg, Goldstein et al.2005). Depression includes emotional symptoms such as a depressed mood or perhaps aggression. Motivational symptoms are also common if the patient has loss of interest or initiative. Cognitive symptoms, such as negative thoughts or feelings of hopelessness and somatic problems, such as loss of energy and sleep disturbances, are often part of the disorder. Many will experience some of these symptoms as part of normal life, but when the symptoms are many, long-lasting and intense they can interfere with normal functioning (Kringlen, Øgar et al.2008).

Gruenberg et al. presented the evolution of formal classification systems of depression in the 20th century. The stated goals of classifications are to ensure good communication between health workers, to enhance understanding of the disorder and to enable effective treatment. At first, the classifications of depression were tied to aetiology, but these have since evolved to specific descriptive criteria. Two classifications are often deployed currently. The Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV) includes a list of nine symptoms, of which at least one must be either depressed mood or loss of interest or pleasure to justify a diagnosis of depression. The nine symptoms are: 1) depressed mood; 2) loss of interest; 3) significant weight loss or gain, or increase or decrease in appetite; 4) insomnia or hypersomnia; 5) psychomotor agitation or retardation; 6) fatigue or loss of energy; 7) feelings

of worthlessness or excessive or inappropriate guilt; 8) diminished ability to think or concentrate or indecisiveness; and 9) recurrent thoughts of death, recurrent suicidal ideation without a specific plan or suicide attempt, or with a specific plan. The International Classification of Diseases, Injuries and Causes of Death 10 (ICD-10) is the other classification. The ICD-10 symptom criteria are very similar to those of the DSM-IV and the minor differences will not be presented here. Depression is divided into three grades of severity in the classification systems; mild, moderate and major (Gruenberg, Goldstein et al.2005).

1.2.1 Prevalence and cost of depression

About one in five people will go through a period of depression during their lifetime and one in 10 will experience depression during a year (Mykletun, Knudsen et al.2009). Women are more likely to go through depression than men (Kringlen, Torgersen et al.2001). Depression imposes a tremendous emotional, financial and social burden on the patient, their family and society (Gustavsson, Svensson et al.2011). A survey by the World Health Organization (WHO) in 60 countries showed that depression impairs the person's own perceived health state to a greater degree than other chronic diseases (Moussavi, Chatterji et al.2007). The WHO has predicted that depression alone will be the second most prevalent cause of disease burden in the world in 2030 (WHO, Colleges et al.2008). Epidemiological studies highlight the early onset of depression. In Norway, one in 10 people of working age is incapacitated, and incapacity because of poor mental health occurs on average 9 years earlier than the average incapacity caused by somatic disease, which results in the loss of many working years. The proportion of people incapacitated by a mental health condition is also increasing (Mykletun, Knudsen et al.2009).

1.2.2 Living with depression

Symptoms of depression include low self-esteem and lack of initiative. Patients experiencing depression have described this as a feeling of being inadequate and a weak person (Gask, Rogers et al.2003). One study (Kayali and Iqbal2013) has shown that women with depression consider depression as part of who they are. Some report a feeling of not being "at home" in their lives as part of depression and that this feeling is necessary to alter their lifestyle. Only by going through the depression could they regain a feeling of being "at home" in their lives. This implies that there is no sharp line distinguishing between what is experienced as part of the person and what is experienced as part of depression as a disorder.

Gask and Rogers et al. (2003) found that patients with lived experience from the treatment of depression have expressed that it was difficult to feel that they deserved the best treatment and to seek follow-up. The results of this study implied that the depression itself, which is accompanied by low self-esteem and lack of initiative, makes them less likely to receive care for their particular needs in treatment. They suggested that a systematic approach is needed to improve the treatment of depression. This study showed the complexity of enabling good treatment for depression and that the patient's perspectives must also be considered.

A review reported (Ebmeier, Donaghey et al.2006) that depression can be accompanied by cognitive abnormalities that impair the person's role both in private and at work. Depression can also interfere with attempts to recruit cognitive processes to therapeutic processes. This makes treatment a challenge. Ultimately, the risk of premature death, especially suicide as a cause of death, is elevated for people experiencing depression. In 2011, 598 people committed suicide in Norway. This is a too many. In comparison 168 people died in traffic accidents in the same year (Sentralbyrå 2014).

Treatment can reduce symptoms and shorten the course of the disease and may reduce the chance of recurrence (Wampold2001, Mykletun, Knudsen et al.2009), thereby leading to positive changes in the patient's life. Experiencing depression in life and working with the treatment for depression are often described as filled with "darkness". This thesis focuses on ways to add "light" by exploring motivation and helpfulness from the perspective of the patient, and engagement to implement tools to improve treatment from the perspective of the general practitioner (GP).

1.3 Treatment of depression

The aetiology of depression is complex and depends on several factors. Genetic factors have a role in the aetiology (Ebmeier, Donaghey et al.2006). Stressful life events are considered to be one of the most important triggers of depression (Kringlen, Øgar et al.2008). Research has recommended that mental illness should be detected and treated at an early stage, before more severe expressions can occur (Kessler, Merikangas et al.2003, Wittchen, Jacobi et al.2011).

According to the most recent recommendation from the National Institute for Health and Clinical Excellence (NICE) in England and Welsh (Pilling, Anderson et al.2009) depression should be managed in a stepped-care way, situated initially in primary care. Low-intensity psychosocial interventions recommended for sub-threshold or mild to moderate depression include individual guided self-help based on the principles of cognitive behavioural therapy (CBT), internet-based CBT (ICBT) or a structured group-based physical activity programme.

It is explicitly recommended not to prescribe anti-depressants for these patients unless defined complicating factors are present. It is recommended that moderate to severe depression should be treated with antidepressant medication combined with high-intensity psychological treatment such as CBT or interpersonal therapy. Furthermore, treatment should be reviewed and sequenced by, for example, increasing frequency of appointments and adjusting medication if there is an inadequate response. People with chronic physical health problems and moderate to severe depression who do not respond to treatment should be considered for collaborative care between primary and secondary health service. The national guidelines in Norway align with such stepped-care recommendations and the GP is expected to initiate treatment (Helsedirektoratet2009).

As mentioned above, guidelines for the treatment of depression comprise many specific procedures, a rationale for the prescription of medication and recommendations on when referral is appropriate. On the other hand, treatment of depression requires more than procedures. One large study of 576 patients explored their perspectives on treatment of depression in general practice. The participants were interviewed by asking many open questions, and the average interview lasted one hour, indicating an in-depth approach. The participants valued the specific procedures included in the treatment. Nevertheless, they emphasized that access to a health worker who was able to listen, understand and be empathetic was essential to their treatment of depression. Almost half of the patients suggested that these important relational tasks were performed well by their GP (Palmer, Gunn et al.2010). Another study that explored patients undergoing treatment for depression in general practice also reported the importance of good interpersonal skills, such as the patient being understood and listened to, as essential in the treatment of depression. However, some of these patients noted that it was, at times, difficult to discuss their problems in a good and therapeutic way with their GP (Gask, Rogers et al.2003).

1.3.1 Access to treatment

There are various challenges to providing good treatment for depression. Three challenges have been identified in the treatment of depression in Norway (Helsedirektoratet 2009). For patients with depression, the first challenge is to accept that they have a problem and thus to seek help. Stigmatizing attitudes to mental disorders are responsible for distress and reluctance to seek appropriate help. However, studies have found that both people in general and patients who have experienced mental disorders express less embarrassment and expect less stigma when seeking help from GPs compared with other health workers (Barney,

Griffiths et al.2006, Barney, Griffiths et al. 2009). The first contact with the health care system is often through GPs. There is often little delay in seeing a GP because waiting lists are short (Pilling, Anderson et al. 2009). The second challenge is the diagnosis of a mental disorder. There is an ongoing debate regarding when the label of depression should be applied in general practice (Dowrick 2009). Some argue that diagnosing mild severity opens the opportunity to provide treatment at an early stage (Kessler, Merikangas et al. 2003). Others argue that the criteria for the diagnosis should be limited to avoid medicalization and to decrease the overall demand for clinical treatment because depression is often self-limiting (Gruenberg, Goldstein et al. 2005). The third challenge is the time interval (or treatment delay) from when the patient has been diagnosed until the onset of treatment. In some countries, the GP refers a patient to health workers in primary care who are specially trained in treating mental health disorders, such as mental health nurses. In other places there is a low threshold for referral of mental issues to specialized care. However, most mental health problems are now treated in primary care (Wittchen, Jacobi et al. 2011, Hermens, Muntingh et al. 2014), and treatment for mild to moderate depression situated in primary care is consistent with international (Pilling, Anderson et al. 2009) and national recommendations (Helsedirektoratet 2009).

In Norway, almost all inhabitants are enrolled in a system called *fastlegeordningen*, which gives all inhabitants one specific GP whom they can access for all health problems. Even though Northern Norway is rural, most people live only a short distance from their GP and GPs are available for follow-up. In Norway, the GP is the health care worker most likely to provide treatment for depression (Helsedirektoratet2009). This means that the GP is often able to start and provide treatment, and thus, there is little treatment delay. A joint report by the WHO and World Organization of Family Doctors (WONCA) suggested that integration of mental health care into primary care improves the treatment of mental health conditions (WHO, Colleges et al. 2008). This is considered to be the best way to ensure access for treatment in a way that minimizes discrimination and stigma. It is important for individuals and their community's perceptions of their disorder if they stand in the same queues, receive appointments in the same way and see the same doctors as people with other conditions. The report also presents a pyramid of mental health services. In contrast to the NICE recommendations for stepped care (Pilling, Anderson et al.2009), the base of this pyramid focuses more on self-care. Overall, the report also emphasizes the importance of the health worker–patient partnership for promoting an active role of individuals with mental disorders

in their own care in all steps. Primary care is the first level of formal services in the pyramid. Primary care is used most frequently and at a lower cost compared with the higher levels, which comprise specialist psychiatric services, psychiatric services in general hospitals and community mental health services. The positive aspects of primary care are that it facilitates important values of person-centred and holistic service, and represents continuity in the relationship between the patient and the health worker (WHO, Colleges et al. 2008). A good relationship with a health worker provides continuity and by itself has been found to be a positive influence on outcomes (Di Blasi, Harkness et al. 2001).

In Norway, most patients are given treatment in general practice, but it is unclear whether they are given good treatment. Mykletun et al. (2009) suggest that the GP's willingness to give sick leave for depression instead of helping the patients to cope with their life most likely aggravates the condition for the individual. The number of patients treated for mental illness and the prescription of anti-depressants are increasing in Norway. Most depressed patients are treated by GPs and most anti-depressants are prescribed by doctors in primary health care. Mykletun et al. also suggest that one of the major challenges in providing good treatment for patients with a mental disorder in Norway is the need to improve access to treatment options that do not include psychotropic drugs by improving competence of GPs and by strengthening their toolkit. CBT is mentioned as a useful treatment strategy. Patients also tend to prefer consultation with a therapist rather than being prescribed medication (Proudfoot, Goldberg et al. 2003, Ebmeier, Donaghey et al. 2006, Gun, Titov et al. 2011).

Research has suggested that GPs do not have the confidence, knowledge and necessary tools to treat patients with mental illness in a non-pharmacological and evidence-based way (Richards, Ryan et al. 2004, Mykletun, Knudsen et al. 2010). A Cochrane review (Huibers, Beurskens et al. 2003) explored whether it is effective for GPs to deliver psychosocial interventions, but found the research to be very limited for drawing conclusions about outcomes. A study of Norwegian GPs found that they see treatment of depression as part of their work, although they feel that they lack the skills and competence to provide good treatment (Mykletun, Knudsen et al. 2010).

1.4 Cognitive behavioural treatment

As mentioned above, substantial research supports CBT as a preferred psychotherapy in treatment of depression (Hans and Hiller 2013). CBT can be presented in a model of three parts: situation, thoughts and feelings. In this model, there is a connection between the parts.

Negative and dysfunctional thoughts relate to feelings or emotions and can lead to depression. In CBT, the patients learn to challenge their own patterns of thinking (Beck 1995).

CBT is an often-used approach in specialized mental health services. One challenge with standard CBT in routine specialized mental health services is the time demanded for such an approach (Hans and Hiller 2013), which makes this therapy inaccessible to many. Patients with depression referred by their GP to a specialized health care usually encounter long waiting lists, which lead to treatment delay, normally 3–6 months in Norway. Moreover, there is less available specialized mental health care in rural and remote areas of Norway. In the Northern Norway Health Region, where about 32% of the citizens live in rural areas, there are 0.59 psychologists per 1000 inhabitants compared with 1.11 per 1000 in metropolitan areas such as Oslo and Akershus (Sentralbyrå 2009).

Reviews have been conducted and found that outpatient CBT is effective in reducing the severity of depression (Hoifodt, Strom et al. 2011, Hans and Hiller 2013). However, Reese et al. (Reese, Rosenfield et al. 2013) claim that there is a substantial and worrying gap between the theories of CBT, interventions supported by research and the interventions offered to patients in the community. To narrow this gap, more knowledge is needed about what promotes and inhibits the intended interventions. Efforts have been made to teach GPs CBT. Several studies have shown that GPs trained in CBT experience barriers in treating depression such as a lack of confidence and time constraints (King, Davidson et al. 2002, Wiebe and Greiver 2005, Davidsen 2008, Aschim, Lundevall et al. 2011). ICBT puts less strain on the GP's time because much of the treatment is done as homework by the patient. An internet-based programme also presents the theory and is thought to demand less detailed theoretical knowledge by the GP and thus makes it easier for the GP to gain confidence.

1.5 Internet-based cognitive behavioural treatment

A core element recommended in the treatment of depression is the encouragement of patients to engage in their own health and recovery (Helsedirektoratet 2009). Interventions on the Internet offer a low threshold treatment, are accessible and fit with the “digital lifestyle”. ICBT is structured and follows a manual, which makes this therapy suitable for self-help procedures (Churchill, Hunot et al. 2001, Andersson, Bergstrom et al. 2005). The intention of self-help is that the patients engage in their own treatment. Mykletun et al. (2009) claim that low adherence or “drop-out” is a serious barrier to good treatment for mental disorders in Norway. A meta-analysis concluded that there was no significant difference in adherence between face-to-face CBT and ICBT in terms of completed sessions (van Ballegooijen,

Cuijpers et al. 2014). However, better adherence and better outcome in reducing symptoms of depression have been suggested by several reviews when ICBT is supported by a therapist compared with allowing the patient to work completely independently (Johansson and Andersson 2012, Richards and Richardson 2012).

A meta-analysis by Ferrand and Woodford (Ferrand and Woodford 2013) suggested three main ways to approach self-help CBT: including ICBT, computerized CBT (CCBT) including CD-R and books. Self-help CBT can be self-administered, meaning that the programme is recommended to patients who complete the programme on their own. Self-help CBT can also be supported in two different ways; minimal contact follow-up or guided. The first way is to provide a rationale for treatment and then to provide minimal-contact follow-ups where there is no focus on process issues. The second way is to give support through guided follow-ups (also called therapist administered). With this approach, the patient attends regular and scheduled meetings that can be face-to-face or by telephone or mail. The role of the therapist is to focus on process issues. Process issues are all the issues arising from working with the self-help material. This meta-analysis also found better effectiveness in the treatment of depression when support was given compared with CBT as self-administered self-help. However, it was concluded that it is unclear what the support should best comprise.

1.5.1 ICBT and the patient

Clinical effectiveness and cost-effectiveness are important when evaluating whether a new technology should be implemented into clinical practice. Maxwell (1992) suggests that these are only two of the total of six indicators needed to evaluate the quality of a health service. Other indicators are safety, equity, accessibility and acceptability. The last indicator of acceptability monitors whether the people involved in a new approach find it comfortable and valuable. A review (Kaltenthaler, Sutcliffe et al. 2008) of patient satisfaction reported in clinical trials with CCBT as the treatment for depression found positive attitudes already in 2008 that indicated the acceptability of treatment. The limitations of this study were that all participants were completers and the drop-out rate was high. This study concluded that more qualitative research is needed to gain a better understanding of the patients' perspectives. Later studies have also confirmed positive attitudes. In an Australian survey, both health workers and patients reported being comfortable with treating mild to moderate depression with evidenced-based online interventions (Gun, Titov et al. 2011). Pre- and post-measures in a clinical trial also explored the acceptability of CCBT with brief face-to-face consultations

and found a positive patient experience. Interestingly, the women found the programme to be more helpful than the men (Cavanagh, Shapiro et al. 2009).

Acceptability can be interpreted as more than just positive attitudes or measurement of satisfaction. Acceptability can also be understood as what is helpful to or what motivates patients. Some recent qualitative studies have explored patients' experience with internet-based treatment without face-to-face follow-ups. Motivation is important to ensure patients persist in treatment. Many patients do not persist with treatment using ICBT. Identified barriers to persistence were lack of computer skills (Gerhards, Abma et al. 2011), time constraints (Bendelin, Hesser et al.2011, Donkin and Glozier 2012) and low mood (Donkin and Glozier 2012). The latter of which implies that depression itself is a barrier to persistence with ICBT. Limited worth and lack of identification with the programmes were also noted as challenges (Gerhards, Abma et al.2011, Donkin and Glozier 2012). In one study, many patients sent the research team emails to contextualize the questionnaire answers that they gave in the programme, which they felt otherwise would be misunderstood. This indicated that they struggled to "fit" their answers into the existing alternatives. They also reported that a lack of therapeutic relationship meant that they had problems engaging with the computer intervention (Donkin and Glozier 2012). Overall, in these studies, the patients indicated that they wanted more human support as a motivator to adhere and/or as personal support to gain a deeper understanding to make the programme helpful (Bendelin, Hesser et al.2011, Gerhards, Abma et al. 2011). Positive aspects of ICBT were identified in various ways: to be reminded by email or phone enhanced persistence (Donkin and Glozier 2012), and to be able to work on their own gave a feeling of autonomy or control (Bendelin, Hesser et al. 2011, Gerhards, Abma et al. 2011, Donkin and Glozier 2012). The ability of the patient to translate the content from the online programme into actions or to implement new ways of thinking into daily life was also found to be helpful (Bendelin, Hesser et al. 2011, Donkin and Glozier 2012). The perception that the programme is helpful and noticing improvement were identified as important reasons for persisting with treatment (Gerhards, Abma et al. 2011, Donkin and Glozier 2012), and increased insight into depression and/or the patient is useful (Bendelin, Hesser et al. 2011, Gerhards, Abma et al. 2011). Overall, several dimensions relating to the use of ICBT by depressed patients have been studied, but little is known in depth about the patients' experiences with ICBT supported with face-to-face consultations.

1.5.2 ICBT in general practice

GPs with training and education in mental health are more positive towards depression and more often use non-pharmacological treatment (Richards, Ryan et al. 2004). By contrast, as mentioned above, research shows that, despite training, it has been difficult to implement short versions of specialized psychological treatment into general practice (King, Davidson et al. 2002, Wiebe and Greiver 2005, Davidsen 2008, Aschim, Lundevall et al. 2011). Guided ICBT puts less strain on the caregiver and has been suggested as an alternative in general practice (Hoifodt, Strom et al. 2011, Kivi, Eriksson et al. 2014). In the national guidelines for the treatment of depression in Norway, online interventions are recommended as a low-intensity option (Helsedirektoratet 2009). Studies of GPs found have positive attitudes to eHealth and online interventions (Gun, Titov et al. 2011, Sinclair, Holloway et al. 2013). In one interview study, GPs reported that they incorporated recommendations to online health information only if they had knowledge of trusted sites (Ahluwalia, Murray et al. 2010). Other studies have reported that GPs do not use eHealth and online interventions in their daily practice because of a lack of knowledge of reliable web sites and because they feel unfamiliar with such approaches (Sinclair, Holloway et al. 2013, Hermens, Muntingh et al. 2014). Some GPs have also reported insecurity about ensuring a good patient–health worker relationship when they used internet interventions (Hermens, Muntingh et al. 2014). GPs questioned by both Sinclair and Hermens did not have training in the treatment of depression in which online interventions are integrated. Adequate training of primary care health workers is claimed to be required for improving mental health care. Primary health care workers must learn how to provide treatment in a patient-centred manner and to understand how to motivate and prepare patients to engage in their treatment at home (WHO, Colleges et al. 2008). Little is known about the experiences of integrating online interventions or guided ICBT in primary care. To our knowledge, no papers have explored the experiences of GPs who are trained in such approaches.

Meta-analysis of supported ICBT has indicated a solid evidence base for its effect on reducing symptoms of depression (Johansson and Andersson 2012, Richards and Richardson 2012). However, many aspects are highlighted as unknown or as a challenge such as low adherence and a lack of knowledge about what is helpful to the patient and what follow-up support should consist of. Evidence indicates better outcomes and adherence if human support is given compared with ICBT as self-administered self-help (Johansson and Andersson 2012, Richards and Richardson 2012). This implies that aspects of the patient–health worker

relationship influence treatment in a positive way. Better understanding of the complex aspects involved and the work required is needed for guided ICBT to be helpful to the patient and to be implemented into routine practice. Given the recent development of ICBT and the limited implementation in general practice settings, research is still in its early stages. Qualitative research may improve our understanding of how patients and GPs experience ICBT and the translation of knowledge into practice. This knowledge may contribute to improving the treatment of depression in general practice.

1.5.3 MoodGYM as an optional guided ICBT in general practice

MoodGYM is an ICBT programme developed at the Centre for Mental Health Research at the Australian National University. MoodGYM is a self-help programme that can be considered as a first step in the treatment of depression in the national guidelines for the treatment of depression in Norway (Helsedirektoratet 2009). MoodGYM has been proven to be effective in alleviating symptoms of depression (Christensen, Griffiths et al. 2002, Hoifodt, Lillevoll et al. 2013). MoodGYM is a free internet-based self-help programme that comprises five interactive modules that introduce CBT principles. The principles are presented to the patient through online exercises in a way that allows MoodGYM to demonstrate the relationship between what one thinks and what one feels. One module presents relaxation techniques and another includes sections on managing relationships and increasing engagement in positive activities. It has been suggested that MoodGYM can be effective in primary care even if the provider (i.e., the GP) lacks extensive specialized training (Proudfoot, Goldberg et al. 2003). Our research group conducted a trial exploring MoodGYM combined with short consultations in treatment of depression, which is compatible with general practice. This trial of patients recruited from general practice concluded that this mode of treatment was effective in reducing symptoms of depression (Hoifodt, Lillevoll et al. 2013).

2 Considerations of research design and method

Explicit and deliberate choices in research are important to ensuring good quality. These choices and components of research are not conducted in a linear fashion, but are in constant interplay throughout the research pathway. Maxwell's model (2013) comprised five components: 1) goals, 2) research questions, 3) conceptual framework, 4) methods and 5) validity. Choices are made about the interplay of these components. In all components, ethical considerations must also be included. With this as a framework, the following text shows how and why my research group and I made what we considered to be the most suitable choices when designing and conducting the two qualitative studies that this thesis is based on. Within this section, I also make transparent the most important discussions that these choices are based upon and reflections made in their extension.

2.1 Goals

Who we are and what we bring with us when we approach the task of medical research influences what we look for and the results that we find (Malterud2003). Maxwell encouraged researchers to be open and to reflect constantly about who we are and to aim to convey how this might influence the research process. One aspect of making this transparent is clarifying our goals as practical, personal and intellectual (Maxwell2013). In the following, I discuss the different goals of this research.

Practical: As I understand, this is the overall research goal. For me, the overall goal was to contribute to the discussion about improving the treatment of depression in the context of general practice.

Personal: In winter 2010, I was ready to go back to work after maternity leave after the birth of my youngest son. My friend strongly recommended that I should apply for her two jobs because she had to resign. I contacted the project leader and supervisor, Nils Kolstrup. I was happy to win both jobs: working as a GP at Kaigata legekantor while writing my Ph.D. For 3.5 years, 50% of the work was research combined with clinical practice, a combination that I appreciated. By autumn 2013, I was ready to give my thesis my full concentration.

At first, I was interested in research because I saw it as an opportunity to dig deep into a field, as a contrast to a hectic clinical day. Having more flexible days while my children were young was also part of my motivation because I had heard that research was often more flexible than clinical practice. I admit that at times, it has felt flexible, although it was rather overwhelming in other hectic periods. My dream was to find the opportunity to have a year abroad, and I

worked systematically to make it possible. To improve my English and to be inspired by a vibrant environment for medical anthropology, I worked as a guest Ph.D. student at Melbourne University from August 2013 to July 2014. I learned a great deal both as a researcher and personally during this period.

The project involving the use of ICBT in general practice was interesting for several reasons. A project based on the principles of CBT was interesting because CBT was something that I had heard about and wanted to learn more about. As a GP, I was used to and enjoyed, talking to people. I found it and still find it, interesting to hear their stories. Learning about research interviews was therefore appealing. My background from 1 year of studying Criminology at the University of Oslo was also motivating because that discipline has a strong tradition of qualitative research.

After working within the field of eHealth, both as a researcher and as a GP trying to apply it, I was keen to understand how such an approach could be integrated into treatment in a good way. I hope that my own experiences have helped me to capture the participants' stories. However, I have also tried to ensure that I did not act as a defender of ICBT or assume that my experience was the same as that of others.

Intellectual: In an inductive way, I wanted to explore the meaning of experiences with ICBT from the perspective of the participants. The participants are both the patients and the GPs whom we interviewed. In the patient study, our aim was to understand more about the patients' meaning of the lived experience before, during and after treatment with guided ICBT. In the GP study, our interest was the GPs' perspectives and how they made sense of their choices when intending to implement this novel approach into their everyday clinical practice.

2.2 Research question

The goals of a study are an overarching aspect that directs the research. The more focused research questions (also called aims) evolve into the process of having a goal, choosing a method, gathering data and analysing the data. Who we are as researchers and our conceptual framework are also parts of the process. All of these aspects will, in an interactive way, influence each other (Maxwell2013). Quantitative researchers often aim to say something about significant causality or correlation expressed in numbers. In qualitative research, one can explore the participants' reflections on causality when exploring a phenomenon, and one may infer causal processes. However, Kvale (2009) argues that the overall research question

of “why” is hard to answer initially. “What” or “how” questions are much more suitable for qualitative approaches. I tried to keep this in mind when formulating my research questions. The research group that I was in knew the field quite well, but the process remained to focus the research questions for each paper, and they were revised several times. As Maxwell (2013) argues, the research question evolves as a result of an interactive design process as opposed to being established as a starting point. Especially in the patient study, we had to ask ourselves many times after the interviews were conducted: “What did the participants tell us that was relevant to the practical and intellectual research goals seen in light of identified gaps in the previous literature that warranted research?” From this knowledge, the research questions, or aims, evolved and helped to focus the analysis, conceptual framework and hopefully, in a clear way communication of the results in the final papers. The final research questions are as follows;

Patient study

How do patients experience ICBT with a focus on motivational aspects leading them to persist with ICBT, using the self-determination theory (SDT) as a theoretical perspective?

