Abstract and Executive Summary

A feasibility study of a telephone-supported self-care intervention for depression among adults with chronic physical illnesses

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A FEASIBILITY STUDY OF A TELEPHONE-SUPPORTED SELF-CARE INTERVENTION FOR DEPRESSION AMONG ADULTS WITH CHRONIC PHYSICAL ILLNESSES

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ABSTRACT

Meta-analyses indicate that depression self-care interventions in persons with chronic illness can be effective at reducing depressive symptoms and improving self-care of chronic illness. However, few studies have been conducted on older clinical populations with chronic physical illnesses. Moreover, depression self-care interventions, sometimes referred to as self-management interventions, are only beginning to be used in Canada.

The objectives of this research project (conducted between April, 2009 and July, 2011) were to assess the feasibility and acceptability of a telephone-supported depression self-care intervention in a population of primary care adults aged 40 and over with chronic physical illnesses. The intervention comprised a “toolkit” containing audio-visual, internet, and paper-based tools that might appeal to individuals with different learning styles. Two bilingual coaches (non-therapists) were trained to provide telephone-based support for up to 6 months. This support consisted of short weekly calls for the first 3 months, and monthly calls thereafter for up to 6 months.

The research involved 3 groups: family doctors, their patients, and the family/friends of patients. A random sample of Montreal family doctors was invited to participate. Eligible patients (age 40+, at least mild depressive symptoms, and one of the targeted chronic diseases) were recruited from these practices, using a 2-step depression screening process. Participants received the toolkit and were offered telephone support for up to 6 months. Independently of the intervention, patients were followed by research staff at 2 and 6 months to determine the acceptability of the intervention and clinical outcomes. Data were also collected from participating family doctors and family/friends, using questionnaires, semi-structured interviews, and focus groups. A total of 59 family doctors, 63 patients, and 19 family/friends participated in the study.

The main findings of the study were:
1. A telephone-supported depression self-care intervention for primary care patients with chronic physical illnesses was feasible and acceptable among those that participated;
2. Intervention adherence (tool use, completion of coach contacts), acceptability, and outcomes were similar among different age groups, between men and women, and among those with different levels of physical health;
3. Family doctors assisted with patient recruitment but few were involved in supporting the intervention;
4. Many family/friends provided emotional support and help with daily activities, however, they were uncertain how to support depression self-care.

A randomized controlled trial of this intervention is warranted.
EXECUTIVE SUMMARY

INTRODUCTION

Depression is a common, serious, and often chronic problem that is managed mainly in primary care settings.\textsuperscript{1,2} It is more prevalent among people with chronic physical illnesses,\textsuperscript{3} most of whom are middle-aged or older. In this population, depression adversely affects treatment and self-care for the chronic physical illness (e.g., reduced medication adherence).\textsuperscript{4,5} Although antidepressant medications and psychological therapies are effective methods of treating depression,\textsuperscript{6} many older people prefer not to take medications and access to psychological therapies remains limited.\textsuperscript{7,8} For these reasons, self-care interventions for depression are of interest as an alternative, potentially cost-effective treatment.

Our team has completed a feasibility study of depression self-care interventions and we are now conducting a randomized trial to test the effectiveness of a telephone-supported vs unsupported depression self-care intervention. In this report, we present the results of the feasibility study.

SELF-CARE INTERVENTIONS FOR DEPRESSION

Self-care interventions (sometimes referred to as self-management interventions) are an important part of many chronic disease management programs.\textsuperscript{9} For the purposes of our work we have adopted the following widely-used definition of self-care: “...the tasks that an individual must undertake to live well with one or more chronic conditions. These tasks include gaining confidence to deal with medical management, role management, and emotional management.”\textsuperscript{10} Supported self-care comprises: “...the systematic provision of education and supportive interventions by health care staff to increase patients’ skills and confidence in managing their health problems, including regular assessment of progress and problems, goal setting, and problem-solving support.”\textsuperscript{10}

