## **SUMMARY**

Common mental disorders (CMDs) are highly prevalent and contribute substantially to the burden of disease worldwide. Over 450 million people in the world suffer from a mental disorder, and most sufferers live in low- and middle-income countries (LMICs). On a global scale, about 150 million people have a current major depressive disorder, and almost a million commit suicide each year. CMDs are associated with a significantly impaired quality of life, with excess mortality, substantial societal costs, and a considerable burden of disease. Major depression was ranked as the fourth most disabling medical disorder worldwide in 1990 and 2002, and is expected to be the second most disabling disorder after HIV/AIDS in 2030. The treatment gap for mental disorders in low- and middle- income countries is huge, with 76-80% of people with mental health problems not receiving help for it. This treatment gap is mainly due to a scarcity of human, mental health and financial resources which in turn are also caused by policies in LMIC.

Chapter 1 provides the background, objectives and setting of this thesis. It discusses mental health care in South Africa, where the great majority of people (75%) with a DSM-IV diagnosis of a mental health problem get no treatment for it. Mental health services are unequally distributed around South Africa and still reflect the patterns of racial segregation and inequities during the Apartheid era. A key issue is finding a way to fill the treatment gap and reduce the burden of disease. This can partly be attained by simplifying treatments for CMDs and easing access via internet-guided brief self-help. Literature is discussed regarding the main aim of this thesis - how to develop and test a low-cost intervention in South African communities which have little or no access to mental health services. Insight was sought into the use of such (internet) guided self-help in deprived communities around Cape Town. To provide a general context for the thesis, the current status of psychiatry in Africa is reviewed. Another aim was to evaluate the evidence of the efficacy of psychotherapy for anxiety and depression in LMIC, to decide on what type of treatment might be piloted in a South African target community. Since no meta-analysis had been done, this was conducted. Literature indicates that self-help can be effective and might be suited for low-resourced areas, therefore the evidence for internet-guided self-help too was reviewed. Since the efficacy of methods with limited personal contact between a patient and therapist needs careful assessment, a systematic meta-analysis was completed regarding the efficacy of self-help for depression and anxiety disorders. Mental health literacy and stigma in communities have implications for access to mental health care in South Africa, so this thesis also examined the attitudes towards mental health of the participants in our program.

Chapter 2 reviews the literature on current psychotherapy in Africa, and discusses the recent globalization of psychotherapy and the contemporary debate about a need to "Africanize" psychotherapy. The review of psychotherapy in African countries reveals challenges for future research in this field and makes general recommendations.

Chapter 3 presents the results of the meta-analysis on the efficacy of psychotherapy for anxiety and depression in LMICs. A literature search was used to identify randomized controlled trials (RCTs) of psychological treatments for depression and anxiety disorders in LMICs, describing RCTs comparing a psychological intervention for anxiety or depression with a control condition (care-as-usual, waiting list, placebo, other). Psychological treatments were defined as interventions in which the core element of treatment involves verbal communication between therapist and patient. For each comparison between a psychological treatment and a control group, we calculated the standardized mean difference (Cohen's d) indicating the difference between the two groups at post-test. A random-effects meta-analysis was run to obtain summary-effect estimates of clinical outcomes. Statistical heterogeneity across trials was assessed with the  $I^2$  statistic. Subgroup analyses used a mixed-effects model. Seventeen studies met inclusion criteria, with a total of 3,010 participants. The mean standardized difference between the treatment and control groups at post-test was 1.02 (95% CI: 0.76~1.28) which corresponds well with the effects found in high-income countries. These results indicate that psychological treatments of depression and anxiety disorders are also effective in LMICs, and may encourage global dissemination of these interventions.

Chapter 4 evaluates the growing research evidence on self-help and web-guided treatments of CMDs, including meta-analyses, for depression and anxiety disorders. Searches were conducted in PubMed, PsychINFO, EMBASE, and the Cochrane database for statistical meta-analyses for RCTs of self-help or web-guided interventions for depression or anxiety disorders, published in English. Reference lists were also used to find additional

studies. Effect sizes were tabulated. Thirteen meta-analyses reported medium to large effect sizes for self-help. The studies in the meta-analyses differed in samples, type of self-help (eg, computer-aided, web-guided), control condition, and study design. The meta-analyses suggest that self-help methods ware effective in a range of disorders, including depression and anxiety. Most of the meta-analyses found relatively large effect sizes for self-help approaches, independent of the type of self-help, and comparable to effect sizes for face-to-face treatments. However, further research is needed to optimize the use of self-help methods.

Chapter 5 discusses the results of attempting web-guided self-help to deprived South African communities and the problems encountered. A Dutch problem solving therapy program (PST) was adapted and translated into English, Xhosa and Afrikaans and implemented in townships around Cape Town. When our attempt to recruit participants for the web-guided intervention proved abortive we adapted the online PST to a booklet version and collected more data on why the communities had not taken up online PST. Attitudes towards computer/web programs, and access and literacy, were evaluated among the users of our adapted PST- booklet intervention. Although acquaintance with and interest in using computers and the internet is spreading rapidly, anxiety about their use and the lack of relevant skills are still very much present. The failure to take up the web-guided approach appeared to be due to a lack of computers and internet access and literacy at the time. The implications of these barriers for web-guided self-help in LMICs are discussed.

Chapter 6 presents the feasibility, acceptability and effectiveness of PST self-help for CMDs in deprived communities around Cape Town. Psychologically-distressed volunteers were invited to use the PST booklet individually or in a group-workshop over 5 weeks, and thereafter rated its effectiveness and acceptability on questionnaires (K-10 and SRQ). Of 103 participants, 73 completed 5 weeks of brief PST individually (n=57) or in a group-workshop (n=46). There were significantly more dropouts in those who used the booklet individually than in the group. Psychological distress fell significantly and the booklet was evaluated positively, *suggesting* that the brief problem solving booklet might be an effective, feasible and acceptable short-term treatment for people with CMDs in deprived communities. Group delivery of PST had lower drop-out rates than individual delivery, and was more feasible and

acceptable. Randomized controlled trials are needed to evaluate the effect of brief self-help PST more rigorously.

Chapter 7 explores the mental health literacy and stigmatisation of mental health problems in the participants, since these issues may delay treatment seeking and impair outcome in people with CMDs. We used two vignettes portraying someone who had either subtle or obvious symptoms of depression in order to elicit respondents' mental health literacy and attitudes towards depression. The 'Community Attitudes to Mental Illness' scale (CAMI) was used to measure attitudes about mental illness in general. The results of 56 respondents indicate that psychosocial and intrapsychic factors were regarded as possible causes of depression more frequently than biological causes were. Psychological (e.g. psychologist and social worker) and lifestyle (e.g. close family/friends, physical activity) interventions were more often endorsed as effective treatment options than medication (e.g. antidepressants). People with high psychological distress stigmatized mental illnesses more on the CAMI. Depressive symptoms were not recognized as symptoms of a mental disorder, and knowledge of psychobiological causes of depression and of available effective treatment was limited. It is therefore useful to incorporate psycho-educational components into interventions for psychological distress.

Chapter 8 draws on the above results to discuss the limitations of the studies and give recommendations for future research. Effort should be invested into developing and monitoring ways to introduce evidence based treatments in low- and middle-income countries despite socio-economic and resource problems. The results of our pilot study suggest that it is worth studying further applications of PST and other low cost interventions to reduce the heavy burden of common mental disorders in low-income communities.