How do patients experience ICBT focusing specifically on those aspects of the therapy that they consider to be most helpful?

GP study

What aspects were perceived by GPs to affect their implementation of guided ICBT in daily practice?

2.3 Conceptual framework

When conducting research, one must work with concepts that are coherent with the rest of the scientist’s own conceptual apparatus and that are, to some extent, socially coherent with the rest of the scientific community (Johansson and Lynöe2008). What “glasses” we have on influence the truth that we seek and the approaches that we choose. An important part of doing research is to be aware of the choices that we make on our way and how we argue logically for the path that we take. Reflecting about what “glasses” we have on makes us conscious of this process.

Choosing a research pathway requires awareness and decision-making on many levels. When conducting both qualitative and quantitative research, epistemology, methodology and method are all important aspects that are intricately connected. Epistemology refers to the theory of

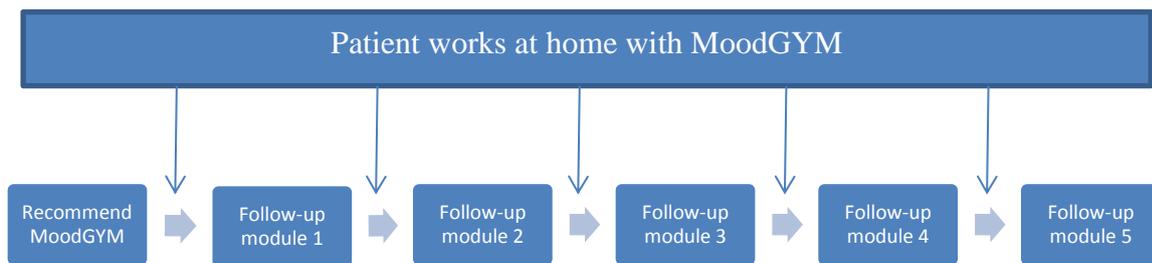
knowledge. This is more at a philosophical level; e.g., defining what the nature of scientific knowledge is. Methodology involves justifying the method through theory that explicitly tries to formulate the logic that a researcher uses to produce knowledge; e.g., as a specific paradigm within qualitative research. Method refers to research action. Research methods are the practical activities that a researcher performs to gather, manage, analyse and report data (Carter and Little 2007). Carter and Little (2007) argue that objectives, research questions and design shape the methodology and that methodology shapes the objectives, research question and design. This is a cyclic view of how components in qualitative research interact. As mentioned above, it can also be seen as a complex interplay. As presented by Maxwell (2013), the components of qualitative research are in constant interplay between the conceptual framework, goals, validity, research question and methods. In other words, the research pathway is not entirely given when the research question is formulated because the relationship between the pathway and research question is a continuous ongoing process. To explore the phenomenon that we wanted to investigate, we reflected often on the conceptual framework. Conceptual framework is introduced by Maxwell (2013) as one of the five components of designing qualitative research. In the following, I make transparent the different aspects of my conceptual framework, such as the context of the study, concepts, underlying assumptions, expectations and the theoretical philosophical approach that have informed my study. I begin by presenting the broader eHealth research that I have been involved in to explain the study context of the two qualitative studies that this thesis is based on. I also reflect on what I think are important aspects of my pre-understanding. In the subsequent sections, I describe in detail what knowledge we wanted to explore and what we saw as data and finally, how we planned to obtain these data, thus explaining the epistemology and methodology of this thesis. I finish by presenting the theoretical framework used to understand and interpret our findings for each paper.

2.3.1 eHealth research in Tromsø, study context and me

To understand who the participants were and to grasp who we are as researchers, it is obvious that a description of the study context needs to be provided. From autumn 2010 until autumn 2012, a randomized controlled trial (RCT) was conducted at UiT The Arctic University of Norway (trial registration: Australian New Zealand Clinical Registry ACTRN 12610000257066). This RCT offered guided ICBT to a group of patients experiencing depression. The patients had sought help from their GP and were referred to the clinical trial. I visited all GP offices in Tromsø to encourage the GPs to refer patients. The patients had

symptoms of mild to moderate depression. Patients who were suicidal, psychotic or drug abusers were excluded. We used the Norwegian translation of MoodGYM as an internet-based programme in the intervention. In-between the online modules face-to-face consultations (module follow-ups) were offered. In total, the intention was to have five module follow-ups, although this was flexible to some extent (see Figure 1: Intended module follow-ups). The therapists were two psychologists without specialized training in CBT (Ragnhild Sørensen Høifødt and Kjersti Lillevoll). The consultations were of a motivating nature inspired by a short manual. However, if time allowed, the consultations also allowed reflections in general. To simulate the conditions in general practice in Norway, the time spent in face-to-face consultations was only 20–30 minutes, compared with 40–60 minutes in conventional CBT.

Figure 1: Intended module follow-ups.



In addition to exploring clinical effectiveness, we also wanted to investigate the patients' thoughts and reflections. Patients from the RCT were recruited to in-depth face-to-face interviews to explore their experiences with treatment (the patient study). The measurements of clinical effectiveness concluded that this mode of treatment was effective in reducing symptoms of depression (Hoifodt, Lillevoll et al.2013). From this conclusion, the next step was to implement this complex intervention into general practice.

A training package based on the Norwegian translation of MoodGYM was developed. The presenters at the course were a GP (Nils Kolstrup) and two psychologists (Ragnhild Sørensen

Høifødt and Kjersti Lillevoll). It was a 3-day course for GPs held in the spring of 2011. GPs from all of Norway were invited to participate; however, most participants came from the north of Norway. The training comprised: (1) an introduction to CBT principles, (2) presentation of and a group session on, MoodGYM's content, (3) a patient's description of his experiences with guided ICBT and (4) a presentation of the manual for follow-ups and links to an online version of the manual. The manual comprised a short summary of each module and suggestions for follow-up questions. Originally, the intention was to conduct a trial to explore the clinical effectiveness of guided ICBT in regular care in general practice. All of the GPs participating in the course agreed to participate in this trial. Unfortunately, the recruitment of patients proved to be difficult and we decided to stop the trial. The participants in the GP study were recruited mainly from those GPs who completed this course. In-depth face-to-face interviews were conducted to explore their experiences with implementation of ICBT into their daily clinical practice.

Communication in an interview setting is influenced by several factors. An interview is more than just exchanging words. One dimension is the structure of the interview—how the interview guide is followed. A second dimension is the characteristics of the parts of the interview and a third dimension is the interaction between the parts and the influence of this interaction (Ryen 2002). In both studies, the interviewers were young female health workers. One of which was also a therapist in the RCT (Kjersti Lillevoll) and another was a presenter at the course for GPs (Ragnhild Sørensen Høifødt). We had all read a substantial amount of research supporting the use of self-help, eHealth and ICBT. In parallel to my Ph.D. studies, I worked as a GP. The advantage of a GP background was an interest in the dialogue with people and exploring their stories. I was familiar with the psycho-education literature about depression and the treatment of depression. A pre-understanding of the field of eHealth and depression allowed me to easily understand the language in the field. On the other hand, this pre-understanding might make me search within the interviews to confirm my assumptions about the world. A strong pre-understanding may lead to the falsification of findings by trying to validate the researchers' own understanding during the interview (Kvale 2009, Maxwell 2013). To reduce the chance of confirming our positive assumptions about ICBT, we constantly reflected on our pre-understanding and how it could influence us in conversations between us as interviewers and with an experienced researcher in medical anthropology (Mette Bech Risør). Our intention was to be curious and open to the participants' stories and not to assume that they shared our thoughts and reflections on MoodGYM.

In the patient study, one interviewer was a psychologist (Kjersti Lillevoll) and the other (me) was a GP. We discussed several times between ourselves and with co-researchers and concluded that the overall content and length of our interviews were similar. The psychologist had more first-hand experience with the programme as a therapist in the RCT. I had thought that this would influence the interviews to be more nuanced than mine. However, in the end such a difference was not identified. I was satisfied that both of us had been able to establish an atmosphere that was open to hearing personal stories and emotional reflections. As a GP, I found it strange in the patient study to listen to the patients tell about their problems without giving advice or acting as a helper, as I normally would. This relationship was new to me and I spent many hours reflecting on it with my co-researchers. I found comfort in and acceptance of, this relationship in the overall research goal to improve treatment for depression in the context of primary care.

In the GP study, I, as a GP, interviewed other GPs, which meant that I was investigating my own field. I was very concerned to have “big blind spots” because I knew the field and thereby could forget to ask the basic questions. This shared understanding is problematic in qualitative research because of the intention to investigate aspects of everyday life that are taken for granted (Kvale 2009). However, findings from research interviewing GPs have found that if the interviewers are GPs themselves, a wider focus and more emotionally charged dialogues are possible (Chew-Graham, May et al. 2002). The interviews that a psychologist (Ragnhild Sørensen Høifødt) conducted in the GP study lasted longer than my interviews. One possible explanation is that she was new to conducting qualitative interviews and therefore rephrased questions several times due to a fear of missing information and making the interviews longer. Another possible explanation is that the psychologist addressed aspects that are normally taken for granted to a greater extent. However, we found that the content of our interviews was quite similar. A third possible explanation is that as a psychologist, she was used to having longer sessions in clinical practice and therefore found it natural to talk for longer in the interviews. However, in the patient study, there was no clear difference in the length of the interviews when I was a GP and the other interviewer was a psychologist (Kjersti Lillevoll). The clinical background is therefore not likely to explain the difference entirely. Another reason could be that all the GPs knew of me as a GP and therefore, a trusting atmosphere was quickly established, which made the interview shorter.

2.3.2 Exploring the person's own view

A qualitative, oriented study does not focus on numbers or measurements, but rather focuses on grasping content and meaning. There are often few subjects and many variables (Aase and Fossåskaret 2007). Human beings are perceived as social individuals who are able to change attitudes and learn new things and are active agents in a social world. Ryen (2002) argued that an exploration of these changes and new things can best be explored in a qualitative manner and that an analysis of information from few subjects may be transferable to others in a similar situation. However, exploring change demands trust and openness in the interview setting.

Exploring phenomena such as helpfulness and motivation associated with the experience of ICBT does not provide numeric data and the variables are mostly unknown. Exploring the nuances and searching for a deeper understanding of experiences with this treatment involved trying to understand the perspective of the participants; each person's own view. The aim was to obtain knowledge about what engaged the participants with an internet-based treatment programme and how it engaged them. Overall, our interest was how the participants made sense of their experiences and behaviour rather than determining what actually happened. Their beliefs and thoughts were real to us, which gave our approach what is known as a "realistic view" (Maxwell 2013).

2.3.3 Lived experience

Edmund Husserl founded phenomenology with the starting point that science is merely preoccupied with explaining natural objects or events, whereas the understandable meanings of these events or objects are taken for granted. If, for instance, a biologist were to study a fish, the fish is an object to be scientifically explained. The meaning, which we obtain from lived experience about what makes a fish a fish to us, does not receive any attention. In our "natural attitude", the meaning of many phenomena is not reflected on, but as phenomenologists, we investigate the meanings taken for granted in everyday life. Phenomenologists use lived experience as a starting point in their work. Without such reflection, it is difficult to become aware of the practices that we are part of. Such an awareness may help us to improve our practice (Lindseth and Norberg 2004). Therefore, if the task at hand is to understand experience as it is understood by those having it, the empirical knowledge of this can be approached using phenomenology.

In this research, we asked questions to reveal meaning. We wanted to investigate the experiences of patients and GPs about treatment using MoodGYM and how to create meaning and make sense of such treatment in everyday life. For instance, we asked about the patients' experiences of being sick and living in a computerized society with the expectancy of fulfilling the treatment and how they motivated themselves. We also asked about what they found to be helpful when using MoodGYM. To approach phenomena with phenomenology means to shift from a mechanistic view of known influencing factors or variables to an interest in the relationships, interactions, meaning and human interpretations (Maxwell 2013). Taking a phenomenological attitude, both the listener and the narrator take part in the narrated meaning when telling. The participant is not a ship filled with black and white facts, but together nuanced narration from lived experience is made. The researcher does not collect data passively, but rather takes an active part in the dialogue with the participants. The researcher contributes to the dialogue by asking the right questions, showing empathy and interest and displaying body language that indicates curiosity. By narrating, the teller refrains from judging and the listener may not judge (Lindseth and Norberg 2004). As researchers we need to analyse the data gathered. If what the patients say is just repeated a researcher is not needed (Ryen 2002). It is not expected that a single fundamental truth will be found, because the whole truth can never be understood fully. Instead, the search focuses on the possible meanings in a continuous process (Lindseth and Norberg 2004). Our intention was to have a phenomenological attitude in the meetings with the participants.

Epistemology within science has moved from believing that there is one fundamental truth to the opposite stand, that there is no truth (Johansson and Lynöe 2008). My approach is from a position somewhere in the middle—that truth is complex and can be seen and interpreted in different ways. A different story might be found if somebody with a completely different pre-understanding and background had conducted the interviews with the same participants; or if the same interviews were conducted 10 years ago when the Internet was not part of our daily lives, a totally different truth would be revealed. Our common world was completely different then and therefore, the experience with MoodGYM would also be different. The particular stories that I found today may be different to those found to be true from depressed patients and GPs 10 years from now. However, the perspective of the individual and the general arguments elucidated may be fruitful for later studies of the treatment of depression in the context of general practice. The intention was not to believe that I knew the truth about the

variables that influence the choices that the participants make, but instead I asked them to tell their own stories and to explore how they themselves found the “shoe fitting”.

2.3.4 Exploring aspects of interest in the patient study

Exploration of the patients’ experience with ICBT expressed in the interviews involved a recursive process backward and forward to find the meanings of their lived experience.

Motivation and helpfulness were identified as important aspects. In this section, I try to make transparent how we approached such diffuse concepts. In the subsequent sections, I present the theoretical framework used to define the concepts and to better understand our findings.

The patients’ thoughts and explanations in relation to their treatment of depression were what we intended to grasp, to open up and to display in their lived experience.

For analysis, the interviews had to be transcribed into text (Lindseth and Norberg 2004).

Ricoeur (1991) argues that a text has an autonomous status compared with speech. There are two ways of reading. One can just read a text as an authorless and wordless object and thereby explain it in terms of internal relationships. Linguists approach a text this way using a structural analysis. Alternatively, one can try to communicate with the text and thereby interpret it. Interpretation moves from the text and tries to find meaning through a hermeneutic approach. The overall conception of reading is then the recovery of meaning. To explain is to bring out the structure. To interpret is to follow the path of thought opened up by the text. This hermeneutic theory claims that it is possible to interpret and explain written text and has inspired Lindseth and Norberg (2004), among others, to interpret other written types of data. Inspired by Ricoeur, Nordberg and Lindseth combine phenomenology and hermeneutics when investigating lived experience. They argue that both written text and transcribed interviews can be assessed using the same method as Ricoeur uses to explain and interpret text.

Lindseth and Nordberg (2004) suggest using the combination of naïve reading and structural analysis to formulate a final comprehensive understanding. The essence of the meaning itself can thereby be elucidated from lived human experience. Essential meaning is something that is familiar through our way of living, actions, narratives and reflections. According to Norberg, (2011) the advantage of an interview is that one can ask for explanations. In this way, the explanations perceived by a person can be uncovered. To investigate lived experience, interviews needs to be fixed in text, which again always needs interpretation. The task at hand is not to describe or explain something as a general social phenomenon but to understand the experience expressed in the interview texts (Lindseth and Norberg2004). With

this theory at hand, we tried to map out the structure of the interviews and to interpret the text to elucidate meaning expressed by the patients who were interviewed. One explanation did not exclude another possible explanation, but they followed one another and thereby gave a deeper insight of the experiences under investigation. In our research, the content of what the patient, as an individual, was telling us was our data.

Assessing the phenomena of motivation and helpfulness may be easier said than done because thought and knowledge around such phenomena may be very diffuse, even to the person describing them. However, there is no doubt that choices and thoughts are made in the process. Lindseth and Norberg (2004) argued that narration may reveal choices made from lived experience. Information and knowledge would thereby be uncovered even without patients necessarily being conscious of talking about the phenomenon; e.g., by inviting patients to tell their story of depression and the treatments that they have been through. To explore motivation and helpfulness, the stories should be analysed in terms of what they say, what they talk about and what they refer to when interpreted. Thus, a hermeneutical approach was deemed to be suitable from these aspects. The intention was also to focus on the understandable meaning of these experiences and their meaningfulness, which makes a phenomenological approach useful as methodology. Analysing the text using phenomenological hermeneutics can be done to explore the essence in lived experience. In the patient study, we were interested in the lived experiences and how the patients gave meaning in terms of motivation and helpfulness and therefore, we found phenomenological hermeneutics to be a suitable approach for understanding our data.

Part of our conceptual framework was our knowledge of the existing literature in the field of eHealth because it informs our assumptions and beliefs. Motivation is an important element in persistence with any treatment programme. A meta-analysis has found adherence to be a challenge both in face-to-face CBT and with ICBT (van Ballegooijen, Cuijpers et al. 2014). Several reviewers have found that ICBT yields greater retention when combined with human support compared with self-administered self-help (Johansson and Andersson 2012, Richards and Richardson 2012). This indicates that there is something in the human interaction or the patient–therapist relationship that increases motivation to continue treatment. On the other hand, if the patient is motivated to complete the intervention, little is gained if the patient is not able to make the intervention meaningful and helpful. Knowledge about what patients find helpful in ICBT is limited. We wanted to explore what is experienced as helpful within both the specific content of MoodGYM and the support given in the consultations. The reduced

time during the consultations compared with CBT given in specialized care may interfere with the doctor–patient relationship, which may again inhibit motivation to progress and the perceived helpfulness of the treatment. Therefore, we were interested in elaborating on the connection between the patient and the helper.

We wanted to include in the analysis all relevant events, thoughts and reflections expressed by the patients. The use of internet programmes by patients experiencing depression makes the phenomenon completely different from the ordinary treatment of depression, which may include medication for depression and from the usual face-to-face cognitive therapy. The fact that the patients are depressed increases the difficulty in motivating and helping them because a cardinal sign of depression is the lack of initiative and a feeling of hopelessness. Inspired by previous literature and findings in the interviews, we decided to interpret in greater depth the motivational aspects and what was perceived as helpful. Understanding more about these aspects might lead to improved treatment in the future.

2.3.4.1 Theoretical framework for exploring motivation (Paper one)

In Paper one, we argue that it is useful to explore motivation to understand more of the aspects that may improve adherence. Many theories try to explain how motivation is influenced. Møller (2010) claimed that health professionals often see motivation as a parameter only within the patient and one that can easily be measured. This knowledge about measurements does not give useful information about how motivation can be improved. Such information will only help to map out the current situation. It is more interesting to explore what people involved in a change find motivating rather than to measure how motivated people are. Møller (2010) argues that motivation means to want and make efforts to change. However, motivation is not something that is only within the person. Motivation must be seen as a complex phenomenon that depends on the social contexts and interpersonal relationships that it is embedded in. We were inspired by this definition of motivation and wanted to explore motivation as something more than a number on a scale. We were also interested in the connection with the therapist. Prochaska's theory of motivation argues that the relationships that a person has can influence motivation. He claims that a person goes through different stages of motivation when a change is made and tailoring the relationship between the patient and the mental health worker can enhance motivation and therefore the outcome (Prochaska and Norcross 2001). We know that ICBT with human support improves outcomes, but we do not know what this support should comprise. We wanted to explore what the

patients who had lived experiences with treatment perceived as motivating in terms of their thoughts, reflections and events.

SDT offers a broad perspective on human functioning and motivation (Ryan and Deci 2000, Verstuyf, Patrick et al. 2012, Moran, Russinova et al. 2013) and says that humans naturally have intrinsic motivation, but require supportive conditions to maintain and enhance it. Our aim was to explore motivation and especially the aspect of how to understand support, SDT gave us a useful framework for exploring and understanding supportive conditions and motivation. Intrinsic motivation is driven by an interest or enjoyment in the task itself. These aspects exist within the person, the way that they think and what goals within themselves they seek; for example, to feel happy or to feel proud. A patient might complete their modules in MoodGYM because they find it interesting to know more about depression or because they like the idea of working on their own by the computer and the exercise gives them self-satisfaction. These are examples of intrinsic motivation.

According to SDT (Deci and Ryan 2000, Ryan and Deci 2000), three basic psychological needs should be satisfied to enhance intrinsic motivation: relatedness, competence and autonomy. Relatedness includes a sense of recognition, belonging with peers, family or community and a need to feel connected to and valued by, important others. Competence involves socio-contextual success with optimal challenges, feedback and freedom from demeaning evaluation. Competence will only enhance motivation if it is accompanied by a sense of autonomy. This implies that motivation is strongly connected to people as social beings and that social connections can influence motivation. This theory is suitable for understanding the stories presented to us in the patient study because the social dimension was a recurring finding. Extrinsic motivation is factors outside the person and are explained by STD. Examples of extrinsic factors are being rewarded and appreciated by a spouse or a work supervisor, having a nice office and so on. Another example of extrinsic motivation would be if the patient completes modules just because the therapist expects this or to achieve recognition from the therapist. Extrinsic factors were not identified as important in the patients' stories and were therefore not a focus in our analysis. This is described further in Paper one.

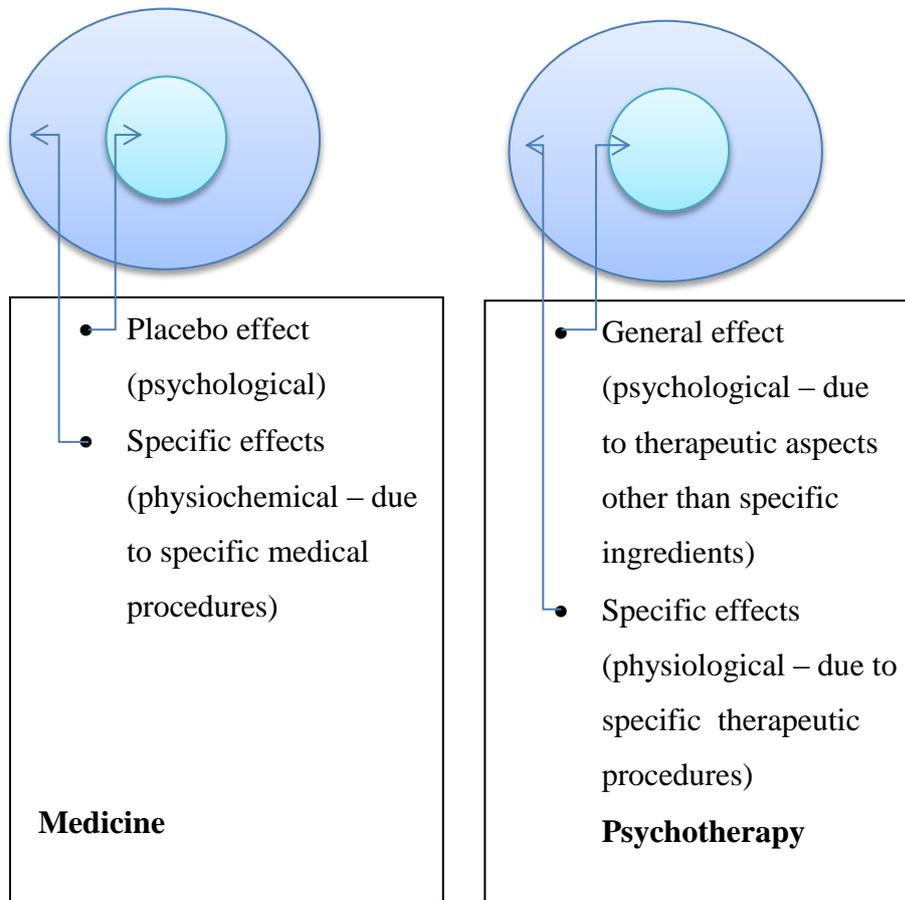
2.3.4.2 Theoretical framework for exploring helpfulness (Paper two)

In Paper two, we argue that it is useful to explore what is experienced as helpful in guided ICBT and how it is experienced. The intention of psychological treatment is that it should help patients live their life with fewer symptoms of their mental disorder. Evidence indicates

the ICBT leads to promising reductions in the symptoms of depression and that this outcome is better when treatment is supported by a health worker (Johansson and Andersson 2012, Richards and Richardson 2012). These findings are based on measurements on the effects of support, which show that support is helpful, but they do not provide detail about how it is helpful. Little is known about what patients themselves perceive as helpful and whether and how they find support improves treatment. We wanted to explore what the patients who had lived experience from treatment perceived as helpful in terms of thoughts, reflections and events.

As mentioned above, ICBT is based on cognitive behavioural theory. We could have investigated our data only on helpfulness in relation to what is known as therapeutic elements specific within CBT. With CBT as our only framework we could have held our focus on the connections between situations, thoughts and feelings and how homework increased awareness of thought patterns (Beck 1995) and how these were integrated into everyday life. On the other hand, the interviews identified nuanced and complex aspects with elements of social meanings. The theory of CBT alone could not help us to understand all our findings. There is an ongoing debate about what is helpful in psychotherapy. Wampold (2001) discusses the tension between the medical model versus the contextual model. The aim of the medical model is to determine the specific effects of a therapy; for example, the effects specific to CBT compared with those of psychodynamic therapy. The general effects are the results of the common shared factors of all psychotherapy. These general effects can be compared with placebo effects. Clinical studies using the medical model to explore psychotherapy try to exclude general effects. Figure 2 shows a re-creation of this model to illustrate the comparison.

Figure 2: Medical models in medicine and psychotherapy. (Wampold2001)



In contrast to this medical model of psychotherapy, Wampold argues that evidence from substantial research favours the contextual model because the effect is the same overall for all psychotherapy for depression, independent of specific factors. The contextual model includes the same components as the medical model of psychotherapy. However, Wampold argues that the shared components of all approaches to psychotherapy are most influential in treating patients' (or clients') problems, complaints or mental disorders; shared components are most helpful. These shared components give the general effects. The point is not to exclude general effects, but rather to be aware of their therapeutic effects and importance in treatment. To optimize psychotherapy, both specific factors and common shared factors should be considered. Wampold quotes Grencavage and Norcross when discussing the five most common shared factors identified: 1) client characteristics—positive expectations, hope or faith and a client who actively seeks help; 2) therapist qualities—cultivation of hope and warmth-positive regard; 3) change processes—providing the opportunity for ventilation of problems, practice of new behaviour and provision of rationale; 4) treatment structures—use

of techniques, exploration of emotional issues and adherence to theory; and 5) relationship elements—development of alliance and engagement. This theory therefore presents a wide spectrum of what can be understood as helpful within psychotherapy. In the interviews, a wide spectrum of different aspects were experienced as helpful in reducing the symptoms of depression. Inspired by Wampold's theory, we aimed to understand in greater depth the specific elements experienced as helpful with ICBT and to explore all helpful aspects, including what are known as common factors of psychotherapy.