Depression self-care interventions typically include activation, changing negative ways of thinking, and problem solving.\textsuperscript{11} They generally involve less than a total of 3 hours of professional support, to distinguish them from brief psychological interventions,\textsuperscript{12} and are delivered using a variety of tools and support structures, e.g., individual face-to-face or telephone support by a trained coach or guide (a health professional, a paid non-professional, or a volunteer), group support, interactive Internet programs, or doctor support. Although meta-analyses indicate that these interventions can be effective, most of the evidence to date is based on younger adult volunteer or non-clinical populations.\textsuperscript{12-15} Few studies have been conducted on older, clinical populations,\textsuperscript{16,17} or on populations with chronic physical illness who also have depression.\textsuperscript{18-20}

Self-care interventions have been implemented in several Canadian provinces as part of chronic disease management programs. However, depression self-care interventions are offered in only a selected areas of the country either in individual or group format.\textsuperscript{21,22,23,24}

OBJECTIVES

The objectives of this research project were to assess the feasibility and acceptability of a telephone-supported depression self-care intervention for the primary care population of adults aged 40 and over with chronic physical illnesses. We targeted this population for the following reasons: 1) interventions for depression in this population potentially have a large impact on healthcare costs in...
the long term, as this population consumes a disproportionate amount of healthcare resources;\textsuperscript{25, 26} 2) depression in this population is more common and longer-lasting\textsuperscript{3}; 3) perceived unmet needs for care are greater among those with chronic conditions, particularly among those with mood disorders;\textsuperscript{27} 4) at ages 40 and over there is a large increase in the prevalence of chronic physical conditions;\textsuperscript{26} 5) self-care interventions for depression can improve the outcomes of many physical illnesses through increased adherence to treatment and through improved health behaviors.\textsuperscript{4}

**Overview of the Study**

The study, conducted between April, 2009 and July, 2011, involved development of the intervention, and testing of the intervention for feasibility and acceptability.

**Development of Intervention**

We developed the intervention using input from both focus groups and consultations with family physicians, social workers, psychologists, and nurses with experience in depression management in primary care. The intervention comprised a “toolkit” that contained a variety of self-care approaches to manage depression, including audio-visual, internet, and paper-based tools that might appeal to individuals with different learning styles. All tools were made available in both English and French. Three of the tools incorporated cognitive-behavioral therapy principles: the Antidepressant Skills Workbook,\textsuperscript{28} an Action Plan, and a Mood Monitoring tool. Three of the tools were primarily informational: an Informational Leaflet, a video/DVD on depression, and information on internet depression tools. Additional tools included information on community resources (support and self-help groups available in the community); and an information booklet for family members.

Two bilingual coaches (non-therapists) were trained to provide telephone-based support to patients for up to 6 months. A schedule of short, weekly calls for the first 3 months was followed by monthly calls up to 6 months. Coaches were instructed by scripts to provide information, encouragement and guidance on the use of the tools, and to not provide therapy.

**Feasibility and Acceptability**

**Family doctors:** We sent a letter to a random sample of 375 Montreal-area family physicians, inviting them to participate in the study. Participation involved distribution of brief patient-completed study screening forms, and completing questionnaires at the beginning and end of the study. There was no prescribed role for the doctor in the intervention; doctors were asked to provide care as usual to their patients.

**Patients:** Patients eligible for the study were: aged 40 or over; diagnosed with one or more of the targeted chronic diseases (arthritis, high blood pressure, diabetes, heart disease, asthma, or chronic lung disease); reporting at least mild depressive symptoms; not currently receiving psychotherapy; no physical or mental disability that would preclude either use of the tools or coach telephone calls. Potentially eligible patients were identified using a self-screening form in the doctors’ office or clinic. A research staff member verified eligibility over the telephone, and invited the patient to participate in the study. Participating patients were sent the self-care toolkit, and contacted shortly thereafter by a coach. Research interviews were conducted by telephone at baseline, 2 months, and 6 months to assess the following: acceptability of the self-care tools and coach calls; use of the self-care tools, depressive symptoms, overall physical and mental health, and health behaviors (exercise, social contacts, etc).
Family/friends: A total of 19 family/friends completed questionnaires on the types of support they provided to patients; 7 also participated in in-depth qualitative interviews.