2.3.5 Exploring aspects of interest relevant to implementation in general practice

In the GP study, we wanted to explore the experiences of implementing guided ICBT into regular clinical practice from the GP's point of view. There are few studies on ICBT given in regular care and therefore, the aspects important to the process of implementation are not mapped out in detail. In the patient study, we explored motivation and helpfulness, which are both complex and somewhat diffuse phenomena and thus a phenomenological–hermeneutical approach was suitable. However, the intention of the GP study was to explore, in a more straightforward way, patterns in the stories describing the professional work at hand and the GPs' thoughts regarding this issue. This required us to adjust our methodological basis.

We chose thematic analysis, a method that is used widely in the medical field (Braun and Clarke 2006). The acknowledgement of this approach in our research community was an important reason for choosing it. Thematic analysis is a flexible tool because it has theoretical freedom and can be used in relation to different epistemological positions. This flexibility demands that the researcher make explicit the choices that are made (Braun and Clarke 2006). We chose to continue to have a phenomenological attitude in the encounter with the participants because we aimed to be open, without judgement and to display curiosity in trying to understand how the participants made meaning of their lived experience (Lindseth and Norberg 2004). We had a realistic view and took a data-driven inductive approach because the coding was strongly linked to the data, rather than trying to fit the coding to an already existing theory (Braun and Clarke 2006). However, we continually discussed within the research group our interpretation in light of the existing literature and could never free ourselves from theory and our pre-understanding.

2.3.5.1 Theoretical background implementation (Paper three)

Implementation in general practice also requires motivation of the GP, although implementation in general practice is strongly influenced by the clinical complex context. The GP's positive attitudes and motivation are clearly not the only factors. Their behaviour can be affected by many external aspects, such as clinical guidelines, organizational aspects of time, financial resources and tools available. Medicine is not just something that the doctor delivers, but is created through the doctor's interaction with the patient. These were the reasons for not continuing with SDT in the GP study. The choice to recommend ICBT to patients with depression and to follow up with these patients is part of a professional decision. The dual process theory is a model often used to explain such decision-making (Croskerry 2009, Ingemansson, Bastholm-Rahmner et al. 2014). This theory suggests that health workers use two pathways to make a clinical decision: a fast and intuitive system, and a slow and analytical system. This theory focuses on the cognition of the health worker making the decision. In contrast, ICBT is a novel approach and is therefore not an established alternative in everyday clinical practice. The choice to use ICBT requires both a clinical decision through the health worker's cognition during the consultation and the effort to implement this approach as a possible alternative in a complex clinical context.

Many theories have been developed to explain aspects that affect the implementation of innovations in health care (e.g., (Grol and Wensing 2004)). We chose normalization process theory (NPT), which was developed by May and Finch (May and Finch 2009, Murray, Treweek et al. 2010), as a framework to explore the implementation of ICBT because it is derived from multiple qualitative studies that explored the implementation of complex intervention and eHealth contextualized in regular health practice. Others have considered this theory to be valuable when evaluating implementation of new treatment of depression in primary care (Gunn, Palmer et al. 2010, Coupe, Anderson et al. 2014). There is a gap between the development of new treatments and knowledge and the implementation of these interventions into practice to benefit the patient or population groups that they are intended for. According to NPT, successful implementation occurs when a practice is normalized to the point where the health workers find it natural to choose that practice or it "disappears from view".

Implementation depends on a complex interplay of four main components of the work of health workers (May and Finch 2009, Murray, Treweek et al. 2010). Work is defined as

purposive social action that involves investments personally and as a group to achieve goals. Promoting and inhibiting aspects outside the health worker influence the process. Firstly, “coherence”- is the work to make sense of an intervention. Health workers need to grasp and agree on what is involved and they must find it relevant. Practice is made possible by a set of ideas about meaning, use, utility and competence. Gunn and Palmer et al. (2010) claimed that one important aspect of coherence in the treatment of depression was agreement on the technique to deploy. Secondly, “cognitive participation”- means that health workers must engage in the complex intervention. This may involve enrolling in training or positioning themselves to use an intervention. Legitimation of a practice is essential for promoting cognitive participation and is closely bound to norms and conventions. As Gunn and Palmer et al. (2010) emphasized, health workers need to join in with depression work. Thirdly, “collective action”- is the effort required to enable the intervention to happen or the work to make the intervention function. The work is done to make the treatment compatible with the other activities in a hectic clinical setting. Efforts to make the intervention work through interactions with other stakeholders are one aspect of collective action; e.g., the doctor–patient encounter and developing a trusting relationship with the patient. Organizational effort is also needed to apply the skills within the clinical practice setting.

In the treatment of depression, health workers perform various forms of work to provide treatment, such as applying certain techniques, organizing time in a hectic day and sustaining the patient–health worker relationship (Gunn, Palmer et al. 2010). The last component, “reflexive monitoring”- comprises gathering information about the formal and informal appraisals of the benefits and costs of the intervention. Implementation of a complex intervention in the clinical setting does not occur in a linear fashion but rather occurs through the dynamic interplay and within the wider context of the interventions comprising organizational structures, social norms, group processes and conventions. There is constant interplay between these components, which are interwoven. In the writing of Paper three, it was a challenge to separate these components when analysing our data and identifying patterns. The advantage of NPT is that by exploring these components, we can show the various aspects of work done or not done when implementing ICBT into regular practice.

2.4 Method and method discussion

2.4.1 Interview

Qualitative research methods include a diversity of approaches such as interviews, observations, text analysis and use of visual media (Ryen 2002). The aim and focus that the researcher wishes to explore will determine the best approach. This is achieved by the researcher asking the question: “How may I gain access to knowledge about the focus?” If the main intention is to explore how things are acted out in practice, asking the person may not give an answer. It is not given that a person is always conscious about what he does in action. For example, it is likely that a woman working in the fish industry may find it difficult to explain how she removes scales from shrimps, but she could easily demonstrate this. If she has thoughts on the subject, it is not certain that they coincide with observed findings. First-hand information about what is actually acted out requires observation. On the other hand, if the intention is to explore what the person thinks she does or what she thinks about what she does, observation may not give trustworthy data. Only the person herself can elaborate on her own thoughts either in writing or orally. The advantage of communicating orally is the opportunity to make clarifications on the spot and thereby to avoid misunderstanding (Ricoeur 1976).

Deciding which method is most suitable depends on the issue(s) explored in the study and the context of the research (Ryen 2002, Kvale 2009, Maxwell 2013). If our aim were to explore what exactly was done when under treatment with MoodGYM, observation would be more suitable. For example, we could have followed GPs during their work to see how they used ICBT in their daily practice. Focus group interviews are a good way to obtain different opinions and to create a climate for a discussion (Kvale 2009). Focus group interviews could have been another alternative way to explore other aspects of implementation. The GPs from the course could have met regularly to evaluate and discuss their experience with MoodGYM. Focus group interviews would give less time with each participant, and thus the more in-depth narratives and reflections might have been lost in a group. NPT can be used to evaluate complex interventions in a clinical setting or as a tool to facilitate the implementation process. Hypothetically focus group interviews could with advantage have been combined with NPT in a prospective way to facilitate the work of implementation. For the patient study, we explored the experiences of treatment for depression from the patients’ point of view, which is

a very sensitive topic. To obtain honest descriptions of both the GPs' and patients' experiences, we considered that one-to-one and face-to-face interactions were most suitable.

With epistemology anchored within positivism one tries to find an objective truth through liberation from theology, feelings and opinions, often in a quantitative way (Johansson and Lynöe 2008). Hypothetically, we could have approached ICBT in a more quantitative manner using a survey. From the point of view of the motivation theory of Ryan and Deci (Deci and Ryan 2000, Ryan and Deci 2000), we could have used a deductive approach as a basis for a survey where possible intrinsic and extrinsic factors can be rated on a 1–10 scale. The patients could then rate these factors according to their perceived importance and whether they were considered to be part of their treatment. We could have measured those motivational factors that were considered to be most important and how often they appeared in this group. These results could be combined with the measures of the effects of the treatment to give a deeper understanding and to indicate coherence. By performing a survey like this, with the intention of measuring and counting motivational factors, we could have identified whether there were any relationships between various factors and the treatment results. The limitation of using such a survey is that the variables that the researcher wants to explore and takes for granted as true may be uninteresting for the participants. The use of online material in the treatment of depression is a new and undiscovered field in general practice and the variables that influence the adoption and success of this specific treatment are largely unknown. We chose not to use a highly structured interview such as a survey comprising pre-formulated variables in a questionnaire because it could prevent or inhibit the elaboration of new knowledge about this approach and the everyday life of the participants as experienced from their point of view

An in-depth interview is meant to open up the opportunity for elaboration and nuance. Interviews often comprise narratives, which convey how participants make sense of events and their participation in social life. By understanding we enable us to cope in the world and therefore interviews can give an important contribution to research (Kvale 2009). The aim of an interview is to understand more of the participants' attitudes and reflections. Interview knowledge is acquired first by structuring what the interview will explore; i.e., by creating an interview guide. Knowledge is then acquired through the social interaction between the interviewer and participants by determining what questions are to be asked, and how, and through the answers given. Finally, knowledge gained through the interview is restructured through transcription, analysis and reporting.

Maxwell (2013) argues that when performing qualitative research, the researcher is the research instrument and thus influences the entire process. We constantly tried to reflect on how we were instruments in the process and how we, as researchers, played an active role. For me, this meant being prepared to focus during the interviews and to learn from my experiences after the interviews were finished. I will now present some examples of my preparations. I chose to wear neutral clothes and minimal make-up during the interviews. I learned the interview guide by heart so the questions could come more naturally as part of the dialogue. I focused during the interviews by formulating open questions without appearing to judge and listened carefully to the participants. This was a challenge to me. I wanted the participants to feel that they were the experts on their own experience and I was the curious researcher who wanted to learn from them. I was conscious that my body language was important, and I tried to show that I was interested by keeping eye contact, leaning forward and so on. I used my own experiences to communicate and to try to understand the participants. I tried not to assume that participants shared my way of making meaning of the world. I think that it was an advantage that there were two interviewers because we could reflect together about ourselves as instruments and learn from each other in the process after each interview.

In both studies, we chose to use an interview guide to ensure that the main topics that we wanted to explore were brought up in the interview (see Appendix 1 and 2). Using a semi-structured interview, we ensured that the main topics were explored but still provided the opportunity for the patient to talk freely from the topic chosen. The main topics in the patient study were: a) the participants' experience with the ICBT programme, b) changes in the participants' everyday life during blended care (guided ICBT), and c) elements of motivation to persist with ICBT. The main topics in the GP study were: a) the GP's general views on their work with depressed patients, b) motivational aspects for learning to use ICBT, c) experiences implementing guided ICBT, and d) implications of the use of ICBT for consultation quality and patient–doctor interaction. These guides were revised several times in the beginning of the interview period as our insight increased to ensure that relevant topics were covered in the future interviews. However, in the interviews, we aimed for an open dialogue similar to a conversation. The guide was used more as a reminder than a script. In the patient study, we conducted a pilot interview before the first interview to try out the questions. As Maxwell recommends (2013), I articulated my immediate reflections after each interview, and these reflections often touched upon the relationships that I experienced with

the participants. These immediate reflections helped me to inform the analysing phase to grasp important aspects of the interview. It was also a way for me to reflect constantly on myself as a research instrument and on the awareness of my pre-understanding. The participants were not invited to give feedback at a later stage of the research process.

2.4.2 Location

Part of the preparation for an interview is finding a location. Choosing a location may also influence the communication in the interview. Ryen (2002) argues that it is positive to conduct the interview where the knowledge is made and to avoid “office chair” interviews. Conducting interviews in the participant’s home may be perceived as safe and relaxed, and may allow the participant to feel in control. When interviewing, the interviewer tries to grasp the participant’s experience. The goal is not to impose the researcher’s interpretation upon the participant. Being a curious and interested listener will help the important aspect of the participant’s own understanding to come to the surface. Trying to build trust and not to provoke are essential. Choosing the home as the location may strengthen the participant’s feeling of being the expert and thereby may allow us to obtain more complete information about the participant’s personal experiences. In the patient study the patients attended therapy in an office at the University of Tromsø, and conducting the interviews here was an alternative. If the interviews were conducted where the patients received their therapy, patients might feel that they were meeting us as advocates of the treatment mode. We felt that this could disturb the neutrality we were trying to establish and could inhibit the participants from opening up to elaborate on their more critical or negative perceptions. On the other hand, this location might enhance the feeling of confidentiality.

We chose to be flexible about both the time and location of the interviews. In the patient study, all participants preferred to meet at a co-researcher’s office at the University of Tromsø. This office had a comfortable chairs and a home-like atmosphere. It was on a completely different part of the campus from where the treatment had been given. To make it easier for the patients to find the office, I met the patients at the main entrance to our local hospital and walked with them to the office. The 5-minute walk to the office was a nice opportunity to tell them something about myself. I offered coffee or tea to make them feel welcome. This location worked well, and we found that a trustful dialogue was possible. In the GP study, the GPs chose their home, office or the University of Tromsø as the location. There was no big difference in the interviews in relation to where the interviews were

conducted. In all settings, the GPs served me coffee, and I felt that an informal atmosphere was established.

2.4.3 Sampling and participants

Who is asked will influence what the stories reveal. Finding a person with knowledge about the topic chosen is essential to achieve an informative interview. Silverman (2005) argues for purposive sampling in the selection because it illustrates the aim, features or processes that we are interested in. The characteristic of the participants interviewed for each study are described below. In both studies, the numbers of interviews were appropriate for the purpose. Still, our findings from both our studies should be interpreted as only a partial description of the full range of experiences with ICBT.

2.4.3.1 Patients interviewed

All patients in the RCT had been referred from primary care for symptoms of depression. Patients had to be aged 18–65 years and to have access to the Internet; those who were suicidal, psychotic or drug abusers were excluded (Hoifodt, Lillevoll et al. 2013). All patients in the intervention group of the RCT were given a debriefing session by their therapist after finishing treatment. After this session, they were given written information about our qualitative research and a written consent form. All arrangements for the interviews were made over the telephone. Among the patients who gave their consent initially, continuous recruitment was conducted. We changed to strategic recruitment after about 10 interviews to include men and women, both younger and older, and both completers and non-completers. Several non-completers refused to be interviewed. In total 14 patients were interviewed in the patient study.

Comparative information may lead to a deeper understanding of a phenomenon that a researcher aims to explore, such as, for example, going abroad also reveals information about our home country (Ryen 2002). Interviewing both those patients who dropped out of treatment and those who completed ICBT provided the basis for a deeper understanding of the patients' experiences. These two groups of patients can be considered as comparative, and interviewing patients from both groups would thereby strengthen our understanding of depressed patients receiving this treatment. It is a limitation that the recruitment of non-completers turned out to be difficult. The stories might have been more nuanced if both groups could have contributed more voices.

A purposive sample of participants is when the recruited participants have knowledge relevant to what the researcher wants to explore (Silverman 2005). One strength of the patient study was that patients were referred by their GP or by another health worker in primary care as a result of clinical evaluation. Thus, the patients were not self-selected for treatment. We wanted to explore their lived experience from guided treatment. It was important that they could be candidates for such treatment in an everyday clinical practice. They had the unique knowledge that we wanted to explore and were therefore a suitable purposive sample. On the other hand, these patients had agreed to join the RCT and to be interviewed. It is possible that these patients were more motivated and in some way, different from patients in an everyday clinical setting. ICBT can also be used as self-administered self-help or guided in ways other than face-to-face. It would be interesting to explore other types of support, but this was outside the scope of this thesis.

The patients were interviewed shortly after the treatment ended. The advantage was that they could easily remember their thoughts, reflections and events from their time during treatment. Nevertheless, the stories about helpful elements can explore only what was immediately helpful and not what was helpful over time.

2.4.3.2 GPs interviewed

Self-selected GPs, mostly from the northern parts of Norway, participated in the 3-day course mentioned above. A training package in guided ICBT using MoodGYM was presented during the course. All GPs returning to clinical practice gave their consent to participate in follow-up research on the treatment approach. To strengthen our analysis and to allow for comparisons, we included two additional GPs who had not completed the course. These two had only attended a 3-hour presentation of this treatment model given by one of the GPs who had attended the course. In total, a purposive sample (Silverman 2005) of 11 GPs was recruited. All arrangements for the interviews were made over the telephone. Participants were both men and women, of various ages and with various lengths of experience as a GP. There was an over-representation of women at the course and therefore the GPs interviewed are also over-represented by women. More male participants might have resulted in other stories. The GPs were self-selected, which may be a source of selection bias. The GP stories may have been different if the selection had been random. There is a chance that the GPs in our study were more interested in both mental care and online interventions than other GPs in general. Still, our aim was to explore aspects of the GPs' experiences as they intended to implement

ICBT into everyday clinical practice, and accordingly, motivated GPs had the knowledge that we were interested in. In addition to interviewing the GPs, the intention in the GP study was to interview patients who had gone through guided ICBT with their GP. One patient was interviewed. Recruitment of patients was difficult and therefore, this part of the GP study was stopped. With more resources and time it would be interesting to explore stories of patients from regular clinical setting in general practice in a future study.

2.4.4 Analysis

Analysis of the data starts during the interview, as mentioned above. The interviewer interprets the statements in the interview from what is said, the tone of voice, body language and pre-understanding (Malterud 2003, Maxwell 2013). Subsequent to each of my interviews, I recorded my immediate reflections about the interactions and interpretations. This was helpful for remembering the first impression of the interview as a whole. All the interviews were transcribed. The transcription in itself is an interpretation of the data. Therefore, researchers were encouraged to transcribe their own interviews (Kvale 2009). In the patient study, I transcribed all interviews that I conducted, but because of time constraints, Kjersti's interviews were transcribed by an extern assistant. In the GP study, the second author (RH) and I transcribed all the interviews ourselves. When transcribing, many choices are made such as interpreting unclear wording, punctuating and how to include para-linguistic expressions. After the oral interviews were transcribed to text, the transcriptions were checked several times by reading and listening concurrently. The written text was subsequently imported into NVivo software for further analysis.

The process of not only reporting what the participants said but also trying to understand what the stories and reflections mean has been challenging. Concurrent reading and re-reading of the interviews, analysis of the data and reading the existing literature were performed. A few central theories with their concepts were chosen to understand the findings better. These theories are presented in the Conceptual Framework section and were useful for trying to explain and understand motivation, helpfulness and implementation associated with the ICBT. We found that this improved the explanatory power. The following section explains the analysis of each study in detail.

2.4.4.1 Analysis of the patient study

The methodology used to analyse the data from the patient study was based on the phenomenological–hermeneutical method presented by Lindseth and Norberg (2004). The epistemology that this methodology is based on is presented in the Conceptual Framework section. Following this approach, the interviews are transcribed into text and analysed in a hermeneutical stepwise manner. Three steps guide the researcher to interpret the essence of the lived experience underpinning the stories and reflections that the participants tell. We wanted to investigate the essence of the phenomena of motivation and helpfulness experienced by patients during treatment with guided ICBT. The first phase of this approach is “naïve reading”. The text is read several times to grasp the meaning of the text as a whole then a formulation of this understanding is made. We read all of the interviews several times and created a text for each interview that contained what we interpreted as the most important aspects of the interview.

The second phase is a structural analysis, which is described as a structural thematic analysis through which one seeks to identify and formulate themes. A theme captures a thread of meaning of lived experience. Initially, the entire text is divided into meaning units. In our analysis, a meaning unit was a text section that captured an event, thought or reflection that we saw as relevant to the participant’s experience with depression and/or ICBT. These units were later condensed and each formulated condensed section was then coded. In this phase, we made a table in “Word” with two columns. In the column to the left, the meaning units from the interviews were placed in their original order. In the column to the right, we wrote the condensed meaning. The final table for each interview was then imported into NVivo and the condensed sections were then coded.

The third phase was creating a comprehensive understanding. In this phase, the themes and sub-themes are summarized and reflected on in relation to the research question and the context of the study. With this methodology it is also recommended to deepen the understanding of the interviews by exploring them in light of existing literature. The results should be written in everyday language. In a recursive manner, moving backward and forward, we discussed the overarching themes and sub-themes in relation to the naïve understanding, the research question and the text as a whole. The basis of our analysis was inductive; i.e., the themes were closely related to the data. However, we also critically interpreted our findings in light of SDT in the final phase to give depth to our understanding

and to help us to explain many of our interpretations. Finally, these results were discussed in light of the existing literature on the field of eHealth. The end-points of this analysis are presented as Papers one and two.

2.4.4.2 Analysis of the GP study

The basis for the analysis of the data from the GP study was a method called thematic analysis. This is a theory that celebrates the active role that the researcher takes when identifying patterns, selecting what is of interest and reporting it to the reader. As mentioned in the Conceptual Framework section, it is important to state explicitly the choices made in the process of this flexible approach. However, the method also provides a step-by-step guide for conducting this thematic analysis. Many of the steps align with Lindseth and Norberg's (2004) steps of analysis used in the patient study, although others were slightly different.

The steps comprise six phases of analysis with the end-point of identifying and interpreting the meaning of patterns within and across the dataset (Braun and Clarke2006). In the GP study these phases were followed as recommended and were not conducted in a linear fashion, but rather through a recursive process of moving backward and forward.

1) "Familiarizing yourself with your data". This first phase started with transcribing all of the interviews and thus to form an overview of the interviews. This was followed by reading all of the transcripts while listening to the original audio recordings and noting down thoughts. Next, the transcripts were re-read in an active way, and more ideas were noted.

2) "Generating initial codes". In this phase, we imported transcripts to NVivo 10. The entire dataset (all text from the interviews) was coded and some parts were coded several times. The coded text was identified in relation to semantic content in an inductive way. Thoughts, reflections and events expressed by the GPs were coded.

3) "Searching for themes". The relevant codes are gathered to create potential themes. A theme is defined as something important that captures a patterned response or meaning within the data set in relation to the research question. There should be a distinction between the themes and a meaningful coherence within a theme (Braun and Clarke2006). Potential themes that we saw in relation to the GPs' experience of implementing ICBT were discussed among the research group and potential themes were created.

4) “Reviewing themes”. In this phase, we re-read and checked whether the themes worked in relation to the coded extracts and the interviews as a whole.

5) “Defining and naming themes”. This phase is meant to identify the “essence” of what each theme is about. In this phase, we organized the overarching themes and linked the analysis to the theories in the field that we found relevant. The use of mind maps was helpful in this process. Thirty or more mind maps were made to test and visualize how I understood “what was going on” by making a simplified picture of a part of the complex data.

6) “Producing the report”. We created a rich thematic presentation meaning that we analysed and presented major parts of the dataset to give the reader a sense of what we identified and interpreted as the predominant and important themes relating to the aspects of implementation. Quotations to illustrate the findings were included in the paper. The analysis is an interpretation of a thematic story-line. The framework of NPT improved our understanding of our findings in the final phase and helped us to find coherence within the story-line and to anchor the analytical claims. This gave our interpretations explanatory strength. Finally, these results were discussed in light of other existing literature. The end-point of this analysis was presented in Paper three.

2.5 Validity

Validity refers to the relationship between research and reality or, as Maxwell (2013) encourages researchers to ask themselves, “How might you be wrong?” Kvale (2009) discusses three types of validity: validity of craftsmanship, communicative validity and pragmatic validity.

Validity of craftsmanship is about being a trustworthy and good researcher; conducting methods in a structural way and having the necessary qualifications and knowledge in the field. This type of validity is about making good decisions throughout the entire research process (Kvale 2009). In our two studies, we investigated thoughts, reflections and events related to the patients’ treatment using ICBT or implementing ICBT. Thus, we argue that in-depth interviews were the right approach for accessing valid information about this matter. We chose to interview participants about their lived experience with the matter of interest (ICBT) to access their nuanced stories.

Kvale (2009) notes that interview studies are sometimes criticized because it can be questioned whether one can know whether a participant is telling the “truth”. One must

assume that narratives recreate the experience. However, an obvious difficulty concerning the validity of narratives is whether they are communicating things that actually happened. After all, a story is a rhetorical structure that is made to persuade or provide a perspective about what happened. The stories told are fashioned with a peculiar audience in mind as well as with an attempt to structure an experience. A position in anthropology takes this into account and presumes that the narrative derives its power by transforming and disorienting the lived life. To enhance the meaning of an experience for a person, this transformation and disorientation needs to be included (Mattingly 1998). As I understand this theory, the limitation of a narrative is that it may not reveal what really happened in the participants' life, but instead we grasp information about the person's own version of the situation and what the person considers to be true. In our studies, it was the participants' interpretation and what they perceived as important that were communicated, and this was what we wanted to investigate.

In both studies, a thematic approach guided our analysis to ensure a structural approach and to ensure that the themes identified were consistent with the stories from the interviews. We made a substantial effort to read the existing literature within the field to improve our theoretical understanding and thus to improve our ability to interpret our findings. To ensure quality in gathering, analysing and interpreting the data, it was important to work and constantly discuss our decisions within a multidisciplinary research group. Our different backgrounds ensured a diversity of qualifications and knowledge in the field. Working in a group helps one avoid becoming "blind" to alternative explanations (Malterud 2003). Here, I have presented some aspects showing the validity of my craftsmanship as a researcher and how this has produced valid research. This is also reflected in the arguments in all parts of this thesis; i.e., the background, methods, results and discussion reflect my deliberate and knowledge-based choices and conclusions.

The second criterion of validity is communicative validity. Valid communication is needed both in the interview setting and when communicating the final report. Our intention in the interviews was to explore information about the experience with ICBT from the participants' perspective. As mentioned above, the interviewers in both studies were young female health workers who were also involved in other roles conducting research on MoodGYM. This background influenced us as researchers, but it may also have influenced the data obtained and thereby the result of the studies (Ryen 2002, Malterud 2003). The advantage of having health workers as interviewers is the openness that patients often give immediately. I always

find it astonishing how patients whom I never have met before will, after only a few seconds, reveal their innermost secrets. In many non-professional relationships, it can take years of friendship before a person talks about such private matters. One disadvantage of us being health workers was that we may have been seen as part of the health system and therefore as defenders of MoodGYM. Another aspect of being a health worker that conducts an interview, is that there is an imbalance of power in relation to the patient being interviewed (Stige, Malterud et al. 2009). As a result, the threshold for a patient to be critical or negative towards ICBT could be high, which could interfere with patients sharing trustworthy information about their experience. There is also a chance that the patients could tell stories that are too sensitive if they see us as health workers and forget that we are researchers. To reduce the possibility of gaining too sensitive or overly positive stories, we made it clear before each interview that we were not there to defend the treatment. We made it clear that we were talking with them as researchers and that our aim was to understand their experiences better.