FINDINGS

Family doctors

Of the 375 doctors invited to participate, 63 (16.8%) were contactable, met eligibility criteria, and consented to participate and 59 (15.7%) remained in the study. Predominant reasons for participation were past involvement with research projects, interest in mental health care, enthusiasm about self-care, and sense of collegiality. Two-thirds of participating doctors complied to varying degrees with patient recruitment, with compliance being higher amongst doctors in solo practices or with previous research experience. The doctors who participated appeared to play a minor role in supporting the intervention, and their involvement was primarily limited to responding to patient-initiated discussion of the tools.

Patients

Overall, 254 potentially eligible patients were referred to the study, 216 were contacted for a telephone eligibility interview, 63 eligible patients provided written consent and completed the baseline interview; 57 (90%) and 55 (87%) completed 2-month and 6-month follow-up interviews, respectively. Older adults with more serious physical illness, men, and those with a lower level of education appeared to be under-represented among study participants.

At the 6-month follow-up, 84% of participants reported that at least one of the tools was helpful to them. Almost all had read the Informational Leaflet, 76% had viewed the video/DVD, but only 25% had tried the internet tools. About 2/3 of patients had tried the Antidepressant Skills Workbook, the Action Plan, and the Mood Monitoring tool, respectively. Coaches made an average 10.5 telephone calls to participants, a total contact time of less than 2 hours per patient. Over 91% of patients found the coaching to be helpful, but 47% felt they could have used the tools on their own.

Overall, there was a clinically significant improvement in depressive symptoms between study enrolment and 6 months. Improvement in depression severity was found more frequently among those who had used one of the behavioral tools, but it was not associated with use of the informational tools or with the number of coach contacts. Similar improvements in depressive symptoms were found among patients in different age and sex groups, and different levels of physical health.

Family/friends

One third of patients reported receiving support from their family/friends with the self-care tools. Notably, patients who reported adherence to the behavioral tools were more likely to report family/friend support with the tools, and their family/friends more often reported that they provide support in daily activities like transport and housework. Family/friends appeared interested in involvement in the depression self-care intervention, but were uncertain about the extent and type of involvement they should offer.
CONCLUSIONS

The results of this feasibility study should be interpreted with caution, as the study was uncontrolled, and of modest size. The following preliminary conclusions can be drawn, for the involvement of family doctors, patients, and family/friends in the intervention:

Family doctors

1. While doctors are likely open to reinforcing the benefits of depression self-care interventions, the volume and complexity of their work means they are unlikely to have the skills or time to both deliver and support such activities, particularly for their patients with chronic physical illnesses.  
2. Supplementary and alternative sources of support for depression self-care in the community may be useful (e.g., governmental and non-governmental agencies which provide services to those with chronic physical illnesses).

Patients

1. Our supported depression self-care intervention for primary care patients with chronic physical illnesses was feasible and acceptable among those who participated in this study, including older (60+) and middle-aged (<60) patients. Older adults with more serious physical illnesses, men, and less educated patients were under-represented in the study sample. Different approaches may be needed to interest these groups in depression self-care interventions.

Family/friends

1. Many family/friends already provide varying degrees of emotional support and help with daily activities.
2. Family/friends may benefit from more information about depression and from a negotiated role in the intervention.

CURRENT AND FUTURE RESEARCH

We are currently conducting a randomized trial to compare the effectiveness and costs of a telephone-based supported depression self-care intervention for depression in comparison to an unsupported intervention among primary care patients aged 40 and over with one or more chronic physical illnesses. Future research will address: sustainable sources of delivery of depression self-care interventions for the population with chronic physical illnesses; and addressing needs of family/friends for information about, and involvement in, depression self-care interventions.
REFERENCES


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