It is a challenge to understand the interpretation of the experiences that the participants talked about. One method of validation is to negotiate within the interview setting the meaning of what the participant aims to convey. The interpretation is also validated using common sense and through critical discussion in light of the existing literature and theory (Kvale 2009). To validate our interpretation in the interview setting, we asked clarifying questions and tried to sum up what the participants had said and thus allow them to make corrections. As mentioned in the sections above, a critical analysis and a theoretical framework were essential for validating our final interpretation. By exploring our findings in light of the existing literature, we could investigate connections that could support or challenge our arguments. If our findings were in total contrast to previous findings, we would have to ask ourselves, “Might we be wrong?” Finally, we have written our papers in a way that communicates the important aspects of our knowledge such that they are understandable to our readers.

The third validity criterion is pragmatic validity. Research has pragmatic validity when the interpretation and understanding can be used in some way (Kvale 2009). Hopefully, the suggestions that we present in these papers will be of use to both researchers developing and exploring internet-based interventions and health workers in clinical practice who are curious about supplementing treatment with online material in Norway. These papers also aim to add to the discussion globally.

An extension of pragmatic validity is generalizability. Kvale (2009) argues that the results do not need to be generalizable but may be transferable to other relevant situations. Ryen (2002) argued that an exploration of change can, in a good way, be explored qualitatively and that an analysis of information from a few subjects may be transferable to others in a similar situation. Although the sample size was appropriate for the needs of the two studies and we have obtained a deeper understanding of these participants' perspectives, our findings should be interpreted as only a partial description of the full range of patients' and GPs' experiences with ICBT. Each reader must evaluate whether the situation is relevant and whether the results can be transferred. Nevertheless, it is likely that the overall results from the three articles can be transferred to other primary care settings in Norway and perhaps across borders. As an extension of the results, we have also made some practical suggestions, which we argue could improve the motivation of patients and elements of training that may enhance the GP's recommendation of ICBT.

2.6 Ethical considerations

There are ethical issues involved in any study of individuals. We have followed the ethical guidelines for medical research in the Helsinki Declaration. Ethical approval was given by the Regional Ethical Committee, Tromsø (2011/2163).

Written informed consent was obtained from all participants before the interview. In the patient study, the patients had participated in the RCT and had therefore received free treatment. This could make them feel obligated to agree to be interviewed. In qualitative health research that explores experience of treatment, the interview itself can have a preventive or therapeutic effect on the patient's condition. In the patient study, I felt that I was to some extent exploiting the participants because I normally work as a GP. I was used to helping patients in our encounters. As a researcher, I received my data, but I asked, "What did the patients receive?" The participants in this study were patients who were struggling, or had struggled, with depression. When struggling with depression, a person can be vulnerable. Reduced concentration and impaired initiative are cardinal symptoms of depression (Kringlen, Øgar et al.2008).

In the interview setting of the patient study, the patients openly talked about very intimate and delicate episodes from their lives. They discussed how they had struggled with work, had personal relationship problems, had trouble sleeping and experienced sorrow. They provided insights into their darkest periods, details that they might not even tell their friends. They gave

so much of themselves. It is possible that the patients wanted to participate to ventilate their thoughts about their experiences. Alternatively, they may have wished to improve treatment and thus the driving force could have been to help others in a similar situation. It is also possible that during their “dark” periods, using their energy on an interview to contribute to research became a burden for them. However, our impression was that the burden was minimal. There is a risk that the integrity of participants can be violated when private information is exposed. To minimize the chance of such violation, the encounter must be respectful. A respectful approach includes normal politeness, awareness of body language and being receptive to possible reservations of the participants (Kvale 2009). It was important for us not to pressure the patients to expose more than they wanted to share. Of course, the integrity of the participants was also sustained in the communication of our findings.

Norway is a small country, and many of the GPs in the GP study knew of me or the project leader (Nils Kolstrup) because we are both GPs. Knowing either of us could have seemed like a source of pressure to agree to an interview. In the GP study, the topic for the interviews was less sensitive compared with the patient study, but a respectful approach was also maintained. We chose to give a gift voucher to the participants (1000 kr) in exchange for approximately one hour of their time to reduce the burden of using their professional time. This is often done to recruit GPs who have a very hectic workday and are often asked to participate in research. Not wasting or exploiting time or effort is an ethical consideration. Therefore, the relevance of a study must always be considered carefully in terms of the scientific outcomes and the opportunity to improve the human situation (Kvale 2009). We hope that both studies will contribute to scientific knowledge in the field of eHealth. Our contribution has increased our understanding of the participants and, hopefully, will contribute to the discussion about ways to improve treatment of depression in general practice.

Confidentiality must always be considered when conducting interview research (Malterud 2003, Kvale 2009). This was an ethical consideration in both studies. In the GP study not only the GPs who told the stories, but also the patients they spoke about needed to preserve their anonymity. In both studies recordings of the interviews were stored safely. When the interviews were transcribed names were removed from the documents and a number was given to enable us to link them to the recordings. Sometimes, details of people in the stories or the context were changed slightly to ensure confidentiality.

3 General discussion

3.1 Principal findings

In this thesis, I have addressed the gaps in the evidence from multiple trials that have found that guided ICBT can reduce the symptoms of depression (e.g., (Spek, Cuijpers et al. 2008, Andersson and Cuijpers 2009, Johansson and Andersson 2012, Hoifodt, Lillevoll et al. 2013)) and the lack of knowledge about how the patients being treated and the GPs treating patients experience different aspects of guided ICBT. To explore guided ICBT used in the context of general practice, we aimed to explore the patients' perceptions about their motivation to use ICBT and how it was found helpful to them with brief follow-up consultations. We also wanted to understand more about the GPs' perspective of the processes and work required to implement ICBT in the everyday clinical setting. Hopefully, this knowledge will contribute to improving the treatment of depression in general practice.

3.1.1 Patient study

The phenomenological–hermeneutical approach identified two overarching themes in the interviews of the 14 patients that explored their experience with ICBT. One theme related to the aspects perceived as influencing their motivation to persist in treatment, and the other theme related to the meaning of what the patients found to be helpful in this mode of treatment.

In paper one aspects of motivation are explored. The patients had an intrinsic motivation to seek treatment for their depression that was related to the hope of recovery and wanting to gain control of their lives. To be able to choose how, when and where to complete the ICBT modules satisfied their need for autonomy and was identified as a condition supporting their motivation. Not to be alone, but to have a sense of belonging towards partners, friends or family was essential to strengthening their motivation towards wanting to recover. An ability to identify themselves with and to relate the theory and examples given in the online modules in MoodGYM to their personal context and problems in everyday life was essential to wanting to continue working with the material. The connection with the qualified therapist in the face-to-face consultation was established when they received acknowledgement of their problems from the therapist and perceived a flexible approach. This connectedness was also identified as a condition supporting their motivation. Overall, the findings in a framework of SDT (Deci and Ryan 2000, Ryan and Deci 2000) indicated that a sense of relatedness,

understood as identification, belonging and connectedness, could strengthen their motivation to persist with this mode of treatment.

We identified five themes related to helpfulness presented in paper two. In light of Wampold's (2001) conceptual model both general aspects and specific aspects were identified and discussed. General aspects of treatment were perceived as helpful. The patients found it helpful to take action to address their problems. It was of value to the patients to be able to ventilate about their problems to a competent professional who was engaged in their treatment. Two aspects were identified as helpful when the patients reflected on aspects related to the specific elements of the guided self-help using MoodGYM. Acquiring new and relevant knowledge was perceived as positive and being able to restructure this knowledge was often necessary. The treatment was also considered to be helpful when the patients were able to make actual changes in their perceptions and interactions in relation to either the self-help material or the face-to-face consultations. Paper two discusses this in more detail.

3.1.2 GP study

In 11 interviews, we explored GPs' perspectives on implementing ICBT into general practice (Paper three). Using a thematic analysis, we identified that the GPs acknowledged ICBT as a credible tool that was based on a theory that they trusted. They expressed engagement in learning about the programme and implementing it into general practice. Their belief in ICBT was strengthened by the training in ICBT. GPs hoped that ICBT could benefit patients by improving their treatment of depression and by empowering the patients with regard to their own health. They also hoped that ICBT could benefit the GPs themselves by increasing their work satisfaction. The motivating aspects were that the ICBT added structure and an agenda to treatment. GPs discussed their hectic and varied practices, which constrained their ability to implement ICBT. They identified as challenges a lack of confidence, reluctance to change their habits and concerns about negative impact on interaction with their patients. Mere recommendation of the online intervention was integrated into their practice and they did not provide module follow-ups as part of their treatment. When interpreting these findings in the framework of NPT (May and Finch 2009, Murray, Treweek et al. 2010) the components of "work" to implement recommendation of MoodGYM was undertaken, but to varying degrees. This was not the case for module follow-ups. Instead, they returned to standard treatment after recommending MoodGYM. GPs described the standard treatment of depression as unstructured and, at times, frustrating, while also comprising the most important elements for

the treatment of depression. They aimed to include active listening and acknowledging patients' problems in their standard treatment. Paper three discusses this in more detail.

3.2 Discussion in light of the existing literature

3.2.1 To add theory

Substantial evidence supports the value of psychotherapy as a treatment for depression, but there is a debate about which aspects of treatment lead to improvement (Wampold 2001, Ebmeier, Donaghey et al. 2006). The focus of this thesis is not to identify the elements in the explored treatment that resulted in improvement, but rather it explores how patients and GPs, with a common goal of improving the patient's life, give meaning to their experience with ICBT in terms of motivation, helpfulness and implementation. A pattern seen in both of the studies, of experience with ICBT combined with brief consultations, is the value of adding structure to the treatment of depression. This structure comprised specific elements such as the principles of CBT and online interactive material. A previous qualitative study that included interviews of Norwegian GPs highlighted the lack of tools to use in mental health treatment (Mykletun, Knudsen et al. 2010). The GPs in our GP study made sense of, and engaged in, MoodGYM. This suggests that MoodGYM may provide a specific tool for the treatment of depression. Making sense and engagement are important parts of the work needed to implement complex interventions into everyday practice (May and Finch 2009, Murray, Treweek et al. 2010). Our findings in the GP study indicate that information about the programme conveyed in the 3-day course gave them confidence, strengthened their engagement and encouraged them to recommend the online programme in their clinical practice. These findings are consistent with those of a previous study that found that having more information about the effectiveness of online programmes and training would increase the use of internet-based treatment of depression (Gun, Titov et al. 2011).

Mohr suggests that the rationale of "what, why, when and how" must be defined in depth to enable the development of implementable technical interventions to change behaviour (Mohr, Schueller et al. 2014). We argue that obtaining information about such rationale and evidence helps the clinician to incorporate a technically based treatment approach into the clinical setting. From our findings in the GP study we argue that if a clinician obtains information about such rationale and evidence, this can help to facilitate implementation of a technical-based treatment approach into a clinical setting. The GPs noted that knowing about theory-based material and having access to a structured concrete programme was beneficial to their

ability to recommend such as programme. The use of evidence-based psychological interventions is enhanced when health workers learn both the techniques and the underlying theories (Reese, Rosenfield et al. 2013). However, an evidence-based programme based on theory was not the only important aspect of their experience with ICBT. Both the GPs and patients emphasized that for guided ICBT to be valuable, the patients needed to relate the treatment to their personal context. An important aspect that facilitated this was through the development of a trusting patient–health worker relationship that allowed the patients to open up about their problems in life, created a dialogue that communicated hope or faith in improving the situation and gave patients ownership of their treatment.

3.2.2 To make treatment personal for each patient

The studies identified as especially important the ability to relate the treatment to each patient’s personal context and to support each patient’s motivation to persist with treatment (see Paper one). This implies the psychological need for relatedness in support of the intrinsic motivation (Deci and Ryan 2000, Ryan and Deci 2000). Not objectifying the patient, but tailoring and adjusting treatment to the patient as a unique person in the personal context, can be understood as a confirmation of the importance of a patient-centred approach. To view the patient as a person with personal health needs rather than as a condition is considered to be essential in general practice (Reeve, Dowrick et al. 2013). A large study (Palmer, Gunn et al. 2010) explored what is important and preferred as part of the treatment of depression in general practice according to community stakeholders (government, health sector and academia) and patients. The authors found a pattern in the responses that highlighted the need to incorporate the complexity of patients’ experiences and the multifactorial nature of care in the treatment of depression instead of aiming for a “one-size-fits-all” approach. Three main domains were identified as essential to providing the best treatment of depression, and important tasks were mapped out within each domain. These tasks were seen as interwoven and not as separate tasks. The relational domain, which included the tasks of “listening, understanding and empathy”, is strongly connected to a “competence domain”. The competence domain provides the GP with appropriate training and education. The third domain was the “system domain”, in which the lack of time is the main barrier. The important task of “holistic assessment and tailored treatment for individuals” requires a system with enough time. In another study (Gask, Rogers et al. 2003), a group of patients undergoing treatment for depression in general practice said that it is important to be listened to and to have more time in consultations. Palmer et al. (Palmer, Gunn et al. 2010) note that their

findings strongly emphasize the relational domain such as listening. This finding contrasts with the current focus within health care systems and evidence-based medicine on implementation of technical and mechanical aspects of competent care for depression. These domains should not be seen as a dichotomy because both domains are equally important. However, relational tasks are more difficult to measure and therefore may need extra attention and demand an organizational context that provides enough time to focus on such tasks.

3.2.3 The doctor–patient relationship

Both studies identified an engagement with the patient as a unique person as positive. The findings indicated that engagement was facilitated by a good doctor/therapist–patient relationship. Qualitative studies of the patients’ experience with ICBT without face-to-face consultations have found a need for more support (Gerhards, Abma et al. 2011, Donkin and Glozier 2012), indicating that the patients felt that they lacked human contact. WHO and WONCA have also suggested that a trusting relationship is fundamental in the treatment of depression in primary care (WHO, Colledge et al. 2008). A systematic review (Di Blasi, Harkness et al. 2001) of the doctor–patient relationship shows that a good relationship significantly influences health outcomes. The relationship is considered to be good when the combination of cognitive care and emotional care is given. Cognitive care is described as giving clear diagnoses and positive expectations. Emotional care is given by being warm and friendly or firm and reassuring. “Practitioners who attempted to form a warm and friendly relationship with their patients and reassured them that they would soon be better, were found to be more effective than practitioners who kept their consultations impersonal, formal or uncertain”. This indicates that the relationship itself has a therapeutic effect.

Reeve and Dowrick et al. (2013) claim that to ensure the quality of primary care in a context dominated by evidence-based medicine, the core role of the GP is to give care based on an understanding of the personal experiences of health that need to be enhanced. In our GP study, the GPs endorsed the need to add structure and a theory base to treatment. They experienced work satisfaction when they had something concrete to offer, which suggests that they liked having control during the consultation. Barry et al. (Barry, Stevenson et al. 2001) suggest that physical problems can be solved in an acceptable way using a formal manner with the GP in control, but psychological problems are firmly rooted in the everyday context and thus need a different approach. The study shows that both patients and doctors are more satisfied when the patient story, called the “voice of the lifeworld”, is the starting point for approaching psychological issues. The GPs in our GP study returned to their standard

treatment after recommending MoodGYM. They aimed to include active listening to allow the patients to talk about their problems in everyday life. This may imply using an approach of the “voice of the lifeworld” in standard treatment. Perhaps this choice is influenced by expectations of the patients. Previous research that has explored the treatment of depression in general practice emphasizes that both the GP and patient are equally important in facilitating their engagement in the treatment (Gask, Rogers et al. 2003).

3.2.4 Common factors of psychotherapy

The GP study identified a paradox. The GPs expressed a need to improve their competence and therefore wanted to supplement treatment with a theory-based online intervention. On the other hand, they also noted that elements of standard treatment are most important in the treatment of depression, despite the fact that they devalued this treatment approach and described it sometimes as frustrating. As noted in the study by Gunn and Palmer (2010), the GPs and patients tell stories that imply the importance of the health worker’s competence. I have argued earlier in this thesis that standard treatment opens up for the “the voice of the lifeworld” to ensure the application of what is known as “patient-centred medicine”. Patient centred medicine is often highlighted as a core task in enabling good care in general practice (WHO, Colleges et al.2008). This raises the question: “How does a GP give good patient-centred medicine as part of the treatment of depression?” The GP study showed that use of standard treatment clearly does not lead to work satisfaction, a finding that was consistent with that of another study of GPs’ perspectives on mental care in Norway (Mykletun, Knudsen et al.2010). Davidsen (2008) report that Danish GPs give “talking therapy” when treating patients with mental issues. This treatment comprises therapeutic elements, but lacks theory and is therefore difficult to learn.

One way to explore how to provide improved treatment of depression is to discuss the aspects in a contextual model. Wampold reviews (2001) a substantial amount of evidence on psychotherapy (e.g., trials and meta-analyses) and argues that the medical model, in which the only emphasis is on documenting the effect of the specific factors in the treatment, is wrong (see Figure 2: Medical models in medicine and in psychotherapy (Wampold2001)). He presents the contextual model in which he claims that the specific factors work as a necessary framework, which can be exchanged with other specific factors. The common shared factors that are shared within all psychotherapies have documented effects and cannot be exchanged. One of the common factors is the “client characteristic”; i.e., a person actively seeking help and having faith or hope in the treatment. The patient study identified the patient as an active

agent as important to both motivation and helpfulness. The GP study identified that patient motivation and initiative were essential for success when implementing guided ICBT into regular care. Our findings are consistent with this theory that patients' hope or motivation can be strengthened by both a trusting relationship based on alliance and engagement that reflect the common factor of "relationship elements" and that the "therapist qualities" comprising warmth and acknowledgement enhance a sense of helpfulness.

Both the patient and GP studies showed that providing an opening for self-disclosure or ventilation of thoughts and feelings and a rationale for treatment, which can be categorized under the shared factor "change processes", were important in the treatment of depression. The fifth shared common factor is "treatment structures", which is defined as adherence to theory and use of techniques or the need to include specific factors. In the GP study, the GPs were clear that having a theory base to treatment was important for work satisfaction and for improving the treatment given. ICBT made sense to the GPs and was compatible with what they acknowledged as credible. The positive aspects were structure and agenda when communicating with the patients, which align with this common factor (Wampold 2001).

It is well known that the step from evidence-based medicine to changing treatment in day-to-day practice is complex and takes time (Norman 1999). Embedding follow-ups of internet-based interventions or mobile apps is novel and challenging in general practice. As for all interventions given by GPs, it is important to find strategies to integrate them into patient-centred medicine. Our findings indicate that the integration of guided ICBT into treatment of depression requires that the GPs combine ICBT with engagement in the patient and allowing the patient to open up about his/her lifeworld. I suggest that GP training in internet-based interventions could be divided into two parts. In the first part, the theory-base of the specific aspects should be communicated clearly. This would allow the GPs to feel comfortable and confident to talk about the theory in a general way and to link theory back to the patients' stories as a starting point. The rationale for a framework of specific factors such as CBT in treatment should be made clear and should therefore support the common factor of "treatment structures". The second part should emphasize the value of the common factors in psychotherapy and highlight that these align with many elements of the treatment they currently give. The GPs might feel more confident and skilled if they knew that this part of treatment also is evidenced based but is not so easy to measure.

One recent paper from Sweden compared treatment-as-usual in primary care given by GPs and nurses with ICBT with minimal contact follow-ups given by licensed psychologists. This

study found no differences in outcomes of the symptoms of depression after 3 months and concluded that ICBT may be delivered successfully in primary care (Kivi, Eriksson et al. 2014). This study can clearly also be viewed as evidence supporting the treatment GPs currently give. Research has concluded that there is a need to improve the theory base of the treatment given in general practice (Davidsen 2008, Mykletun, Knudsen et al. 2010); this idea was also expressed by the GPs and patients in our two studies. Nevertheless, our findings indicate strongly that a formal and manual driven use of guided ICBT is not preferred by patients or GPs. I think it is important that internet interventions are not seen as a substitute for the treatment currently given, instead as an extension of the GP as a therapist. A flexible use of the programmes that incorporates an understanding of the complexities of the treatment of depression may be a better solution. eHealth and ICBT are novel treatment modes for both patients and GPs. More research is needed to explore whether this approach is acceptable and effective in the treatment of depression in primary care. However, competences in theories are not enough to implement new treatment into regular care.

3.2.5 More than just to add knowledge of the treatment approach

One of the major challenges to providing good quality treatment for mental disorders in Norway is to improve competence among GPs in treatment options besides psychotropic drugs (Mykletun, Knudsen et al. 2009). However, competence was just one of many aspects highlighted in the GP study. A meta-analysis of studies that explored the implementation of care for depression found that merely giving GPs training did not improve treatment (Sikorski, Luppá et al. 2012). Other studies have also found it difficult to implement specific methods successfully to improve the treatment of depression in primary care (e.g., (Huibers, Beurskens et al. 2003, Davidsen 2008, Aschim, Lundevall et al. 2011, Hermens, Muntingh et al. 2014)). The qualitative studies imply that it is not only lack of knowledge but also a complex process in which the relational aspects and organizational aspects are important (Aschim, Lundevall et al. 2011, Hermens, Muntingh et al. 2014). This indicates that it is not only “what” we implement but also “how” we implement interventions that matters. NPT claims that complex processes are needed to implement complex interventions. NPT suggests four main components of “work” required to implement interventions: coherence (make sense), cognitive participation (engagement), collective action (efforts) and reflexive monitoring (feedback) (May and Finch 2009, Murray, Treweek et al. 2010). Based on the NPT framework in the GP study, our findings indicate that the “work” of module follow-ups was

problematic in the entire process of implementation. Ultimately, GPs did not make the effort to talk about the process issues associated with MoodGYM in the follow-ups.

Treatment of depression is not something that the GP delivers to the patient; rather, it is done through interactions with the patient. The GP study found that the relational aspect is important when choosing not to include module follow-ups. However, perhaps in a few years, the patients may be more used to talking to a health professional about information gained from the Internet and may then not see this as a barrier to making it personal. Perhaps it needs to mature as an option for people in general. The organizational aspects can promote or inhibit the GP's making an effort to implement treatment (May and Finch 2009, Murray, Treweek et al. 2010). The GP study found that lack of time for preparation and during consultations was problematic. Organizing time and financial training were indicated as important for enabling a change in the treatment of depression. Having enough time within the organization and incitements for this treatment may enhance use. Lack of competence was found to be frustrating, although improving competence may not remove all of the frustration. A qualitative study exploring work with patients' feelings of despair and hopelessness, which are often part of depression, found that even therapists qualified in psychotherapy experience feelings of vulnerability and frustration in their encounters with these patients (Gee and Loewenthal 2013). It is possible that improving the GPs' competence could make them more comfortable when dealing with hopelessness and depression.

The incomplete implementation noted in the GP study could be interpreted as suggesting that GPs should not deliver treatment for depression. A review of the literature on the treatment of depression treatment in general practice reports that the research focus has shifted to preferring mental health specialists within the primary care setting (Sikorski, Luppá et al. 2012). More collaboration with other mental health specialist in primary care could be an alternative for primary care in the Norwegian context and might provide a solution to implementation barriers of internet interventions in primary care. The current situation in Norway is that GPs treat most mental health issues; thus, such a transition would demand great systemic changes. We argue that GPs are in a unique position to provide the first step in the treatment of depression. They can offer holistic treatment and give patients the opportunity to open up and talk about how depression is triggered by stressful events (Kringlen, Øgar et al. 2008), including the onset of physical and chronic disease often presented in general practice. GPs can help to explore how it feels when depression is part of the patient as a person (Gask, Rogers et al. 2003, Kayali and Iqbal 2013) as they get to know

the person over time. However, there is without doubt room for improvement. Better mental health care in general practice would benefit the GPs' work satisfaction and would provide affordable, available and good treatment to the patients compared to referral to specialized care.

4 Conclusion and future perspectives

Strengthening the treatment of depression in primary care is emphasized globally. The role of GPs is considered to be central in the treatment of depression because of the great burden of depression and the unmet demand for treatment (WHO, Colleges et al.2008, Mykletun, Knudsen et al. 2009). To implement evidence-based psychological interventions by teaching both the techniques and underlying theories will help to improve treatment (Reese, Rosenfield et al. 2013). Our findings imply that training in specific factors relevant to an approach based on a psychological theory is warranted and will have a positive effect on implementation. Both the GPs and patients endorsed ICBT because the online material comprises self-help procedures that can supplement the treatment of depression and give patients ownership of their treatment. However, a number of concerns and paradoxes were identified when exploring experience with ICBT.

In paper two, from the patient study, we conclude that both specific and general aspects of guided ICBT were considered helpful. In extension of the results, in paper one and three, we have made some practical suggestions that may improve the use of ICBT. I argue that these suggestions can contribute to the discussion about how to improve treatment of depression in general when initiated by a GP. In Paper one we suggest four steps to consider during encounters with patients with depression to increase their motivation: 1) communicating hope by educating patients about the effectiveness of ICBT and the good prognosis for depression, 2) encouraging patients to enlist the support of important others in their progress towards recovery, 3) communicating that the therapist has adequate competence and can give qualified feedback and 4) focusing on acknowledgement, flexibility and understanding in the meetings with the patient. This may increase a feeling of connectedness and autonomy. In Paper three from the GP study, we suggest that three aspects should be emphasized when offering training to encourage GPs to recommend ICBT: 1) ICBT is theory based and credible, 2) ICBT increases the GP's work satisfaction by providing a tool to offer the depressed patient and 3) ICBT facilitates empowerment of patients for their own health.

Among the common shared factors of psychotherapy (Wampold 2001) the relational element; alliance and engagement with the therapist and change process; for the patient to be able to ventilate problems, were indicated as helpful in the patient study. Relational aspects of treatment were also reflected in the unstructured aspects of standard treatment described, which were seen as both frustrating and helpful by the GPs in the GP study. Perhaps learning about the underlying theories of the common shared factors from psychotherapy could inform

this part of treatment. Increased understanding of how specific aspects and common factors of psychological treatment supplement each other could improve the treatment of depression in primary care in Norway. Overall, I argue that a flexible approach, in which GPs recommend self-help while continuing with a main focus on common shared factors of psychotherapy in the follow-ups, could be positive. GPs could blend standard treatment with a recommendation for internet interventions; a blended format. Under this approach, the GPs could use the patient's lifeworld as a starting point in the dialogue. The patient will therefore set the agenda. The GP will link back to the specific factors of the theory-based approach only when it is suitable. This would add valuable structure to the treatment of depression and could be used to make minor adjustments to standard treatment follow-ups. This would benefit both the patients and the GPs. More research is needed to explore whether ICBT positively supplements treatment of depression in general practice and to monitor the different dimensions of the quality of such treatment.

5 References

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Paper I

RESEARCH ARTICLE

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Motivation to persist with internet-based cognitive behavioural treatment using blended care: a qualitative study

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Abstract

Background: The prevalence of depression is high and results in huge costs for society. Internet-based cognitive behavioural treatment (ICBT) has been suggested for use in primary care and has been shown to be more effective when combined with human support. However, non-completion rates remain a challenge. Current recommendations state that steps to improve persistence with ICBT should be determined and the impact of therapist support on persistence explored. A few earlier studies have explored motivations to persist with ICBT without face-to-face therapist support. The present study explored the motivation to persist as experienced by a group of patients who sought help in primary care and used "blended care", i.e. ICBT supported by short face-to-face consultations.

Methods: To elucidate motivation in an everyday context and the meaning of patients' experiences we chose a phenomenological hermeneutical approach. We interviewed participants in the intervention group of a randomized controlled trial that evaluated the efficacy of an ICBT programme called MoodGYM, an eHealth intervention used to treat depression. Fourteen participants, both completers and non-completers, went through individual, semi-structured interviews after they ended their treatment.

Results: Hope of recovery and a desire to gain control of one's life were identified as intrinsic motivators. The feeling of being able to freely choose how, when and where to complete the ICBT modules was identified as an important supporting condition and satisfied the participants' need for autonomy. Furthermore, the importance of a sense of belonging towards partners, friends or family was essential for motivation as was the ability to identify with ICBT content. Another supporting condition was the experience of connectedness when met with acknowledgement, flexibility and feedback from a qualified therapist in the face-to-face consultations.

Conclusions: A key finding was that participants were motivated to persist with ICBT when their overall need for relatedness was satisfied. This was achieved through a sense of belonging towards partners, friends and family. Connectedness with the therapist and the participant's ability to identify with the ICBT modules also gave a sense of relatedness. Improving these motivational aspects may increase patients' persistence with ICBT.

Keywords: Internet-based cognitive behavioural treatment, Adherence, Self-determination theory, Motivation, Depression, Primary care

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Background

Depression is highly prevalent, resulting in distress to patients and families and huge costs to society [1,2]. Offering early intervention benefits patients and society alike [3]. Patients tend to prefer consultations with a therapist to medication [4]. However, general practitioners (GPs) currently treat most patients with depression, and as a treatment they are widely and increasingly prescribing antidepressants [5,6]. Therefore there is a discrepancy between the treatment patients want and the treatment they get. Studies have also shown that GPs lack the necessary tools to treat mental health problems [6,7].

Internet-based cognitive behavioural treatment (ICBT) has shown promising results in treating depression [8-12]. However, Internet-based interventions have shown to yield better outcomes and greater retention when combined with therapist support [13,14]. Studies have indicated that ICBT could be widely applicable in general practice for the treatment of depression, but these studies have only a minimum of human support [4,15]. Implementing ICBT in combination with short face-to-face consultations in primary care could lead to early intervention, give increased access to cognitive behavioural treatment and improve the treatment of depression, as well as address the requests of patients for follow-up given in consultations. However, research on Internet-based interventions has shown that non-completion is a challenge [16,17]. Therefore it is recommended to find steps to improve patient persistence with Internet interventions [18] and to identify the impact of different elements of therapist support in such interventions [14,17].

According to Møller [19] health professionals often see motivation as a parameter only within the patient that can easily be measured, and this view must be challenged. She argues further that it is more interesting to explore what is motivating, rather than measuring how motivated people are. We are inspired by her conclusion that motivation to change must be seen as a complex phenomenon depending on social contexts and interpersonal relationships.

Patient motivation is an important element in persistence with any treatment programme. The Self-determination Theory (SDT) offers a broad perspective on human functioning and motivation [20-22], and says that humans naturally have intrinsic motivation, but require supportive conditions to maintain and enhance it. According to SDT, three basic psychological needs should be satisfied in order to enhance intrinsic motivation: relatedness, competence and autonomy. Relatedness includes a sense of recognition, belonging with peers, family or community and a need to feel connected to and valued by important others. Competence involves socio-contextual success with optimal challenges, feedback and freedom from demeaning evaluation. Competence will only enhance motivation if it is accompanied by a sense of autonomy [21,23].

Prochaska claims that a person goes through different stages of motivation when a change is made, and tailoring the relationship between the patient and the therapist, as well as tailoring the treatment intervention to correspond to the stage of change, can enhance the outcome [24]. To our knowledge, few studies have explored patient motivation to persist with ICBT, and those have only briefly mentioned motivation as dependent on social context [25-27]. Some barriers to ICBT completion were identified in these studies, such as lack of ability to identify with the ICBT programme applied, poor patient computer skills and the need for more therapist support [26,27]. Reported motivation to persist with ICBT includes a sense of control, an ability to identify with the ICBT programme applied, and additional support from important others [25-27]. While these studies explored some of the aspects that influence motivation to persist with ICBT without face-to-face support, the aim of this article is to explore motivation as experienced by patients using "blended care", i.e. ICBT supported by short face-to-face consultations. These experiences will be investigated with an emphasis on everyday-life attitudes towards the ICBT programme applied, therapist support and depression. These attitudes pertain to individual patient experiences in contextual settings, rather than to motivation as a distinct quantifiable factor. The motivation to persist with ICBT is explored using the SDT as a theoretical perspective. Overall, we wish to contribute to the discussion on how to deliver improved treatment for depression to the community and to propose steps to increase persistence with ICBT.

Methods

Study context

From autumn 2010 until autumn 2012, a randomised controlled trial (RCT) conducted in Tromsø, Norway, offered blended care to a group of patients seeking help from their GP for mild to moderate symptoms of depression. Patients had to be between 18–65 with access to internet and those who were suicidal, psychotic, or drug abusers were excluded (for more details about the RCT see [11]). We used a Norwegian translation of an ICBT programme called MoodGYM, an eHealth intervention developed at the Australian National University. This is a free Internet-based self-help programme consisting of five interactive modules that introduce cognitive behavioural principles through online exercises. MoodGYM demonstrates the relationship between thoughts and emotions and teaches relaxation techniques. It also includes sections on managing relationships and positive behavioural activity.

Patients were asked to complete the five ICBT modules at home, and were given short, face-to-face consultations between modules with their therapist at a small clinic at the University of Tromsø. The consultations were of a

supportive nature only, guided by a script consisting of three compulsory subjects: (a) symptom monitoring, (b) discussion of the topic of the last module in MoodGYM, and (c) introducing the next module and discussing patient motivation. Other issues of importance to the patient could also be discussed if there was more time. The two therapists in the study were both psychologists with limited training in CBT. To simulate the conditions in Norwegian general practice, the time spent in face-to-face consultations was 20–30 minutes, compared to 40–60 minutes in conventional cognitive behavioural treatment. The rate of non-completion was 40.4% in the intervention group of this trial. The present interview study was embedded in the RCT, trial registration: Australian New Zealand Clinical Registry ACTRN 12610000257066.

Participants

All patients in the intervention group of the RCT were offered a debriefing session with their therapist when they ended blended care. At this time they were given written information about our qualitative research project and an informed consent form. Not all non-completers attended this session. Continuous recruitment was initially used, but was changed to strategic recruitment in order to gather a pragmatic sample number [28] of 14 consenting patients. The change from continuous to strategic recruitment was made after approximately 10 interviews to include men and women, both younger and older, and both completers and non-completers. Several non-completers refused to be interviewed. Accordingly only three non-completers were included in the present qualitative study (Table 1).

Table 1 Participants

Patient	Age (years)	Male/Female	Completer/non-completer
1	28	Female	Non-completer
2	26	Male	Completer
3	33	Male	Completer
4	39	Female	Completer
5	61	Female	Completer
6	41	Female	Completer
7	44	Female	Non-completer
8	26	Female	Completer
9	26	Male	Completer
10	48	Male	Completer
11	56	Female	Completer
12	36	Female	Completer
13	22	Female	Completer
14	51	Male	Non-completer

Interview schedule and data collection

Phenomenological hermeneutics is an analytical method developed to grasp “essential meaning” as it is lived in human experience” [29]. With a phenomenological approach lived experience is explored; how life is lived when it is taken for granted, while it contains essences of meaning. “Essential meanings” are understandable meanings of phenomena and experiences. Lived experience is explored using interviews. What is told and narrated is transformed into text which must be interpreted and a hermeneutic analysis is used. Phenomenological hermeneutics is inspired by the philosophies of Heidegger and Gadamer as well as Ricoeur [29-31]. We chose phenomenological hermeneutics as a method because it is suitable when exploring a complex phenomenon such as motivation. Our aim was to explore motivational aspects and an understanding of how the patients themselves have experienced to persist in treatment in an everyday context. By obtaining a narration of the patient’s own perspective and stories, motivation as lived experience could be explored and analysed. Also, with a phenomenological approach it was of great importance to try to set aside what we as researchers took for granted as facts and strive to listen and analyse without judgment, but concentrate on experience. As health workers ourselves, we also prepared ourselves to be open-minded, curious and set aside our medical interests. By transcribing the interviews to text and analysing the text with a hermeneutic approach we moved between understanding and explaining it [29].

Although the venue was flexible, all participants preferred to meet at a co-researcher’s office at the University of Tromsø. This office was chosen as a neutral ground and offered a slightly homey atmosphere. A pilot interview was first conducted with a test person (friend of MW) who had gone through the entire data program. Adjustments to the interview guide were made throughout the interview period. The interviewers (MW and KL) conducted semi-structured interviews designed to gather information concerning, a) a participant’s experience with the ICBT programme, b) changes in a participant’s everyday life during blended care, and c) motivational elements to persist with ICBT. Individual interviews ranged from 40–70 minutes and were recorded digitally. The interviews were performed as dialogues, and open-ended questions were used to evoke descriptions of personal experiences that reflected participants’ perceptions and feelings [31].

Analytical strategy and procedure

Interviews were transcribed into Nvivo 9, anonymised and then analysed in an inductive way according to the phenomenological hermeneutical method [29,30]. Findings were discussed and validated with an experienced qualitative researcher (MBR) throughout the analytical process. Inconsistencies were resolved through discussion and

further reflection. Participants' stories and reflections were analysed in a step-wise manner [29]: a) an initial reading led to the formulation of a naïve understanding; b) based on what participants said, what they talked about, and what this referred to the interview text was divided into meaning-units, then condensed and abstracted to form themes and sub-themes (Table 2). Themes were compared with the naïve understanding and the interview texts for validation; c) subsequently our findings were critically interpreted to create a comprehensive understanding and elaborated in light of existing literature and the SDT.

Ethics approval

Written informed consent was obtained from all participants. Ethical approval was given by the Regional Ethical Committee, Tromsø (2011/2163).

Results

Relevant findings regarding the participants' experiences of motivation were identified and are presented in two main themes combining individual patient narratives with inspiration from the SDT: a) intrinsic motivation and b) experiencing supporting conditions and persistence constraints. Another paper based on interview data from the same 14 participants focused on what they perceived as helpful and how they implemented the principles of cognitive behavioural treatment [32].

Intrinsic motivation

Gaining control of one's life

Many of our participants had struggled with symptoms of depression for many years. They were aware of their problems, but had been unable to do anything about them. When they actively took initiative or accepted treatment it was experienced as motivating. Indeed, some participants felt they had gained more control of their life by taking action:

3: But I think primarily, just getting started with something had a tremendous effect. I was actually doing something instead of sitting, waiting and feeling distressed.

5: I knew that I had a programme that I could utilise, so I did when I had time, and when I had...was in my doing mode... I felt that I wanted to take some control of the process, now I'm... [...] I feel inspired to take more control.

The ability to organise their everyday life to complete the ICBT modules was also related to this feeling of gaining control. The participants' desires to manage their own lives, expressed both directly and indirectly, indicated that this was an intrinsic motivating aspect to persist with ICBT. A transition from passive to active behaviour was a basic driving force, constituting a change from being prepared to taking action. For some it was less important what they did as long as they did something, while others emphasised that they believed in and hoped that blended care would help them.

Hope for recovery

Some participants had heard about cognitive behavioural treatment and had expectations that a treatment based on these principles could help them. Others had faith in blended care because their GP had recommended it. Many participants expressed their personal hope for recovery and a desire to learn more about themselves and their condition. Their hope that recovery was possible was described as motivating.

8: I wanted to get better; therefore I wanted to learn some techniques in order to function better.

13: Feeling curious [towards the programme]! Or I had hoped it would help and it has.

Participants generally described the first two ICBT modules as informative and often felt that they started a learning process, which gave them hope that it was possible to learn more. Symptoms of depression were a problem in their lives, and they wanted to continue ICBT with the hope of recovery.

Supporting conditions and persistence constraints

Competence and autonomy

Learning while working on a laptop demanded very few practical adjustments from our participants, and computer skills were not an issue. The participants did not express any technical challenges of logging on or problems with manoeuvring within the ICBT programme.

12: Yes, it went quite well. I generally spend a fair amount of time using computers anyway.

13: For me it was not a problem working on the computer. You could do it in your own pace, relax and sit comfortably. In that way I found it to be good. The only thing was a few questions or words I didn't understand,

Table 2 Analysing process – example

What participants say	What participants talk about	What participants refer to
Meaning-unit:	Condensation:	Subtheme:
1: I would have left the programme anyway because the modules weren't suitable for me.	Dropped out because the modules were not suitable.	Did not identify with the programme.
2: No, to me the greatest motivation I suppose was the woman I live with. It was. And for my own part a wish to have a better everyday life [...].	The greatest motivation was his wife and to have a better everyday life.	Partner is important.
		Theme:
		Identification
		Belonging/important others.

so you sit there alone and think... but luckily, I have Google to help me (laughter).

It is obvious that overall our participants were used to working with computers, and to using the Internet as a source of information. The mastery of technical challenges and the ability to understand the content of the ICBT programme revealed positive attitudes towards coping with it. This was conveyed together with a sense of competence.

Participants reported different experiences when the issue of time was raised, both due to long modules and competing priorities. Indeed, some modules were identified as especially time-consuming. Almost all patients expressed problems in finding time to complete the ICBT modules.

8: It was quite an effort, particularly in the beginning, when I spent a lot of time on each module.

7: It was difficult to find time for this. I'm struggling to find time to do everything. There is so much that has to be done, that most things get done half-heartedly.

Patients who were clearly taking action developed conscious strategies to overcome these constraints, such as choosing a set day to complete their modules, or using the date of the face-to-face consultation with the therapist as a deadline.

4: It was good to have a deadline [the consultation], which required me to be organised.

7: [...] she [the therapist] said that this was nothing I needed to concern myself with. If it was unsuitable, I just skipped that part [module section]. It would just waste time, unnecessary time.

The flexibility to skip parts of the ICBT programme that were judged unsuitable by the participant was described as important to overcome time constraints. This flexibility was encouraged by the therapist and embraced by the participants who were strongly searching for solutions. Others were more caught up in the obstacles and were overwhelmed by time demands and long modules, but many appreciated the freedom to work at flexible hours and to select the parts of the ICBT programme they found suitable for them, which also correspond to their sense of autonomy.

Belonging

As mentioned above, finding time to persist with ICBT was a challenge. Participants emphasised the importance of supportive relationships, such as those with partners, friends and family who became directly involved in blended care and in the general process towards recovery. Their support and involvement became manifest and was appreciated in many ways, e.g. as encouragement to enrol in a treatment programme, to work on ICBT modules and to participate in face-to-face consultations. In this way

partners, friends and family could help the participants to find the time and space to pursue their treatment.

9: No, I had my partner. I would probably have [dropped out] many times hadn't it been for my partner [dry laughter] ...she was good at pushing me... She had noticed that I felt better afterwards [consultation]. She told me that I should go [to the consultations] because I felt better after talking some... and done these tasks...

When participants allowed important others to play an active role in their treatment process, and when being open to their involvement was a positive experience, it promoted a sense of belonging, i.e. of not being alone in the process. Participants mentioned this as a motivator for moving forward in treatment.

When describing the period of treatment, the role of important others was also reported as supportive when feeling depressed in daily life. Being met with patience and that partners, friends and family were willing to make adjustments to their routines because of a participant's limitations, was appreciated.

9: And my partner, who is quite kind [wry laughter] to me, lets me off the worst tasks. That relaxes my state of mind and in general.

14: When I haven't been present socially and not had any social activity, questions regarding where I am and what's wrong with me have been directed towards him [brother]. He's been quite a helper.

These typical descriptions of caring actions revealed that the participants felt that their families or friends understood and acknowledged their problems. This pointed to the alleviating aspect of being part of social relationships during a difficult period.

Participants described that the feeling of belonging, feeling part of social relationships, directly strengthened their intrinsic hope of recovering and the motivation to engage and persist in treatment. Symptoms of depression sometimes represented a challenge to take part in social settings in a way the participant wanted. However, wanting to participate and the feeling of being welcomed by others were mutually motivating aspects. When describing what motivated participants for treatment, reasons that included their families were often expressed.

9: [...] and it [engaging in treatment] was not just for my own sake, it was also for my partner's sake.

3: Just when this happened, I became a father, and I wanted to function. I wanted to work and function. I did not want my illness to ruin the experience. Impact on the child in a negative way. The mother also needs help and support, especially just after giving birth.

Participants strove to contribute to, participate in and enjoy family life, and to interact with colleagues and friends. When this capacity was reduced it was experienced as a loss in their social life. Participants described their loss as experiencing less enjoyment and

less interaction with the people they valued, which sometimes lead to isolation. Participants described this not only as a loss for them, but also for the people they were close to, revealing a confidence in feeling valued. To regain a social life was a driving force and an important motivating aspect for treatment.

Overall, the feeling of being part of a social environment, and not being alone was experienced as positive. A sense of belonging through attachment, being valued and understood, satisfied a need for relatedness and was positive for motivation. To want and be wanted socially was a driving force to engage and persist in treatment.

Recognition and self-identification

A positive feeling of not being alone was also experienced when participants were able to identify with and to relate to the content of the ICBT programme.

14: I found some recognisable bits there... that made it possible in a way, to connect with him or her in the various examples used. And I thought: Goodness, this is about me, right? That's what I do!

10: Because you never know when you suddenly get an eye-opener. Wow! They [MoodGYM] hit the nail on the head again!

Patients sometimes strongly identified themselves with the fictional characters presented in the ICBT programme. This identification showed them that the problems they had, when symptoms of depression were present, were not specific to them; they were experienced by others, as well. This was perceived as essential to treatment progression and motivation.

On the other hand, participants were split on how they viewed the presentation of the ICBT content. The programme seemed superficial to some, with simplified problems, principles and strategies. It was perceived to target young people, and many expressed that the ICBT content did not correspond to their situation.

7: [...] maybe it was directed towards a younger audience. Because it was a lot about exams and reading and coping with school situations. But I do understand that not everything can be right for everybody.

9: The reason I didn't complete [all the modules completely] was because it didn't seem right for me at the time.

The perception that the ICBT content was created to target a younger audience sometimes led to a sense of alienation. Two of the non-completers expressed difficulties with identification as the main reason for not completing the program (participant 1 and 7).

Yet, when participants gained self-identification through an ability to relate and to mirror themselves in the content, it motivated them to persist with ICBT. Discussing the ICBT programme with the therapist and important others was described as helpful in overcoming problems

with the content. This strengthened the sense of identification with the content, but also the connectedness with the person in whom the participant was confiding, together satisfying the need for relatedness.

Connectedness and expert feedback

Participants described the face-to-face consultations as helpful and motivating. Some even expressed that they were absolutely necessary to participate in ICBT. It was through this dialogue they could reflect and develop.

3: If the consultations hadn't been there, things would have faded somewhat.

4: [...] it is in meetings with others that my thoughts fall into place. So for me it has been motivating and a very positive experience.

3: And I voiced my thoughts, and then we [patient and therapist] discussed the module. Then it was very straight forward to clear out the thoughts [...]. To try to adjust the setting in the module to things that fitted me better.

Participants emphasised that the dialogue during consultations was an opportunity to put thoughts into words, rather than seeing it as a control or monitoring. It was an arena to connect, to open up, but, as mentioned earlier, was also useful to facilitate participants' ability to identify with the ICBT content.

Connectedness was established through dialogue and strengthened when met with understanding, flexibility, acknowledgement and openness on the part of the therapist. For some, the therapist was just a person to interact with, but to others the therapist had a special expert status.

12: What was really important to me were the follow-up sessions. [...] it was a person who I knew was knowledgeable and an expert on this...

Many participants wanted feedback and needed to trust the feedback given. Trust could be established when the patient was confident that the therapist was well-qualified, knew about depression and could provide therapy. This combination meant that some participants felt they were getting expert feedback. When asked, many expressed that their GP could not function as a therapist in the same manner, giving reasons such as lack of time and lack of competence in cognitive behavioural therapy.

Time constraints made the consultation stressful to some participants, both completers and non-completers alike. All three non-completers wanted to discuss their problems in more depth and wanted a more individualised approach in the face-to-face consultations as in traditional therapy. One of the non-completers was offered this and chose it instead of continuing with blended ICBT (participant 14).

1: The consultations could have been longer and more in-depth... about other things and how I functioned otherwise in life.

For some patients, short consultations were a barrier to open up and satisfy their need for connectedness. However, to summarise, all patients emphasised the importance of the dialogue with the therapist. Working with ICBT alone was not preferable.

Discussion

A key finding was that our participants were motivated to persist with ICBT when their need for relatedness was satisfied. The SDT claims that the psychological needs for relatedness, competence and autonomy must be satisfied to enhance intrinsic motivation [21,23]. All three were identified to be influential in our study, especially relatedness in terms of recognition, belonging and connectedness. Our findings show how motivation to persist with ICBT was not only an internal individual process, but also a social process where interactions with others were essential. Unique to this study were the findings exploring what aspects of the interaction with the therapist were important for motivation. These aspects were identified as connectedness through acknowledgement, trustworthy feedback and encouragement of flexibility. Our findings are in line with Johansson's findings of a better outcome when there is a more human involvement during follow-up [13] as some of our participants expressed face-to-face consultations to be absolutely necessary to participate in ICBT. Major barriers to ICBT persistence and completion, such as lack of support, lack of computer skills and lack of self-identification were not expressed as clear in our data as in the study by Donkin et al., which was found in an older population without therapeutic consultations [25]. This could imply that the short face-to-face consultations in our study helped increase acceptability and enhanced supporting conditions. The way questions were asked during the interview could also explain the difference in findings. Santana has shown that use of the Internet to assess health problems is rising [33]. The fact that our population was younger (see Table 1) and therefore more skilled in using the Internet to obtain information about health issues may be a reason for not experiencing computer skills as a barrier. A reason could also be that possibly MoodGYM is a more user-friendly programme yielding these findings.

However, not being able to identify with the content of the ICBT programme was identified as a barrier in our findings, especially with the non-completers and has been found in earlier studies [25,27]. The SDT claims that if ideas and values are not shared, relatedness is hindered, resulting in a feeling of alienation [21]. Our findings indicated that social relationships with the therapist and important others could facilitate the process of self-identification, and thereby enhance relatedness and motivation. On the other hand, depression per se may compromise the ability to be self-determined. According

to the SDT, the more self-determined patients are, the more likely they are to engage in activities that reflect their own values and interests, and such activities are more likely to satisfy psychological needs [20]. Kaylai has found that being depressed is to be "unhomelike", i.e. a state of alienation [34]. Alienation in the SDT is the opposite of relatedness, and can undermine self-motivation [21]. This barrier is inevitable. However in follow-up of patients suffering from depression the therapist can help to establish supportive conditions to satisfy the need for relatedness and thus hopefully enhance motivation. As mentioned in our findings, the relationship with the therapist, but also with partners, friends and family were important. According to the SDT, feelings of identification, belonging and connectedness satisfy the need for relatedness [21]. In earlier studies, exploring ICBT, social relations were mentioned to be important by enhancing and maintaining motivation [19,21,35]. This supports the assumption that relatedness is important for motivation.

Many participants pointed out that a feeling of taking action and a need for feedback from an expert therapist, who in our study was a psychologist, was of great importance. Time constraints were identified as a problem to connect with the therapist. Especially the non-completers expressed a need for a more traditional therapy with more time and in-depth dialogue around their problems. However, most of our participants experienced trust and acknowledgement in their consultations, despite their short length. According to Prochaska, tailoring the therapeutic relationship and treatment intervention to the patient's stage of change can enhance the outcome, specifically the percentage of patients completing therapy, and the ultimate success of treatment. While in the stage of action, patients need the advice of an expert [24]. In our findings, patients often told stories that indicated that they were in a stage of action when motivated to persist in treatment. The fact that the therapist was a psychologist, an expert, was experienced to strengthen this motivation. GPs experiences with short consultations indicate that they feel they are able to give useful treatment for depression, despite time pressure [5]. On the other hand, patients reported that time constraints in consultations with GPs undermine their capacity to benefit from the consultation. The presence of other patients in the waiting room just made matters worse as it was experienced as more stressful that other patients waited for the GP, and made it more difficult to open up and connect [5,36]. In our study the therapist was never disturbed, and the waiting room was almost always empty. Possibly this setting fostered relatedness despite the short consultations. If blended care is implemented in general practice, patients may feel stress due to appointment time constraints and may fail to feel connected with the GP. It is also uncertain

whether a GP or other ICBT provider in primary care can fill the shoes of being an expert during the process of change. Undertaking training in the delivering of blended ICBT may provide competence for such GPs.

Strengths and limitations

A methodological strength with this study was the use of in-depth interviews. Participants themselves were thus able to elaborate on their experiences with ICBT. Depending on the situation, people in social interactions inhabit different role characters and statuses [37]. In our study, both interviewers were first of all researchers, but they were also health professionals. The second author was a therapist in the RCT in which this study is situated, but never interviewed her own patients. We chose to be open about our double status, but did not inform our participants about her status as a therapist. We made it clear that our intention was not to defend the treatment, but to better understand the patients' thoughts and experiences. The intention was to open an honest and trusting dialogue. It was a strength that the experienced third author (MBR) continuously gave feedback on our interviews to ensure that quality and adequate depth was achieved.

Participants entering RCTs are a selected sample [38] and may therefore be more motivated. One strength of our study was that all participants had initially contacted their GP for their problems, which may reduce the selection bias. A limitation was that only three of our 14 participants were non-completers. Although non-completers were invited to be interviewed, many refused and thus could not be included in our study. Therefore our findings can only be seen as a partial description of the full range of patients. However, our main aim in this article was to explore the aspects of motivation to start and persist with ICBT, and accordingly a majority of completers was acceptable.

Conclusions

By analysing the interviews of our 14 participants, we attempted to understand motivation as experienced when using ICBT with short intermittent consultations. Intrinsic motivators such as gaining control of one's life and a personal hope for recovery were identified. A key result was that patients were motivated to persist with ICBT when their need for relatedness was satisfied. This was achieved through feelings of self-identification with the ICBT programme and an experience of belonging and being valued by partners, friends and family and connectedness with the therapist.

Implications for research and practice

Enhancing motivation may be a step to improving therapeutic persistence. However, further research is necessary.

We propose four steps an ICBT deliverer in primary care should have in mind in the encounter with patients with depression to increase motivation.

First, communicating hope by educating patients about the effectiveness of ICBT and the good prognosis of depression. Second, encouraging patients to enlist the support of important others in their process towards recovery. Third, communicating that the ICBT deliverer has competence and can give qualified feedback. Fourth, focusing on acknowledgement, flexibility and understanding in the meeting with the patient. This may increase a feeling of connectedness and autonomy.

Future research is needed to explore in more depth whether blended ICBT can represent a worthwhile treatment for depression in primary care and be added as an additional tool in a GP's armoury.

Abbreviations

ICBT: Internet-based Cognitive Behavioural Treatment; GP: General Practice; RCT: Randomised Controlled Trial; SDT: Self-determination Theory.

Competing interests

The authors declare that they have no competing interests.

Authors' contributions

The research-group; MW, KL, RH, ME, KW, MR and NK met on a regular basis to depict the design of the study, discuss and make all necessary decisions during the entire research process, accessing all relevant papers (e.g. interview-guide, consent-form, coding). MW and KL were responsible for data-collection, transcribing data and analysing data. MW wrote the first draft of the manuscript. MR and KL contributed continuously with comments and discussion to data-collection, coding, analysis and writing of this paper. MJ contributed to both to analysis and in the writing of the manuscript. All authors commented on drafts of this paper. All authors read and approved the final manuscript.

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Paper II

Original Paper

Patients' Experiences of Helpfulness in Guided Internet-Based Treatment for Depression: Qualitative Study of Integrated Therapeutic Dimensions

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Abstract

Background: Quantitative research on Internet-based cognitive behavioral therapy (ICBT) has collected substantial evidence for the effectiveness of this treatment approach on health outcomes. Less is known about how patients find ICBT to be generally meaningful and helpful for treating depression.

Objective: To explore patients' experiences of being in ICBT treatment with a focus on the treatment dimensions that they considered helpful.

Methods: Choosing a phenomenological-hermeneutical approach, 14 patients were interviewed with semistructured qualitative interviews to elicit their understanding of using ICBT. The patients took part in a clinical trial using ICBT with MoodGYM, which also featured brief consultations with a clinical psychologist. The interviews were transcribed and analyzed according to the chosen methodology and organized into significant themes.

Results: The phenomenological-hermeneutical analysis identified 5 themes relating overall to the meaning of this mode of treatment in terms of helpfulness. Two related to treatment in general: (1) taking action to address one's problems and (2) the value of talking to a professional. The next two themes specifically addressed guided self-help using the MoodGYM program: (3) acquiring relevant knowledge, and (4) restructuring the new knowledge acquired through ICBT. A fifth theme concerned (5) actual changes in patients' perceptions and interactions, related to either the self-help material or the face-to-face consultations with the therapist.

Conclusions: Three important dimensions were made explicit: the active engagement of the patient, the guidance of the therapist, and the content of the treatment program. The findings pointed to (1) the role of MoodGYM as a source of new knowledge providing patients with a structured approach to work with their depression, (2) the patient's role as the primary agent of change through adapting relevant knowledge from MoodGYM to their situation, and (3) the dialogue with the therapist as a trusting relationship in which to share thoughts and feelings, receive feedback and advice, and to assist the patient in making use of the MoodGYM content.

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KEYWORDS

Internet-based cognitive behavioral therapy; ICBT; guided self-help; depression; qualitative

Introduction

Research has yielded promising results on the effects of Internet-based cognitive behavioral therapy (ICBT) on a range of mental health problems, including depression [1-3]. This form of therapy has the advantage of increased availability and at the same time puts less strain on therapeutic resources [4]. ICBT can be unguided, meaning that the patient works alone with the self-help material; or it can be guided, meaning that the patient enjoys some support and guidance from a therapist. The research on ICBT and other computerized treatments to date indicates that guided self-help and traditional face-to-face-therapy may offer roughly the same success rates for health outcomes [5], but it points to the importance of providing users with support during self-help programs [2,3,6]. Still, the role of support is not well understood in terms of the amount necessary or what it should offer [7,8].

The mechanisms through which ICBT is effective in reducing depression remain unclear. Both specific and common factors of treatment may serve as active ingredients [9]. Cognitive behavioral therapy (CBT) aims to alter the maladaptive structures and processes fundamental to depression [10], by making use of both cognitive and behavioral strategies. A key assumption in CBT is that the depressive patient can use CBT to modify or deactivate his/her depressogenic schema or develop compensatory skills. A qualitative study has provided support for the notion of compensatory skills in face-to-face CBT, where patients utilize the extensive self-therapeutic activities in CBT to manage their depression [11]. Self-therapeutic activity may involve the use of specific CBT techniques or personalized adaptations. Further, the patient might understand and cope with his/her depressive symptoms in light of new psychological knowledge. Similarly, self-therapeutic activity aimed at reducing negative cognitions may be one active ingredient in ICBT. Another line of psychotherapy research has shed light on contextual factors contributing to treatment outcome. The contextual model of psychotherapy [12] recognizes the contributions and interdependencies of other elements beyond the “bare-bones” treatment models and techniques (eg, mechanisms proposed by cognitive theory). These other factors include the actual patient and his/her expectations, factors outside the therapy situation (extra-therapeutic factors), and the working alliance between therapist and patient. The term working alliance refers to the partnership emerging between the therapist and patient in order to achieve the patient’s goal [13]. A robust relationship has been found between the quality of the working alliance—which depends on both therapist and patient factors—and outcome of treatment [14].

Although the effectiveness of computerized and Internet-based CBT is established, there is little agreement concerning the core content [15] and therapeutic process in self-help treatments [16]. Research on possible mechanisms of change has been emerging [9,16], and there is a need for studies aiming at furthering our understanding of active ingredients and processes at work in ICBT. Change in treatment specific factors for ICBT for depression, such as dysfunctional attitudes, worrying, and perceived control, has been found to mediate outcome [17]. Studies of the working alliance in Internet treatments report

overall high ratings that are within the range of alliance ratings in face-to-face therapy [18]. Qualitative research on unguided ICBT has identified both CBT-related and patient aspects as influencing depression. Issues such as computer and Internet skills and the patient’s need for emotional support were reported as important influences during ICBT [6]. Qualitative research into guided ICBT yielded similar findings. It seems that the way patients work with CBT relates to the success of their outcome and their opinion about the therapy: an active, hands-on, self-reliant approach correlates with successful outcomes and favorable opinions. The opposite case is a passive style of working that does not put new knowledge into practice, skips parts of the course material, and is in need of more support [19]. It is not clear, however, what lies behind such differences in approach or whether the cause might be low expectations to the treatment, or because the patient feels a lack of helpfulness during the ICBT process. Purves and Dutton [16] explored patients’ experiences of the therapeutic process in an unguided computerized CBT program and identified four themes in interviews with patients. These included a meaningful relationship with the self-help material, using the self-help material to create structure to their psychological state, being stimulated by the self-help material creating engagement, and an increased sense of personal agency. In sum, the current literature implies that specific and common factors contribute to the outcome of ICBT. In order to improve effectiveness and acceptability of such treatment packages, further examination of these issues are warranted [9].

This study explores patients’ experiences of helpfulness in guided Internet-based cognitive behavioral therapy for depression. We intend to combine a pragmatic intention with a phenomenological-hermeneutical approach on patient experiences rather than on isolated patient factors. Such an approach, inspired by Husserl, focuses on human experience in everyday life, explores a natural attitude, and understands the whole of an experience [20]. Further, human beings have intentional relationships with their surroundings and things in their everyday lives, that is, relationships that are experienced as meaningful. In this case, we mean to elucidate how patients experience and give meaning to the phenomenon of ICBT in an everyday context. Such experience can be narrated and presented as text, which again calls for a hermeneutical interpretation [21]. To grasp the essential meaning of ICBT, this study aims to explore the experiences of patients in an ICBT intervention with therapist support. Knowledge about what patients experience as most helpful, and how patients understand and implement the principles of CBT, is essential if we want to improve the quality of ICBT programs and patient support. The current study aims to explore patients’ experiences with ICBT, focusing especially on those aspects of the therapy that they consider most helpful.

Methods

Design

This qualitative study was conducted in parallel with a randomized controlled trial (RCT; ACTRN12610000257066). The aim of the RCT was to test a treatment approach with ICBT

that could be feasible in general practice. It compares Internet-based cognitive behavioral therapy interspersed with brief personal sessions with a therapist to a waiting list control sample. Participants in the RCT were recruited for this qualitative study when ending treatment. The first and second authors of this paper took part in the planning of the RCT and conducted the interviews. The first author worked as a therapist in the RCT but did not interview her own patients. Both the first and the second author conducting the interviews were blind to the outcome of the patients at the time of the interviews.

Description of the Randomized Controlled Trial and Treatment

Patients included in the RCT after an initial assessment had a session with their therapist who introduced the self-help program. The introduction focused on giving brief information about the theoretical basis and the empirical support, as well as the content of the program and expected work load. Patients were asked to complete the five modules of MoodGYM in sequence, one per week. They were then followed up with weekly, face-to-face consultations with the therapist over a minimum of 7 weeks. A full course treatment included eight consultations. However, the treatment protocol was quite flexible and allowed for delays in the treatment, and it did not have a maximum limit for therapist sessions. In case of delays, the therapist contacted the patients to reschedule a new appointment.

The consultations each lasted approximately 15-30 minutes, similar to the time available in general practice. The guideline script comprised three compulsory subjects: (1) symptom monitoring, (2) discussion of the topic of the last module in MoodGYM, and (3) introducing the next module and discuss patient motivation. If time permitted, other issues that patients perceived as important to their depression were also discussed.

The self-help program used in the randomized controlled trial was MoodGYM. Its aim is to help patients prevent and cope with depression, based on principles of cognitive behavioral therapy [22,23]. It was developed at the Centre for Mental Health Research at Australian National University, and its effectiveness is empirically supported [24,25]. MoodGYM has five modules containing texts explaining the basic principles of CBT, a variety of self-tests and self-help exercises, and homework in which the patient is invited to analyze some personal experience in accordance with the principles of the program. Although some of the content in MoodGYM is generic CBT, there are also some specific sections devoted to parental

relationships, relationship break-ups, problem solving, and even relaxation.

In the RCT sample, 72.6% were female, and age ranged from 18-63 with a mean of 36.1. The number of treatment sessions ranged from 1-12, with a median of 8 sessions; 40.1% did not complete the treatment program. The baseline depression scores, as measured by the Beck Depression Inventory (BDI-II) [26], had a mean of 21.7. A full description of the sample can be obtained in the forthcoming paper presenting the results of the RCT (personal communication by Høifødt, Ragnhild, March 2013).

Recruitment to the Interviews and Procedure

Overall, the study was planned to provide complementary knowledge production on ICBT different from the kind of knowledge obtained in an RCT, hence the use of a qualitative approach. The recruitment of patients to the interviews was parallel to the randomized controlled trial, with patients receiving oral and written information about our qualitative study and an invitation to participate at their final consultation. Recruitment was continuous until the desired total of 14 interviews was reached. The recruitment procedure was strategic in the sense that we aimed to include men and women, younger and older, completers and noncompleters. The therapist would provide the interviewer with contact details for consenting patients. Patients could choose the location, either at their home or at the university in comfortable everyday like settings. All patients preferred to be interviewed at the university. The interviews lasted for approximately 60 minutes, were recorded using a digital voice recorder, transcribed verbatim by the second author or a clerical assistant, and then coded using NVIVO software. The initial coding procedure comprised a separate coding by the first, second, and last author of two interviews, and subsequently checked for consensus. During the entire process of analysis, the coding and the subsequent themes were discussed and reflected upon.

The researcher's interview guide consisted of open questions inviting the patients to narrate different aspects of their ICBT experience: their motivation during progression, any changes they made in their everyday life, and any changes they perceived in their condition. This prompted answers concerning, eg, sociality, temporality, and spatiality of one's lifeworld (the sum total of physical surroundings and everyday experiences that make up an individual's world). As a whole, the interview was performed as an open dialogue interview. Table 1 presents a list of questions within each of the topic areas.

Table 1. Main questions in the interview guide.

Topic	Questions
Changes in everyday life	What was your life like before you got depressed? What was it like during your depression? How is it like after treatment? Can you describe any changes you have made during this time? Can you recall situations where you have acted differently as a result of the treatment? Do you think people close to you will have noticed any difference?
Motivation during treatment	What made you start treatment with MoodGYM? How did you progress through treatment? Which were important elements in treatment? Did you experience any difficulties?
The treatment	What did you think of the treatment? Was there anything you liked or disliked in particular? How did you like working with the computer? How did you experience the relationship with the therapist? In what way were you able to influence the progression through the treatment? Did you need to make any practical adjustment in your everyday life?

The qualitative study from the onset employed a phenomenological-hermeneutical methodology, which basically means that we sought to elicit the way participants related to the treatment. The approach is phenomenological in the sense that it understands human experience as founded in a basic relatedness to the world though merely living it in a naïve way, with a natural attitude. This experience, however, may be expressed in narratives, actions, or reflections, showing the intentionality of a human being, and may be described scientifically. This approach is inspired by Lindseth and Norberg [21] who again rest their methodology on both Husserl, Heidegger, and Ricoeur [21,27]. Semistructured interviews were conducted to elicit empirical information about patient experiences in treatment, aiming to set aside “the taken for granted” attitude of their lived experience.

Patients

Fourteen patients were recruited from the RCT sample. The patients interviewed were 5 men and 9 women (64%), aged 22-61 years. The number of consultations ranged from 3-11. Three patients (21.4%) did not complete the treatment program. At pretreatment assessment, Beck depression inventory scores ranged from 10-28 (mean 18.27). At posttreatment assessment, 6 patients (42.8%) had not changed, 1 (7.1%) had improved, and 7 (50%) had recovered, based on criteria for clinically significant change [28].

Analysis

Carrying out a phenomenological analysis requires the researcher to reflect carefully upon the taken for granted statements of one's informants and to approach these with an attitude of “bracketing”, that is, to examine and question openly what is being expressed [20]. Also according to Lindseth & Norberg [21], a phenomenological-hermeneutical analysis cycles through different levels of understanding of the text material. First, the interview is read to achieve a superficial understanding of what the text is all about. Second, the text is analyzed in terms of its meaning units (semantics) with a reflective approach. The semantic units are then condensed to form themes and subthemes that disclose meaning in everyday words rather than merely portraying concepts. Also, the themes develop from the material rather than from the interview topics. The identified themes are, after the second step, compared with the initial cursory understanding for validation. Third, the themes are reviewed and reflected on as a whole, and an overall understanding may be reached through critical reflection based on theoretical literature. This procedure was adhered to, but it was necessary to compare the themes not only with the naïve understanding but also with the original interview transcript. And in the third step, comprehensive understanding was achieved in light of theories about change processes in psychotherapy. In summary, the analysis involved a dynamic process moving between abstracted themes and the interview transcripts for validation [27]. During the analytical steps, essential meaningful experiences with the treatment were identified and one of them was what counted as “helpful” for the patients. The themes revealing what helpfulness consisted of might emerge as pragmatic issues (which they were), but what was experienced as helpful was also interpreted as

capturing exactly how the treatment became meaningful to the patients.

Results

During analysis, several meaningful themes were identified from the interviews. The overall topic chosen for this paper is how patients perceive the treatment as being helpful. Another paper focuses on motivational aspects of the treatment (personal communication by Wilhelmsen, Maja, Jan. 2013).

Overall, we defined five themes reflecting perceived helpful dimensions. Two themes were related to being in treatment in general and were nonspecific to ICBT. These concerned (1) taking action to address one's problems and (2) the value of talking to a professional. Two themes specifically addressed the patients' experiences with the self-help program material: (3) acquiring relevant knowledge and (4) restructuring the new knowledge. A fifth theme concerned (5) the way that patients describe actual changes in perceptions and interactions with their environment that patients relate to the treatment they have undergone.

Being in Treatment

Taking Action to Address One's Problem

In most cases, patients had been considering the pros and cons of seeking help for a long time, even for years. One typical response to taking this difficult step was the sense of relief and satisfaction that patients felt when they took action to address their problem. Some patients had not gotten very far with the process and had not experienced any improvement, while others were highly active during treatment and making deliberate changes to their lives one step at a time. In both cases, patients talked about the mere act of doing something as important:

Working with MoodGYM, the best thing about it all was that I was doing something about it. You know, coming to these sessions every week, getting to talk, starting the next chapter. You know, the things I worked with did not suffice, but I felt good working with it. I felt sort of like I was getting out from...getting back to normal. [Male (26)]

The analysis reflects the significance of moving from a state of passivity to one of activity. Patients recounted that they had felt a need to move forward that brought them to seek help. Taking action was in itself an achievement that engendered hope and brought a positive effect. The treatment might not be all they had hoped for, but patients still valued their own effort to try and improve their own situation. This theme is related to motivation in the treatment process, but it became evident in the interviews that this affected how the patients were feeling, as a meaningful event towards recovery.

Patients highlighted the easy access to the treatment as another important facilitator for taking action. The alternative for many people with depression would be referral to specialist health services, where long wait times leave patients passive. The alternative of a private clinic leaves patients worried about their financial liabilities. Our patients had low expectations about the abilities of general practitioners to deal with

depression—GPs were assumed to have little time on their hands and little knowledge of mental illness. In general, our patients were pleased to be offered a course of qualified therapy universally available online at no cost.

The Value of Talking to a Professional

There was consensus among the interviewees that the involvement of a therapist was vital in the treatment and that talking to a professional is very important to them. The level of satisfaction with the amount of contact with the therapist varied a great deal. Some patients were quite satisfied, while others came to realize that what they really wanted was conventional face-to-face therapy, not guided ICBT. For all patients, a trusting relationship with a professional was a fundamental part of the treatment:

I thought it [the relationship with the therapist] was really good! She didn't make me feel judged in any way. She was very accommodating. Almost as if she understood what I was talking about. She sometimes was ahead of me about things I was going to say, in a way. She understood very well what it was like. [Female (22)]

Patients expressed a need to talk freely about their issues and a chance to reveal things about themselves without fear of judgment. Their need for appropriate verbal communication was significant. Communication with the therapist was described as different from everyday interaction with others, and patients thought it essential to the treatment. The chance for patients to share their experiences, innermost thoughts, and feelings was something they found important:

In the first session I got to talk about it all. So...the first session was very important...the first and the second session, that was when I got to talk about the things that troubled me. So I believe...I think it was very important to be able to do that. [Male (26)]

Furthermore, the reciprocity of the relationship was emphasized: not in the sense that the therapist and the patient are equal, rather, the role of the therapist as a professional was appreciated. The importance of a dialogue was stressed, where the patient could ask questions, discuss issues with the therapist, receive trustworthy feedback, and be supported and acknowledged:

But, I have sort of looked for...what shall I say, a professional or an adult who has in some way supported me in my thoughts about all the things I do. Those things I do because I feel guilty, have to, but in reality don't need to. I would like a verbal confirmation that I'm doing enough! [Female (56)]

These aspects of the professional relationship, that is, having someone you can trust, a chance to freely express yourself, and receiving individual affirmation, were for some just as important as working with direct symptom relief or negative thought patterns. It seems that by engaging in this dialogue, these patients were reassured by the affirmation and support they received.

Internet-Based Cognitive Behavioral Therapy

One vital aspect of MoodGYM depression therapy is that patients are actively engaged; they receive homework aimed at challenging their repetitive automatic negative thoughts and cognitive distortions. The latter two themes: (3) acquiring relevant knowledge and (4) restructuring the new knowledge, describe ways in which the content of MoodGYM was experienced by patients. The extent to which patients could relate to MoodGYM varied greatly, so these responses provided insight into relevant dimensions of interacting with the program.

Acquiring Relevant Knowledge

Patients commonly describe features of the self-help material as being experienced as particularly relevant, issues presented in the program that “have to do with me”, or in contrast, issues that were irrelevant. Typically, patients were more satisfied with the standard content of CBT (eg, presenting the principles, cognitive distortions) rather than the content aimed at specific problems (eg, relationship break-ups, parental relationships). Patients could accept some parts of the content being of little relevance to them, as long as they could find other parts that they could learn from:

The first thing I came to the session and said, “this, this is huge”. It [a presentation of the basic ABC-model of CBT] was the drawing we saw early on, with situations, cognitions and feelings. I had never seen that drawing before...and if I were to draw it, feelings would never be in such a drawing. Because I've ignored feelings...So that was, well, a first...a sort of awakening. [Female (39)]

The fact that a patient could recognize something in the program content and feel its relevance was a way to feel support and recognition in a situation that otherwise was unfamiliar or hard to accept. The process of seeing relevance in the material is intertwined with the process of learning and acquiring new self-knowledge. Conversely, patients who found no relevance in the material were unlikely to learn anything. So for some respondents, the content raised awareness, reactivated once-familiar knowledge, or provided new insights; whereas for others, the feeling was that the content was not meaningful to them:

Well, so little by little, when I could only identify with the character that was not depressed, then it like became more and more...it was almost as if I felt myself getting annoyed by those modules. And I decided that this here stuff doesn't give me anything. [Female (28)]

Not all patients felt able to relate to the principles of CBT presented in MoodGYM. This was generally due to a mismatch of the program aims and what patients perceived as their most pressing problem. All our patients showed symptoms of depression, but not all of them felt depressive thoughts and ideas to be their principal problem. Some were quite clear in their mind that ICBT would not provide the answer to their difficulties, perhaps to the extent that they were unwilling or unable to relate to the MoodGYM content.

Restructuring the New Knowledge

Patients' accounts of their experiences with the program content show how they reflected on the material, adapting or processing it to suit their own perceived needs. Patients who found parts of the self-help program relevant did not necessarily accept it all uncritically, rather, they described an active process of interpreting the material. This also meant reflecting on past events, thoughts, and feelings in light of their newfound understanding:

I felt it [working with the modules] took a long time because I was sitting reading and trying to interact...interact with what I read...It was not that I struggled with the homework or with understanding what it said, but I chose to spend time on it. [Female (26)]

It was evident that the proposed approaches and techniques were not universally suitable, and some patients went to considerable lengths to restructure the content to suit their perceived needs. A table in module 2 gives an overview of distorted cognitions (Figure 1).

There were an awful lot of categories. How could I make it useful? On a daily basis, I had to merge some into larger groups and then work out, like, "Alright, now I'm making this type of mistake". It had to be restructured a bit, because I couldn't be bothered to sit and cram all of them. And I didn't need to either. [Male (33)]

The patients talked about how the program material made them more aware of their own negative thinking and that this awareness opened up for further reflections about the validity of those thoughts, and how such thoughts are incorporated in a negative cycle that also includes feelings and actions. However, not all patients were able to make adaptations of the material to fit their own needs, despite recognizing the relevance of the material. For some, bridging the gap between theoretical concepts of negative thinking and making the ideas their own, was far from easy. Sessions with the therapist helped the bridging process by enhancing patients' understanding and ideas about program content: "Indeed the conversations helped make the content of the Internet form more elastic". [Female (39)]

Actual Changes in Perceptions and Interactions

Patients described changes in both thought and behavior as essential. Some changes were clearly related to what they learned from the self-help program, eg, testing the truth value of their negative thinking or using specific techniques from the program, whereas other changes had been discussed with the therapist in the sessions and were not directly related to the self-help program. Changes in thought patterns, where patients started to question the content and validity of their depressive ideas, were a specific result of the self-help techniques:

And also in relation to the business of structuring and categorizing thoughts and mindsets, and doing a reality check on what you're thinking, related to what has happened or what you're feeling—that has been very helpful to me. What does this really mean? Where

does this come from? This has been very useful to me. [Female (39)]

The patients were describing how they came to realize that thoughts and ideas about an event are not accurate representations of reality. Moreover, they might be biased and need careful scrutiny. Questioning the validity of thoughts and ideas made room to explore other possible interpretations, and this process helped give patients more flexibility in their thinking. It showed, for example, how a bias in their mindset might be making their depression worse. Behavioral changes could follow such cognitive changes, including how patients related to events and how they discussed things with others. A technique in module 3 distinguishes observations from interpretations (Figure 2). The following quote illustrates how an exercise from MoodGYM ("The Reporter") is incorporated by one patient:

There were some things I remember, and that was when I got that far in the program, then they talked about a reporter. I've given that much thought, and that's something I'll take with me. Actually, I am an emotional person, and sometimes I get annoyed with myself...And then there was this here reporter...her name is Vold. She [a Norwegian television reporter] reports from the Middle East and Palestine, and I think she's good. And I imagined her in front of me...she's in the midst of fighting, or they are shooting, or they are fighting all around her, or at least in the background. And she's standing there trying to report accurately on what has happened. I think it's admirable. So I've had her with me in quite a few situations. [Female (61)]

Other behavioral changes served to break a negative cycle of self-recrimination, inactivity, and withdrawal. These changes could produce positive secondary benefits for the patients, including getting closer to the people around them:

I got to know her [his partner's] kids better, for instance. That's very positive. [Interviewer: "How did that happen?"] Well, I tried to make the best of it and play with them, not going into a room and hiding away all by myself. [Male (26)]

Some changes described by the patients revealed that their self-perception had tended to move in a positive direction, towards self-acceptance. This was evident from statements that revealed a more self-accepting and less self-critical attitude towards themselves:

If you have done something that you're not completely satisfied with, you should not think that you're a terrible person. That you can actually get a firm grip on it and work with it. [Female (41)]

Some of the changes patients made in their daily lives sprang out of the sessions with the therapist, but were not directly related to any of the program material. Examples might be practical solutions to problems discussed in the sessions, or specific strategies to break a negative cycle, designed specifically for the patient's own situation: "Yes, we had to find practical solutions, because it's not always that positive thinking can silence the negative." [Female (22)]

This is an illustration that patients could also experience other practical problems that needed to be tackled, in addition to the difficulties in their lives that needed attention. Examples are cognitive behavioral therapy provided in the self-help program.

Figure 1. Screenshot from module 2 in MoodGYM.

MoodGYM uses a list of typical errors developed by David Burns ("Feeling Good, the New Mood Therapy"). [Others](#) are available.

David Burns' Warped Thoughts

For each type of thinking, click the icon for examples.

WARPED THOUGHT	DEFINITION	CLICK ICONS FOR EXAMPLES
<p>ALL or NONE thinking</p> <p>none</p>	<p>Everything is perceived to be either full on or full off. If something isn't fully completed/ or right/ or perfect/ then its entirely uncompleted/ wrong/spoiled.</p>	
<p>Overgeneralization</p>	<p>One example of a mistake or error is interpreted as a pattern of mistakes, and errors.</p>	
<p>Mental Filter</p>	<p>One (negative) part of the picture is examined to the exclusion of the larger (positive) part.</p>	
<p>Disqualifying the Positive</p>	<p>Dismissing or ignoring any positive comment/ achievement/ compliment.</p>	
<p>Jumping to Conclusions</p>	<p>You think negatively about something without supporting evidence. There are two errors: Mind reading: You think without any evidence that someone is thinking negatively about you The fortune teller error: You truly believe that you know what will happen in the future, without evidence.</p>	

Figure 2. Screenshot from module 3 in MoodGYM.

← BACK NEXT →

FEELINGS
THOUGHTS
UNWARPING
DE-STRESSING
RELATIONSHIPS

PROGRESS

Taking the role of a reporter

(turning Clark Kent into Superman).

This is the first method for contesting warpy thoughts other than "Straight Talking".

Take the role of reporter (turning Clark Kent into Superman)

Consider taking the role of a reporter describing the events that you get upset by. This will allow you to step back from your deep involvement and automatic responses and allow you to distinguish observations from interpretations.

Let's go back to the broken car: Do you remember what Moody said here?

[next »](#)

[View text description](#)

Discussion

Principal Findings

The previous section has looked at what patients experienced as helpful with regards to treatment. These comprised basic dimensions as the very act of seeking help and being in a therapeutic relationship with a professional. Patients described their experiences of the specific CBT delivered by MoodGYM as a source of relevant knowledge that they adapted to their own situation and implemented in their everyday lives. Overall, the phenomenological-hermeneutical analysis gave knowledge of several experiences with ICBT concerning helpfulness but also provided a whole impression of how these experiences were related and understood. The patient identifies with and learns from MoodGYM material that stimulates them to engage in self-therapeutic activity. This process is supported through the consultations with the therapist. In addition, the relationship with the therapist had a function beyond supporting MoodGYM use, in providing an arena for sharing thoughts and feelings and receiving feedback and advice.

Regarding help-seeking, patients described that making a commitment to therapy was a great help suggesting that dimensions within the patient, not directly related to treatment content, have an influence on outcomes. Taking action to improve one's situation is a way of regaining control, referred to by previous authors as empowerment [16] or being compelled to take action [29,30]. Taking action would include making a commitment to the ICBT treatment and accepting its methodology, which again can be interpreted as an expression of the treatment relationship or the working alliance. The working alliance is shaped within the context of the therapy and represents the bond between therapist and patient, as well as a shared understanding of the work and goals of the treatment [13,31,32]. The patients were given an explanation of ICBT, and most accepted self-help therapy as a way forward with themselves being the primary agent of change. Yet there were also cases where the commitment was poor, and the patient did not accept the basic premises of ICBT or deemed the content of MoodGYM inappropriate to their needs. This resulted in poor motivation and little active engagement in the treatment. The success of the working alliance is strongly related to the success of the therapy outcome [33,34], which indicates that establishing a common understanding of the aims of the treatment is a vital key to recovery. There are findings pointing to the ability of patients to develop a meaningful relationship within a fully computerized treatment [16]. However, research findings concerning the working alliance in ICBT are inconclusive [18], and further research, particularly in relation to the type of support (face-to-face, telephone, or electronic messages) and treatment outcome is warranted.

The presence of a therapist was important in several ways. It means a trusting relationship can be developed, and patients have a channel for self-disclosure and supportive response. The need for disclosing thoughts and feelings, interaction, and feedback has been highlighted in previous studies [6,29,35], pointing to the role of the therapist in the therapeutic relationship as warm, empathic, affirming, and engaging [36]. In a previous

study, patients reported difficulties in translating computerized CBT content to their own social situation [6]. In the current study, sessions with the therapist added to the self-help program by opening up for discussion of the program content, assisting the patients in their understanding of the content. As such, the role of the therapist influenced the specific CBT dimensions. As in previous studies, some patients deemed the sessions confined and desired more conversation with a therapist to gain a deeper understanding of their problems [19,29]. Another benefit was that the therapist could step in when problems were beyond the scope of the program or tender helpful practical advice tailored to the individual. Clinicians consider a lack of these possibilities as potential drawbacks of ICBT [37]. Thus, patients and therapists value the flexibility and possibility to individually adapt the intervention in a way only human support can provide.

Acquiring new knowledge was a significant benefit from involvement in the MoodGYM program. Patients described themselves being able to relate to cases presented in the program. Patients actively sought out the parts of the program helpful to them and found ways to utilize this new knowledge. The findings show that these patients were not simply passive recipients of insights gleaned from MoodGYM, rather they were active seekers of relevant information, evaluated its validity, and adapted their new knowledge to their own personal situation. These findings are consistent with the perspective of patient involvement in psychotherapy [38] and with previous research where the self-help material stimulates new learning, making patients able to create more structure and order, and break problems down to smaller entities [6,16,19,30]. Within this perspective, the patient is an active agent, entering therapy with some ideas of what they need, selecting from therapy what they consider useful, making independent assessments of results, and integrating therapy experiences into everyday life.

Patients talked about self-therapeutic activities in terms of implementing their own adaptations of MoodGYM content and discussions with the therapist. Commonly, patients reported general insights and increased awareness of negative automatic thoughts and cognitive distortions in real life, similar to previous observations in ICBT [19] and face-to-face CBT [11]. For some patients, these insights enabled them to challenge the validity of such unruly thoughts. Changes in behavior and communication could bring secondary benefits, further strengthening the positive processes in play. Some changes were subtler, not being specifically bound to any given situation but seemed to represent a shift in self-esteem across all situations, with the patient becoming more self-accepting and less judgmental.

In light of the findings from the current qualitative study, guided ICBT with MoodGYM can be viewed as a dynamic process, in which the patient and the therapist work together within the self-help framework offered by the online treatment program.

Implications of the Study

The results of this study highlight how ICBT can be a useful treatment for depression by providing insight into everyday life experiences with this mode of treatment. This has brought forward both patient-near experiences and pragmatic solutions

to identified problems. The results specifically illustrate the dynamic interplay between the patient's lifeworld, the therapist, and the ICBT treatment program. This is important to keep in mind for the future development and implementation of guided self-help.

The collaborative nature of guided ICBT is evident from the results of this study. The patient plays an active role in the therapeutic process, and this point should be explicitly stated before and during the course of the treatment. Needless to say, individual patients have different capacities to get involved, some needing more support and encouragement than others.

The ease with which patients could adapt standard principles to suit their own situations varied a great deal. This realization should help inform continuing development of online self-help programs. In general, generic CBT modules were experienced as more relevant than modules targeting specific issues (eg, problem solving, relaxation), supporting previous findings [39]. Principles and descriptions in the program should be generic to the extent they are recognizable to the patient, yet designed to work with patients with a specific diagnosis [40], but adaptable to an everyday context. This precise diagnosis or description of the patient's problem needs to be prepared beforehand, allowing the patient to be matched to the most suitable program package [7].

Whether therapist support is provided through email, telephone calls, or face-to-face, it can be assumed to contribute to the outcome of the therapy directly and indirectly. Therapist support should offer the opportunity for a level of self-disclosure, in a nonjudgmental setting where patients can expect relevant, supportive feedback. The therapist also serves an important function to help patients understand the principles of CBT and help patients make the transformation from principle to everyday practice.

The role of the therapist was also vital when patients needed individual guidance or advice about how to deal with everyday challenges that might otherwise get in the way of treatment progress. Practical advice from a therapist, or an inspirational session with a sympathetic adult, could provide the motivation to embark on manageable, significant changes.

The findings of the present study point to the dimensions experienced as important by the patients interviewed, and the meaning of this mode of treatment in terms of moving from depression towards recovery. These findings may serve as a hint on how to continue to improve the practice of ICBT. It remains to explore what conditions in ICBT are sufficient and necessary to aid patients, and what distinguishes processes resulting in change from those ending in no change or deterioration.

Limitations

The sample of patients in this study is small, consisting of individuals who volunteered to join a randomized controlled trial and attend the interviews. Possibly they were highly motivated to participate in research, and they are in some way different from other potential candidates who chose not to be interviewed. Furthermore, recruiting noncompleters turned out to be difficult, and thus the completers are overrepresented in the sample. This is a limitation of the study. It is likely that completers and noncompleters have divergent views regarding the helpfulness of the treatment, and we recommend further research into the treatment experiences of noncompleters of ICBT. However, there were differences within the sample regarding outcome, and accordingly, the results also reflect the views of patients who did not improve.

The study examined patients' experiences with an online self-help program, incorporating occasional, brief face-to-face sessions with a therapist. By contrast, Internet-based therapy typically gives guidance through electronic messages or telephone calls. It is possible that the treatment examined in the current study has a greater resemblance to conventional psychotherapy than to Web-based self-help. Further investigation could identify other possible themes for discussion in other forms of Web-based self-help therapies.

The interviews were conducted shortly after the end of treatment, therefore it is not possible to evaluate to what extent potentially helpful elements impacted on patients' lives. It may be that patients were still "fired up" by the therapy at the time of the interview, but this does not necessarily mean they experienced any long-term improvements. Some findings suggest that patients can continue to engage in self-therapeutic CBT for as much as 3 months after ending treatment [11], but further research is needed to shed light on patient agency in CBT.

Conclusion

Elements in ICBT that are perceived as helpful represent the essence of the patients' experience with ICBT. This can be viewed from the perspective of the contextual model of psychotherapy, which highlights the dynamic and collaborative nature of Internet-based self-help. The findings of the current study pointed to MoodGYM as a source of relevant knowledge, providing a structured approach to working with depression. The role of the patient as the primary agent of change is highlighted, through his/her engagement in treatment, seeking knowledge, and employing it to the personal context. During the intervening guidance sessions, the therapist played a useful role by facilitating the understanding and explaining the relevance of the generic MoodGYM content, providing professional feedback and interpersonal support, as well as giving practical advice.

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Conflicts of Interest

None declared.

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Abbreviations

- BDI:** Beck Depression Inventory
CBT: cognitive behavioral therapy
ICBT: Internet-based cognitive behavioral therapy
RCT: randomized controlled trial

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Paper III

Original Paper

Norwegian General Practitioners' Perspectives on Implementation of a Guided Web-Based Cognitive Behavioral Therapy for Depression: A Qualitative Study

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Abstract

Background: Previous research suggests that Internet-based cognitive behavioral therapy (ICBT) has a positive effect on symptoms of depression. ICBT appears to be more effective with therapist support, but it is unclear what this support should comprise. General practitioners (GPs) have positive attitudes toward ICBT. However, ICBT is rarely used in regular care in general practice. More research is warranted to integrate the potential of ICBT as part of regular care.

Objective: The aim of this study was to explore aspects perceived by GPs to affect the implementation of guided ICBT in daily practice. Understanding their perspectives may contribute to improving the treatment of depression in the context of general practice.

Methods: A training package (3-day course) introducing a Norwegian translation of the ICBT program MoodGYM was developed and presented to GPs in Norway. Following training, GPs were asked to include guided ICBT in their regular care of patients with symptoms of depression by providing brief, face-to-face follow-up consultations between modules. We interviewed 11 GPs who had taken the course. Our interview guide comprised open questions that encouraged GPs to frame their responses using examples from their experiences when implementing ICBT. Thematic analysis was chosen to explore patterns across the data.

Results: An overall belief that ICBT would benefit both the patients' health and the GPs' own work satisfaction prompted the GPs to take the ICBT course. ICBT motivated them to invest time and effort in improving treatment. The most important motivating aspects in MoodGYM were that a program based on cognitive behavioral therapy could add a structured agenda to their consultations and empower depressed patients. Organizational aspects, such as a lack of time and varied practice, inhibited the use of ICBT. Inadequate knowledge, recalling the program, and changing own habits were also challenging. The GPs were ambivalent about whether ICBT had a negative impact on the doctor-patient interaction in the module follow-ups. Generally, GPs made an effort to recommend MoodGYM, but the expected module follow-ups were often not provided to patients and instead the GPs returned to standard treatment.

Conclusions: GPs' feedback in the present study contribute to our understanding of the challenges of changing treatment for depression. Our findings indicated that recommending ICBT could add to the GP's toolkit. Offering training and highlighting the following aspects may increase recommendation of ICBT by GPs: (1) ICBT is theory-based and credible, (2) ICBT increases the GPs' work satisfaction by having a tool to offer, and (3) ICBT facilitates empowerment of patients in their own health. In addition, the present study also indicated that complex aspects must be accommodated before module follow-ups can be incorporated into GPs' treatment of depression.

KEYWORDS

mental health; Internet; telemedicine; qualitative research; primary health care; cognitive therapy; depression

Introduction

Overview

Every year, it is estimated that more than one-third of the European population suffers from mental disorders, with depression and anxiety being the most frequent [1,2]. Depression imposes tremendous emotional, financial, and social burdens for patients, their families, and society [3]. Mental disorders have been suggested as one of the biggest health challenges because of deficiencies in available treatment and poor service provision. Rethinking our provision of mental health care is needed [1,4]. Mental health patients tend to prefer consultations with a therapist to prescribed medication [5,6]. Standard cognitive behavioral therapy (CBT) in consultations in routine specialized mental health services is effective but time consuming [7], making this therapy inaccessible to many.

Internet-Based Treatment of Depression

In multiple trials, the use of Internet-based CBT (ICBT) has shown promising results in treating depression (eg, [8-11]). ICBT can be self-administered or supported by either minimal-contact follow-ups or by guided follow-ups that focus on process issues. It is unclear what the support should comprise [12]. However, guided ICBT appears to be more effective than self-administered ICBT [8,9,13]. Guided ICBT may also be as effective as standard face-to-face therapy [9,14]. Furthermore, patients value being active agents using ICBT, although they also emphasize the helpfulness of a relationship with a trusted clinician [15]. In Norway, an increasing proportion of the population uses the Internet for health purposes, and in 2010 the proportion was 77% [16]. This may indicate that the population is amenable to supported online supplements, such as guided ICBT.

Treatment of Depression in Primary Care

Research has recommended that mental illness should be detected and treated early, before more severe expressions can occur [1,17]. GPs are often the first point of professional contact for individuals with depression, and most of these patients are currently treated in primary care [1,18]. In Norway, the mental health provider in primary care is most often the GP [19]. In guidelines from the National Institute for Health and Clinical Excellence [20] and in Norwegian national guidelines for treatment of depression [19], it is recommended initially to apply low-intensity, non-pharmacological approaches such as CBT-based self-help or online interventions in the treatment of mild to moderate depression. Studies have found that GPs have positive attitudes toward such interventions [5,21,22]. However, other studies have shown that GPs rarely recommend evidence-based self-management or eHealth programs to patients with depressive symptoms [18,22].

ICBT has been suggested to be effective in primary care even if the provider (ie, the GP) lacks extensive specialized training

[6,9,23-25]. MoodGYM is an ICBT program developed at the Centre for Mental Health Research at the Australian National University. It has been proven in trials to be effective in alleviating depression as a self-administered self-help program [26] and as guided ICBT for patients from primary care [10]. However, there is a gap in the research evidence related to the conclusions of trials and the knowledge about how to implement new methods in regular care [27,28]. More research is needed to reduce this gap and to explore the potential of ICBT deployed in everyday clinical settings [21,23]. Little is known about trained GPs' experiences of implementing guided ICBT into regular care.

A wealth of theories have been developed to explain aspects affecting the implementation of innovations in health care [29]. We chose normalization process theory (NPT), developed by May and Finch [27,30], as a framework when investigating implementation of ICBT because NPT is derived from multiple qualitative studies exploring the implementation of complex interventions and eHealth contextualized in regular health practice. NPT suggests that, for the health professional, successful implementation depends on a complex interplay of the following four main components of "work": (1) coherence, whereby the participants make sense of an intervention, (2) cognitive participation, which requires the participants to engage in the intervention, (3) collective action, which requires that efforts are made to enable the intervention to happen, and (4) reflexive monitoring, comprising formal and informal appraisals of the benefits and costs of the intervention. Small improvements in the treatment of depression in general practice can have positive consequences for many patients. The aim of this study was to explore those aspects perceived by GPs to affect their implementation of guided ICBT in daily practice. Understanding their perspectives may contribute to improving the treatment of depression in the context of general practice.

Methods

Study Context

A training package based on a Norwegian translation of the ICBT program MoodGYM was developed and presented by a GP (NK) and two psychologists (RSH and Kjersti Lillevoll) as a 3-day course for GPs in spring 2011. MoodGYM is a free Internet-based self-help program comprising five interactive modules introducing cognitive behavioral principles through online exercises. MoodGYM demonstrates the relationship between thoughts and emotions and teaches relaxation techniques. It also includes sections on managing relationships and increasing engagement in positive activities. A sample screenshot from MoodGYM is presented in [Figure 1](#). The course consisted of an introduction to CBT principles, presentation of and a group session on MoodGYM's content, and presentation of a manual for follow-ups. The manual was also supplied online and contained a short summary of each module and suggestions

for follow-up questions. In the final session, a patient described his experiences with guided ICBT.

The course recommended guided ICBT as follows: (1) to recommend MoodGYM to patients with symptoms of depression and subsequently (2) to provide module follow-ups comprising brief and structured face-to-face consultations between the online modules (see Figure 2). The follow-ups were meant to

be of a motivating nature, by offering a dialogue on process issues and allowing some time for reflection. Process issues were related to working with and understanding principles presented in the online modules such as what was difficult and what was useful. Follow-ups were suggested as 20-minute consultations every second week. GPs who currently worked in general practice and who completed the course all signed up for further research on implementation of the guided ICBT.

Figure 1. Sample screenshot from MoodGYM.

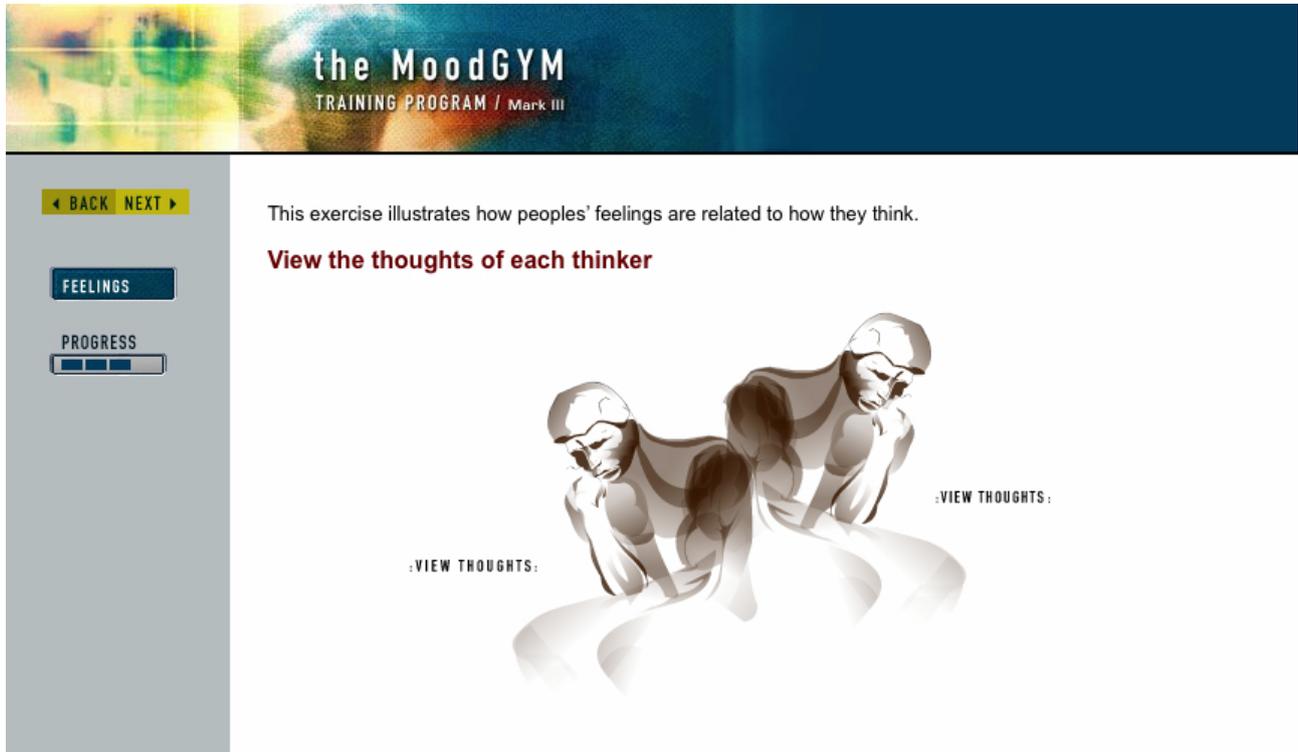


Figure 2. ICBT with module follow-ups.



➡ Represents patient working at home with the five modules

Participants

A purposive sample [31] of 11 GPs from northern Norway was included, and interview arrangements were made over the telephone. The study originally included GPs who had enrolled voluntarily in the guided ICBT course. In the process of recruiting, we had the opportunity to include two additional

GPs who had attended a 3-hour presentation of this treatment model given by one of the GPs who had attended the course. These two GPs were included in the analysis primarily for comparative purposes, to add an extra dimension to the analysis of the GPs' experiences with ICBT. Participants were both men and women, of various ages, and with various lengths of experience as GPs (Table 1).

Table 1. Participant characteristics.

GP	Age	Date of Interview	Duration of interview, minutes	Experience as a GP, years	Recommend MoodGYM	Gender	3-day course	Interview venue
1	52	06.02.13	40	21	yes	male	yes	office
2	35	14.02.13	50	3.5	yes	female	yes	home
3	53	20.02.13	33	21	yes	male	no	office
4	33	25.02.13	35	3.5	yes	female	yes	home
5	38	25.05.13	47	8	yes	female	yes	home
6	58	12.03.13	70	28	no	female	yes	office
7	42	14.03.13	85	3	yes	female	yes	office
8	54	20.03.13	75	10	yes	female	yes	university
9	45	08.04.13	76	12	yes	female	yes	office
10	51	12.09.13	60	12	yes	female	no	office
11	34	19.09.13	83	3.5	yes	female	yes	office

Interview Schedule and Data Collection

The female interviewers (MW and RSH) conducted semistructured in-depth interviews designed to gather information about (1) the GPs' general views on their work with depressed patients, (2) motivational aspects for learning ICBT, (3) experiences from implementing guided ICBT, and (4) implications of the use of ICBT for consultation quality and patient-doctor interaction. The interview guide (see [Multimedia Appendix 1](#)) was developed by the interdisciplinary author group combining prior experience within eHealth research, clinical experience from general practice, and long experience from medical anthropology. A pilot was not conducted; however, adjustments were made after three interviews. The venue was flexible, and GPs chose their home, office, or the University of Tromsø. Individual interviews lasted 33-85 minutes and were audio recorded. The interviews were conducted as face-to-face dialogues, and open-ended questions were used to evoke descriptions of situations grounded contextually in everyday events from their clinical practice. The emphasis was on working together in the interview to reach an understanding of the GPs' experiences that reflected their perceptions and attitudes [31]. The GPs were not invited to give feedback later in the research process. Field notes were recorded immediately after interviews.

Data Analysis

Interviews were transcribed into NVivo 10 data analysis software and anonymized. Thematic analysis is an accessible stepwise method often used to investigate patterns across datasets [32]. It is also a flexible method compatible with an inductive, data-driven approach. We chose thematic analysis as a method because it is suitable when exploring patterns in stories that describe experiences and meanings. Our aim was to explore all aspects perceived by the GPs to have affected their implementation of ICBT, and thus, an inductive approach was chosen. The initial analysis involved repeated readings of each transcript to obtain an overall impression. The next phase involved coding the entire dataset on a semantic level. Events, thoughts, and actions were coded as themes on the basis of their

ability to capture content with meanings that were important in relation to the overall research question. Subsequently, we identified and interpreted overarching themes in a constant process of moving between the data, potential themes, and maps made for visualization. A storyline extending from what initially attracted the GPs to take the course to how they applied ICBT in the everyday clinical setting was identified. We worked toward elucidating themes that were internally homogeneous and externally heterogeneous and had explanatory power. Finally, the themes were considered if they were coherent and represented the meanings found in the interviews [32]. Throughout the analytical process, all findings were discussed and validated with an experienced qualitative researcher (MBR) and two GPs (MW and NK). Inconsistencies were resolved through discussion and further reflection. All transcripts have been checked against the audio recordings. Inspired by NPT [27,30], the researchers were sensitized to components in interplay that are suggested as important during implementation of the complex interventions. Further, findings were discussed in light of existing literature.

Ethics Approval

Written informed consent was obtained from all participants. Ethical approval was given by the Regional Ethical Committee, Tromsø 2011/2163.

Results

Key Themes

We identified four key themes and present here the common storyline extending from what initially attracted the GPs to take the course to how they applied ICBT in the everyday clinical setting. The four key themes are: "GPs wanted to improve treatment and work satisfaction", "The value of a structured agenda and the patient as an active agent in treatment", "Constraints of hectic practice, inadequate knowledge, and competing tasks", and "GPs recommended it, but few module follow-ups were provided".

GPs Wanted to Improve Treatment and Work Satisfaction

GPs reflected on what initially attracted them to take the course and how they could make sense of a change in the treatment of depression they normally provided, in the following referred to as standard treatment. GPs noted that symptoms of depression were common and treatment was considered part of their job. They had inadequate access to specialist care, and thus referral was often difficult. GPs hoped that implementation of an online intervention would benefit patients with mental health issues. Comments that implied a need to improve GPs' own treatment were prominent:

[We give] what we call supporting consultations in general practice, but actually it is just talking without any...I wouldn't say meaning, but no concrete agenda in a way. I mean, there is no...It is just: How is it going? What have you been doing lately? It is more the patient talking in a free way about how they are and stuff. But no actual therapy really. [Participant 11]

Many times I feel that I don't have an agenda or further program other than these supportive consultations, which I often feel it [depression treatment] ends up with. [Participant 5]

GPs used devaluating words such as “only supportive consultations” or “just talking” when they referred to standard treatment, and some described the situation with frustration, indicating concerns about the quality of care. They hoped that supplementing depression treatment would result in improved health and quicker recovery for their patients.

Standard treatment was described as self-taught, informal, and unstructured. The frustration identified might also imply a sense of lack of control and vulnerability. Others expressed that their treatment had improved with experience and was helpful, but they felt they needed something more to offer their patients: “And I think many can feel the frustration about what should we do. How can we help these patients [with depression]? In what way?...To me it felt very good [to learn ICBT]! Because now I finally felt I had some treatment I could try” [Participant 11].

The word “tool” was often used to describe how implementing ICBT could supplement treatment. This indicated another important aspect of the GPs' reasons for enrollment; that is, they wanted to improve their work satisfaction by increasing their competence and confidence by adding a concrete instrument to their treatment of depression: “So it is, it is nice to have a tool to offer people. That in itself makes you feel better as a caregiver. You feel more professional!” [Participant 1].

According to NPT, coherence is experienced if the participants find an intervention to be a good idea and they are able to define the intervention [27,30]. The GPs showed coherence as they found recommending an online intervention to be a good idea and felt that competence in delivering this type of intervention would be helpful for the patient and of benefit to the GPs. When they described the use of MoodGYM, they talked about it as a supplemental tool, but they did not explicitly define what

module follow-ups should comprise and why module follow-ups would improve treatment. This might indicate limited coherence for the module follow-ups.

The Value of a Structured Agenda and the Patient as an Active Agent in Treatment

Internet self-help was regarded as a good idea. The GPs commented further on what aspects of MoodGYM engaged them, enabling them to invest time and effort. Overall, the GPs valued that MoodGYM added a structured agenda to treatment in two ways. First, GPs described MoodGYM's educational content enthusiastically because it is systematic and based on CBT and therefore added a theoretical basis to the treatment: “I find it [MoodGYM] to be...it is very systematic and built up in a good way with the different modules...Yes, I think it is really great and it helps...it is a good help for me as a GP to have something to recommend so that the patients can be educated” [Participant 7] and “To in a way get theory in and...That you [patient] have an opportunity to go into a webpage where there are concrete tasks. I found that positive” [Participant 11].

GPs had confidence in the developers and felt more skillful when able to recommend an evidence-based Web intervention, which implied they felt more professional in their ability to address depression. Compared with the others, the two GPs (Participants 3 and 10) who had not taken the course but had only been to a presentation were more reluctant to tell patients and colleagues that they acknowledged the content as credible and appreciated the structure of ICBT. This may indicate that the course strengthened confidence and the perceived credibility of MoodGYM.

GPs were familiar with referring to the Internet for other conditions. Convenience was mentioned as a positive aspect of recommending MoodGYM because it is free and available, which means it can fit easily into depressed patients' lives. GPs commented that they could help solve their patients' mental health issues only through the efforts of the patients themselves. Patients were regarded as their own best helpers, and the GPs found that ICBT could facilitate self-help. This implied a second aspect of what the GPs found valuable: viewing MoodGYM as a structured agenda to empower patients as active agents to contribute to their own health and recovery. “You give the responsibility to the patient, the responsibility to become better. You place the responsibility. It doesn't work like [the patient can] just come to me and be cured of his depression. He [the patient] needs to do it himself” [Participant 4].

Evaluation was needed to find patients suitable for ICBT, and different characteristics were considered to contribute positively to the success of ICBT. Patients who accepted that their problem was psychological and who could reflect on their own condition were considered suitable for ICBT. A young age was considered positive because young people were assumed to be more computer literate and because the style of MoodGYM appealed to young people. Motivation and initiative were essential: “The people [who] I think will be able to make MoodGYM useful are those who are self-motivated. Those who really want it. And...I mean, they need to have some determination in them. Then I think it will be useful” [Participant 4].

The severity of depression also had to be considered because depression by itself has negative influences on initiative, concentration, and motivation. GPs considered the program best suited to people with mild to moderate depression.

Theory-based structured agenda in the treatment and empowerment of patients were the most important aspects to promote engagement. This engagement relates to the NPT component of cognitive participation [27,30].

Constraints of Hectic Practice, Inadequate Knowledge, and Competing Tasks

Engaging aspects of the program were reported; however, GPs also discussed several challenges in using ICBT. One challenge mentioned was patients being negative to ICBT or not adhering. In the organizational context of general practice, lack of time in the consultation was also a recurrent constraint. The structure of a typical day comprised a tight appointment schedule, no time for preparation between patients, and 20-minute consultations. GPs commented that this made it difficult to take the time needed to think about new treatment methods and remember to recommend MoodGYM to patients: “You already have so little time in the consultation in general practice that everything has to be ready when the patient comes in...It is just opening the book to check what they are coming for. And then things must be ready...It [guided ICBT] isn’t done in 20 minutes” [Participant 5].

Subsequent to recommending MoodGYM, the GPs were asked to provide module follow-ups; however, they described this as a difficult task. Lack of time worsened as a patient often has several issues to discuss in follow-up consultations. Given that the GPs saw a variety of patients, it could also be a long time between each encounter with a suitable patient. The lack of continuity made it difficult for the GPs to become familiar with and knowledgeable about MoodGYM, and thus it was demanding to change their habits. Inadequate knowledge about the modules and prioritizing time to go through modules themselves was a challenge because of other competing tasks and lack of incitement to do so. A need for detailed knowledge indicated that they had high standards for the competence needed to understand and apply MoodGYM’s content and to talk about the modules with their patients. Lack of practical training of module follow-ups in the course was noted as an element that made it difficult to integrate it to a clinical setting. The hectic day also made it difficult to find and apply the manual for module follow-ups: “I should have done it all [entire MoodGYM] so I would know what they [the patients] have been through each time...But I haven’t had the time yet” [Participant 4] and “You had made such nice manuals for each module...I felt it was a mess in my things...And it is about me as well, but I think I should have known it [each module] better!” [Participant 5].

Ambivalent findings were identified on how module follow-ups might affect the interaction with the patients. Dialogue about the programs’ content could give a common platform to talk about. On the other hand, a focus on process issues from working with MoodGYM was thought to inhibit other tasks perceived to be important in standard treatment, such as the open dialogue:

I find it a barrier [to give module follow-ups]...Yes, it breaks in a way with how you normally work in a way. So I think that is one of the main reasons for not. [Participant 9]

Interviewer: What kinds of elements are most important in the treatment you give?

No, it must be to listen to the patients...They must feel safe...must be safe to meet me. I think that is the most important to have a relationship. And you must have a relationship to get a dialogue, which enables reflection of the patients themselves...The fact that they get a recommendation to MoodGYM and that, it doesn’t influence the actual conversation [in further consultations]. [Participant 9]

Overall, many inhibiting aspects on engagement were identified: limited time, lack of detailed knowledge about the modules, the variety of patients seen in the practice, and competing tasks in the consultation. These constraints applied strongly to the module follow-ups. The value of discussing process issues in the consultations was considered problematic. This may indicate little cognitive participation similar to limited coherence [27,30] in this part of the treatment.

GPs Recommended It, But Few Module Follow-Ups Were Provided

All GPs tried to implement MoodGYM as best as they could remember and apply it within a hectic day. Many had the Internet address ready to give to patients. To various extents, they found suitable patients and took the time to recommend MoodGYM. One exception was a GP (Participant 6) who chose not to recommend MoodGYM and explained that it was too demanding to change her treatment habits, although she felt that this would have been different if she had been younger. Other feedback included “If I were to estimate [how many patients I have recommended it to] I would think 25” [Participant 1] and “And I have recommended it to some patients. Especially young people who are on the Internet all the time” [Participant 3].

GPs applied strategies to promote the use of MoodGYM. Motivation was essential and to increase patients’ motivation, GPs emphasized the importance of recommending it in a convincing way: “You need to sell it like this; it is made in Australia, I say. It has had great success. It is translated into Norwegian and YES! You need to try this! I really say it like that” [Participant 1].

By “convincing”, GPs meant communicating with confidence, emphasizing aspects such as that they acknowledged the program as credible and that they had competence in MoodGYM because they had taken a course. They had positive experiences making the patient feel safe by suggesting strategies to ensure anonymity and noting that it was an evidence-based program. The availability and user-friendly nature of the program were also positive aspects mentioned by the GPs. They seemed to provide a rationale for MoodGYM when they recommended it, in the context of a trusting relationship with the patient.

After recommending MoodGYM, follow-ups were conducted in three different ways. One way was to recommend MoodGYM

and not mention the program in further consultations. This way was explained as not being conscious about the intervention, and sometimes they did not record the recommendation making it impossible for them to remember to follow up: “But I haven’t, I just realized, I haven’t got any feedback from any of the patients...And I believe I haven’t written in the records that I have given the recommendation. So, I wouldn’t know to ask if they have tried it” [Participant 10].

A second way, described only by one GP (Participant 7) was to deploy the module follow-up manual in consultations in a structured motivating way. When the patients replied to questions about process issues, this GP noted that they told about episodes in life where principles from MoodGYM were applied. However, both the GP and the patient became impatient because time shortage and role conflicts were a problem. The module follow-ups revealed a struggle in the dialogue with patients because both the GP and patients wanted to explore problems from the patient’s everyday life as a starting point instead of discussing process issues related to MoodGYM. When problems in life were the starting point for the dialogue, neither the patients nor the GP were able to link it back to MoodGYM:

My role [with guided ICBT] was then in a way to motivate people and explore how it is going and...Like have you had...In the concrete program, right...Because first we were meant to talk about the modules and the things around that, but automatically we started talking about...It was totally unnatural for me not to ask: “How is it going at work?...She [the patient] was very interested in telling me...or wanted to talk about it [her mother and work] and...it was a very difficult role to have...and she became a little impatient...it didn’t work very well, that’s my opinion. [Participant 7]

A third and most common way was to recommend MoodGYM but then limit the follow-up of the program to asking the patients if they had done it or not. Neither GPs nor the patients initiated talking about process issues apart from a few patients who gave brief feedback on whether they liked the program. GPs appreciated and encouraged the independent work undertaken by patients using MoodGYM. They admitted to not giving the program much attention in further consultations. As GPs made little effort to obtain feedback on MoodGYM from their patients, they also had little knowledge about how the patients perceived working at home with ICBT:

And to ask if they have gone into it [MoodGYM]. If it [depression] expanded in time...should they have sick leave? Have I done, not missed anything, right? And then...I ask about how it is going. [Participant 9]

Interviewer: Do any of you...do you bring up or do you discuss anything from the program [MoodGYM] in your consultations?

No, I haven’t done it...I don’t get to know anything, but I just get to know if they liked it or not. [Participant 9]

Despite GPs’ acknowledgement of the insufficiencies of standard treatment and regarding guided ICBT as a way to

achieve improvement, paradoxically they returned to standard treatment instead of module follow-ups in subsequent consultations. Time constraints were also a challenge with standard treatment, although efforts to be flexible were made. Central to standard treatment was to support the patients telling their stories. GPs could recount these stories in detail in the interviews. Supportive tasks, such as being available for the patient, responding as a human being, and listening and acknowledging the patient’s problems were perceived to be most important in the treatment of depressed patients. These aspects of interaction were important in sustaining a trusting relationship and were part of standard treatment. No successful experiences to integrate process issues working with MoodGYM together with these supportive tasks were made explicit: “I guess it is [most important] to let the patient tell their story. It feels wrong to interrupt that type of story, about such things [when suffering from depression]. It is not so easy to cut to the chase—where in your stomach does it hurt?” [Participant 4] and “to strengthen the faith they might have in being able to become better. That there is hope. And...of course, to listen to them. To be willing to give more consultations and things like that” [Participant 2].

Confidence and viewing the patient as an active agent in treatment promoted GPs’ efforts to remember, find the time, and motivate patients to log on and work independently with ICBT. These efforts to recommend MoodGYM may relate to the NPT component of collective action or efforts to make an intervention doable [27,30]. Again, components of work to implement the module follow-ups were not successful or prioritized, and to accommodate constraints GPs either chose not to mention the program or briefly ask patients about adherence before returning to standard treatment in further consultations.

Discussion

Principal Findings

In this paper, we address aspects of a gap between the evidence from multiple trials that have found that ICBT can reduce the symptoms of depression (eg, [8-11]) and the lack of knowledge about implementing guided ICBT in the everyday clinical setting in general practice from the perspective of the GPs themselves. In the present study, a storyline was investigated starting from what prompted GPs to learn about ICBT, to how they applied the guided ICBT in their treatment of depression. Our findings imply that guided ICBT in practice was perceived to consist of two steps: (1) a consultation recommending use of MoodGYM and subsequently (2) module follow-up consultations. NPT suggests four main components of “work” to implement interventions: coherence (make sense), cognitive participation (engagement), collective action (efforts), and reflexive monitoring (feedback) [27,30]. In our study, the interplay between wanting to improve treatment, engaging by adding structured agenda, and empowering the patient—being efforts to the first step of recommendation—reflects three of the NPT components: coherence, cognitive participation, and collective action. Overall, GPs’ experiences with ICBT in our study demonstrated positive attitudes, as consistent with the literature

[5,21,22]. On the other hand, the second step of module follow-ups was inhibited by various aspects, such as a hectic and varied practice, inadequate knowledge of the content of modules, and competing tasks of standard treatment and thus did not generate engagement. Mohr suggests the rationale of “what, why, when and how” must be defined in depth to enable development of implementable technical interventions to change behavior [33], and we argue that a health worker must be able to some extent answer these questions to integrate interventions into treatment. What module follow-ups should comprise, why they would improve treatment, and how they should be deployed was not made explicit by the GPs in our study. This incomplete rationale may contribute to the insufficient coherence and cognitive participation and might explain the little effort or little collective action in this part of treatment. NPT here contributes by providing a structure through which to understand how complex the challenges are that affect the GPs’ implementation of the module follow-ups.

A first step towards improvement was taken by GPs in our study because they made efforts to recommend MoodGYM; previous literature has found that GPs rarely recommend evidence-based self-management programs to patients with depressive symptoms [18,22]. An important aspect of promoting coherence and cognitive participation in MoodGYM was that it was based on CBT, a theory the GPs acknowledged as credible. Gunn and Palmer’s study emphasized that improved treatments for depression that are theory-based are more likely to promote cognitive participation and therefore be implemented [34]. Earlier findings show that GPs do not recommend online interventions because they lack faith in, and knowledge of, the content of the interventions [22]. Another study showed that GPs who know of trusted sites incorporate the Internet into their role as a GP [35]. In the present study, GPs engaged with MoodGYM and could convey information about the specific theory MoodGYM is based on, especially those who had taken the 3-day course. This indicated that knowledge about evidence and the theoretical base of an online intervention may promote use by GPs.

Competence was a recurring aspect that affected the GPs’ use of ICBT. Wanting to acquire competence promoted coherence, and experiencing competence gave the GPs’ work satisfaction and indicated cognitive participation. The GPs’ sense of competence was conveyed in encounters with patients, leading the GPs to make the effort to recommend the MoodGYM program, and it indicated collective action. The literature suggests that there is a relationship between the medical practitioner’s competence in the treatment of depression and patient outcomes [36,37]. Patients who receive guided ICBT also emphasize the importance of therapist’s competence [38]. The efforts or collective action GPs made to recommend MoodGYM to suitable patients in a motivating manner were often based on information they had learned at the course. Sinclair et al suggested redefining the role of the GPs to more of a consultant to enable proper use of ICBT during the treatment of depression [22]. Our findings suggest that with gained competence, GPs acted as consultants when they convincingly recommended MoodGYM and because they viewed their patients as active agents. This may indicate that it

is consistent with the GPs’ role to recommend Internet self-help and that a course can enable GPs to gain the necessary competence and confidence to recommend ICBT to their patients.

In the present study, the second step was problematic; that is, the GPs were not successful in providing module follow-ups following initial recommendation of MoodGYM to their patients. Two important aspects were inadequate module knowledge and time shortages. It is possible that the course did not sufficiently emphasize the follow-ups to build competence for this part of treatment. Confidence could be enhanced by more practical training and highlighting the rationale for the module follow-ups (eg, that guided ICBT is more effective than self-administered [8,9,13]). It is well documented that organizational constraints, such as lack of time and a varied practice, can be unsupportive to implementing eHealth in general [39] and CBT or ICBT in general practice [40–42]. In our opinion, time is also flexible, and constraints may be facilitated with incitements.

Paradoxically, although GPs expressed the inadequacy of standard treatment, they still preferred this approach in follow-ups. Despite their enthusiasm for the structure of guided ICBT, GPs found it difficult to encourage patients to talk about MoodGYM process issues or to use process issues as a trigger to talk about everyday life concerns. NPT claims that efforts to implement an intervention occur within interactions with others [27,30]. Previous studies have shown that clinicians [22] and patients [43] prefer online interventions to be used as adjuncts rather than alternatives to standard treatment. Perhaps the patients’ expectations and preferences contributed to this choice in our study. An observational study from general practice found that when dealing with their patients’ mental health issues, GPs intuitively chose to listen to their patients’ problems contextualized in their everyday life, instead of being in control of the dialogue [44]. Both patients and GPs were more satisfied when the focus was on the patient as a whole person [34,44]. In our study, one GP (Participant 7) made explicit a role conflict she experienced between module follow-ups and her regular supporting role, indicating she saw the two types of care as dichotomous. Overall, our findings may imply that the focus on process issues working with modules is perceived as an instrumental approach, whereas when the depressed patients set the agenda by recounting their stories, a more patient-centered approach could be taken. This indicates a tension between the provisions of both structured therapeutic content of a program with a supportive patient-centered dialogue. Previous research from general practice has demonstrated this struggle between instrumental and patient-centered approaches [45], and the implementation of instrumental follow-ups does not fit with the GP’s role in depression treatment [46]. If GPs in our study had better knowledge of the modules and the rationale for module follow-ups and could link back to MoodGYM instead of having it as a starting point of the dialogue, coherence, cognitive participation, and efforts could be strengthened to enable implementation of module follow-ups combined with a patient-centred approach.

Given that the current evidence is not clear, it is not a surprise that GPs in our study lacked knowledge about the composition of support in guided ICBT. A review has suggested that, when studying depression, the effect size in symptom reduction appears to be greater for minimal-contact follow-ups where the patient is provided with a rationale (but no support focusing on process issues) for the use of self-help materials, compared with guided follow-ups with a focus on process issues [12]. In our study, guided ICBT was incomplete. On the other hand, the GPs made an effort to recommend and provide a rationale for their patients' use of MoodGYM. The GPs also reported that they had offered follow-ups without process issues, during which they aimed to be available to their patients and to listen attentively. Such adjunct use to standard treatment may coincide with ICBT with minimal-contact follow-ups and perhaps is more compatible with the role of the GP.

Strengths and Limitations

A methodological strength of this study was the use of in-depth interviews. The GPs had experienced these change processes and were thus able to elaborate on their experiences implementing ICBT. This study explored not only their attitudes but also the work involved in embedding the approach into regular practice. The second author (RSH) is a psychologist and was a therapist in a randomized controlled trial exploring guided ICBT and was a presenter of the course for the GPs in the present study, and the first author works as a GP. Both interviewers had prior understanding of ICBT from clinical settings. We hoped this would improve our understanding of the field and of the terminology; however, we tried not to presume that the GPs included in this study shared our perceptions [47]. RSH's involvement in delivering the training might have led to a response bias if the GPs felt reluctant to be critical of the training or program. To reduce this possibility, we made it clear before each interview that we were not there to defend the treatment but that we wanted to better understand the GPs' experiences. Another strength of the study was that the experienced third author (MBR) gave continuous feedback about our interviews to ensure sufficiently high quality and depth.

Although the sample size was appropriate for the needs of the study, we interviewed only 11 GPs from northern Norway, and our findings should be interpreted as only a partial description of the full range of GPs' experiences. Participants were self-selected GPs enrolled in the course of the blended ICBT,

and we cannot exclude the possibility of selection bias since participants may have been more interested in mental health or online interventions than the average GP. However, our main aim in this study was to explore aspects of the GPs' experiences when they made the effort to implement ICBT in everyday practice and, accordingly, motivated GPs were acceptable. There was an overrepresentation of women at the course and therefore reflects participants interviewed. More male participants might have produced other stories, and a balanced gender analysis would have been possible. Only one GP (female) declined an interview invitation. NPT encourages exploring all stakeholders' involvement [30], but time constraints and the necessary resources put this beyond the scope of this study.

Conclusions and Implications

Perceptions of GPs in the present study contribute to our understanding of the challenges associated with changing the treatment of depression in general practice. A need to supplement standard treatment was prominent, and GPs endorsed the principles of guided ICBT. Guided ICBT was seen as involving two steps. The first step was to recommend MoodGYM and efforts were made to integrate this step into treatment. This indicates that recommending ICBT can add a valuable tool to GP's toolkit. Offering training and highlighting the following aspects may increase recommendation of ICBT by GPs: (1) ICBT is theory-based and credible, (2) ICBT increases GPs' work satisfaction having a tool to offer, and (3) ICBT facilitates empowerment of patients in their own health.

The second step was to integrate module follow-ups into treatment. GPs expressed that they had difficulties with this step and instead returned to standard treatment. A number of reasons and paradoxes were identified when exploring this incomplete implementation. Our study indicates that recommending a theory-based Internet self-help program is acceptable within the role of a GP, however, unclear for module follow-ups. More practical training and providing incentives to enable GPs to prioritize time to complete the online program themselves to obtain knowledge may improve inadequate knowledge of the modules. Our findings imply that it is important to have a patient-centered approach in the follow-ups. More research is needed to explore what the support of ICBT should comprise when deployed in the context of general practice. A key question is to investigate if GPs can combine patient-centered follow-ups with process issues, or if adjunct use of ICBT to standard treatment is more suitable.

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Conflicts of Interest

None declared.

Multimedia Appendix 1

Interview guide.

[[PDF File \(Adobe PDF File\), 33KB - jmir_v16i9e208_app1.pdf](#)]

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Abbreviations

CBT: cognitive behavioral therapy

GP: general practitioner

ICBT: Internet-based cognitive behavioral therapy

NPT: normalization process theory

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Appendix I

Appendix 1: Intervjuguide

Dato/sted

Alder

Sivil status

Generell oppfattning:

- **Fortell historien** om din depresjon og behandlingen du har vært gjennom.

Motivasjon:

-Hva fikk deg til å **delta** i Moodgym?

-Beskriv hvordan har du **gjennomført** behandlingen?

-Hvilke momenter i behandlingen var **viktigst** for deg? Hvordan påvirket dette framgangen i behandlingen?

-Hva har vært **vanskelig** og hvordan **løste** du det?

-Hva vil du si var **drivkraften** for deg i behandlingstiden?

-Kan du fortelle om noen **spesielle personer/hendelser** som har vært sentrale for deg i denne siste tiden?

-Hvilken betydning hadde **e-mailene** du fikk underveis?

Behandlingen

-Hvordan **opplevde** du behadlingen?

-Fortell om et **minne** du husker godt fra tiden du gjennomgikk Moodgym-behandlingen? Hvorfor dette minnet?

-Måtte du gjøre noen **praktiske endringer** i ditt hverdagsliv for å gjennomføre behandlingen?

-Hvordan tror du noen som er **deg nær** oppfattet behanlingen?

-Hvis du fikk være med å **vidreutvikle** Moodgym etter erfaringene du har gjort deg, hva ville du forandre, ta bort eller legge til?

-Hvordan opplevde du kontakten du fikk med **din terapaut**?

-Hadde du mulighet til å **påvirke** behandlingsopplegget? På hvilken måte?

-Kan du fortelle om noe du **liker** spesielt med denne måten å behandle depresjon på?

-Hvis du skulle anbefale dette **til en venn**, hva ville du framheve?

Endringer i livet:

-Kan du beskrive noen **endringer** i livet ditt som har oppstått i denne perioden?

-Kan du huske en konkret episode som du tror du **taklet annerledes** som et resultat av behandlingen?

-Kan du fortelle om noe du **gjør mindre eller mer** av etter gjennomgått behandling?

-Ville du **beskrive deg selv** på en annen måte i dag enn før påbegynt behandling?

-Hvis vi **spurte din nærmeste**, for eksempel din mann/kone, hva tror du han eller hun ville beskrive som endret i ditt liv etter gjennomgått behandling?

Avslutning

-Er det noe du har tenkt på som du vil **tilføye**?

-Er det noe jeg ikke har spurt om som du gjerne vil fortelle?

TUSEN TAKK

Appendix II

Appendix 2: Intervjuguide lege

DATO

STED

ERFARING FRA ALLMENNPRAKSIS

ALDER

Generell oppfatning:

- Fortell litt om din erfaring med deprimerte pasienter og møte dem.
- Hvordan opplever du å få en deprimert pasient på kontoret?
- Hvilken måte håndterer du en slik pasient?
- Fortell om den siste deprimerte du hadde på kontoret. (inkl. hvordan møtte, hva gjorde, kontakt).

Motivasjon:

- Hva fikk deg til å ta kurs i kognitiv terapi?/ Hvordan fikk du vite om MoodGYM?
- Beskriv hvordan har du har forsøkt å gjennomføre behandlingen?
- Var det noe som var motiverende for deg som lege ved bruk av kognitive teknikker eventuelt MoodGYM?
- Hvilke momenter i behandlingen mener du var viktigst? Hvordan påvirket dette framgangen i behandlingen?
- Hva har vært vanskelig/barrierer og hvordan eventuelt løste du det?
 - Ønsket pasientene å prøve dette?
 - Gjorde pasientene hjemmeoppgavene?
 - Var det tekniske utfordringer?
 - Var det tid nok i konsultasjonene?
 - Passet det i en vanlig konsultasjon? Utdyp!
 - Hva skal til for å prioriterer tid til å sette seg inn i teknikkene/MoodGYM?
 - Hva skal til for at du skal føle at du har satt deg godt nok inn i det?

Behandlingen

- Hva syntes du om å bruke CBT eller MoodGYM?
- Hvordan opplevde du som lege behandlingen med MoodGYM?
- Hvem tror du kan være aktuell for slik behandling? (Hva gjør at en pasient passer/ikke passer til denne behandlingen?)
- Omtrent hvor mange pasienter har du prøvd det for?
- Fortell om en situasjon du husker godt fra tiden du har forsøkt å bruke Moodgym-behandlingen? Hvorfor denne episoden?
- Måtte du gjøre noen praktiske endringer i konsultasjonene for å gjennomføre behandlingen? (Tidsbruk, sette opp til kontroll, andre ting).
- Gjorde du noen forberedelser før du gikk i gang med å bruke MoodGYM i behandlingen?
- Opplevde du noen endring i kontakten du fikk med din pasient? Enn den siste?

- Hadde du mulighet til å påvirke behandlingsopplegget? På hvilken måte?
- Forsøkte du å tilpasse behandlingen til din måte å møte pasientene på?
- Kan du fortelle om noe du liker spesielt med denne måten å behandle depresjon på?
- Hvis du skulle anbefale dette til en kollega, hva ville du framheve?
- Hvis du fikk være med å videreutvikle MoodGYM etter erfaringene du har gjort deg, hva ville du forandre, ta bort eller legge til?
- Har du brukt nettsiden msh.no?
- Hvilke andre behandlingsalternativer vurderer du?

Kvalitet og samhandling

- Har det at du har tatt et kurs i kognitive teknikker gjort at pasientene har fått en annen behandling enn før?
- Har din bruk av MoodGym gjort at pasientene har fått en annen behandling av deg enn før?
- Opplever du at kurset i kognitive teknikker har gjort at du endret din bruk av spesialisthelsetjenesten?
- Har du endret din bruk av spesialisthelsetjenesten etter at du har tatt i bruk MoodGym?
- Kunne du tenkt deg et kurs i CBT og eventuelt MoodGYM eller annen selvhjelpsprogram og hva skulle det i så fall inneholde?

Avslutning

- Er det noe du har tenkt på som du vil tilføye?
- Er det noe jeg ikke har spurt om som du gjerne vil fortelle?

TUSEN TAKK

ISM SKRIFTSERIE - FØR UTGITT:

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