

LETTER

doi:10.1017/S1041610215000204

Supported depression self-care may prevent major depression in community-dwelling older adults with chronic physical conditions and co-morbid depressive symptoms

Self-care programs for depression use educational and cognitive-behavioral techniques (e.g. written information, audiotapes, videotapes, computerized, or group courses) to assist patients in the management of depressive symptoms (Morgan and Jorm, 2008). In the UK, these interventions are recommended as step 1 in a stepped care program for treating depression in primary care (National Institute for Health and Clinical Excellence, 2007). One meta-analysis suggests that supported self-care (self-care with coaching) is more effective than unsupported self-care (Gellatly *et al.*, 2007).

We recently completed a randomized trial of a depression self-care toolkit with or without lay telephone coaching among primary care adults aged 40 years and over with chronic physical conditions and co-morbid depressive symptoms (McCusker *et al.*, 2014). Two hundred and twenty-three participants with mild to severe depressive symptoms were recruited and randomized. Immediately after randomization, all participants received the depression self-care toolkit. The toolkit comprised of three core tools: an antidepressant skills workbook (Bilsker and Paterson, 2005), a mood monitoring tool, and an informational DVD. Participants randomized to the supported group were assigned a trained lay coach and offered weekly telephone calls for up to three months, then monthly calls for up to six months. Coach contacts were scripted. Depression outcome (PHQ-9 score) was determined at three and six months. Supported self-care significantly reduced PHQ-9 scores at three months but not at six months.

Many participants enrolled in this trial did not have major depression but were at high risk of developing major depression because they had chronic physical conditions and depressive symptoms at the time of enrolment (Cole and Dendukuri, 2003; Smit *et al.*, 2006). Given the formative stages of depression prevention research in older participants and given that the educational and cognitive-behavioral contents of self-care programs are similar to interventions that were feasible and potentially effective in preventing depression in older participants (Cole, 2008), we

decided to conduct a secondary analysis of our trial data to determine if supported self-care was more effective than unsupported self-care in preventing major depression in this population.

For purposes of this secondary analysis, the sample of analysis included only participants without major depression at enrolment and with at least one follow-up assessment. The principal outcome was major depression (PHQ-9 algorithm) at three or six months. We determined the rates of major depression in each group and computed a Cox proportional hazards ratio (HR) of developing major depression adjusting for baseline education, cognitive status, minor depression diagnosis, and PHQ-9 score.

There were 127 participants without major depression at enrolment and with at least one follow-up assessment (73 in the supported arm and 54 in the unsupported arm). There were no significant differences in completion of follow-up by participant baseline variables or treatment group. In the supported arm, the incidence of major depression at six months was 12.3%; in the unsupported arm, the incidence was 20.4%. The absolute and relative risk reductions in the supported arm were 8.1% and 39.7%, respectively, similar to risk reductions reported in trials of other indicated preventive interventions (Cole, 2008; Reynolds *et al.*, 2014). The HR was 0.58, (95% CI 0.23, 1.51, $p = 0.27$). Unfortunately, the trial did not include a usual care control group to enable us to judge the effectiveness of unsupported self-care.

Even though the results of this secondary analysis were not statistically significant (perhaps due to the small number of participants), they suggest that a relatively simple supported self-care intervention may have potential to prevent major depression among community-dwelling older adults with chronic physical conditions and co-morbid depressive symptoms. Supported depression self-care may have potential to be an effective indicated preventive intervention. Further research is necessary.

Conflict of interest

None.

Description of the authors' role

Cole was involved in the conception of the study, obtaining the funding, implementation of the study,

data collection, data analysis, and writing of the letter. McCusker was involved in obtaining the funding, data analysis, and approval of the final version of the letter. Ciampi and E. Belzile were involved in data analysis and approval of the final version of the letter. Yaffe, Strumpf, Sewitch, and Sussman approved the final version of the letter.

Acknowledgments

None.

References

- Bilsker, D. and Paterson, R.** (2005). *Antidepressant Skills Workbook*, 2nd edn. Vancouver, BC: BC Ministry of Health. Available at: <http://www.comh.ca/antidepressant-skills/adult/resources/index-asw.cfm>.
- Cole, M. G.** (2008). Brief interventions to prevent depression in older subjects: a systematic review of feasibility and effectiveness. *The American Journal of Geriatric Psychiatry*, 16, 435–443.
- Cole, M. G. and Dendukuri, N.** (2003). Risk factors for depression among elderly community subjects: a systematic review and meta-analysis. *American Journal of Psychiatry*, 160, 1147–1156.
- Gellatly, J., Bower, P., Hennessy, S., Richards, D., Gilbody, S. and Lovell, K.** (2007). What makes self-help interventions effective in the management of depressive symptoms? Meta-analysis and meta-regression. *Psychological Medicine*, 37, 1217–1228.
- McCusker, J. et al.** (2014). A randomized trial of a depression self-care toolkit with or without lay telephone coaching for primary care patients with chronic physical conditions. *General Hospital Psychiatry*, In Press.
- Morgan, A. J. and Jorm, A. F.** (2008). Self-help interventions for depressive disorders and depressive symptoms: a systematic review. *Annals of General Psychiatry*, 7, 3–20.
- National Institute for Health and Clinical Excellence** (2007). *Quick Reference Guide (Amended) – Depression: Management of Depression in Primary and Secondary Care*. London, UK.
- Reynolds, C. F. 3rd et al.** (2014). Early intervention to preempt major depression among older black and white adults. *Psychiatric Services*, 65, 765–773.
- Smit, F., Ederveen, A., Cuijpers, P., Deeg, D. and Beekman, A.** (2006). Opportunities for cost-effective prevention of late-life depression: an epidemiological approach. *Archives of General Psychiatry*, 63, 290–296.
- MARTIN G. COLE,^{1,2} JANE MCCUSKER,^{2,3} MARK YAFFE,⁴ ERIN STRUMPF,^{3,5} MAIDA SEWITCH,⁶ TAMARA SUSSMAN,⁷ ANTONIO CIAMPI^{2,3} AND ERIC BELZILE²
- ¹Department of Psychiatry, McGill University; and St Mary's Hospital Center, Montreal, Quebec, Canada
- ²St. Mary's Research Centre, Montreal, Quebec, Canada
- ³Department of Epidemiology, Biostatistics and Occupational Health, McGill University, Montreal, Quebec, Canada
- ⁴Department of Family Medicine, McGill University; Family Medicine Centre, St. Mary's Hospital Center, Montreal, Quebec, Canada
- ⁵Department of Economics, McGill University, Montreal, Quebec, Canada
- ⁶Department of Medicine, McGill University; Divisions of Gastroenterology and Clinical Epidemiology, McGill University Health Centre, Montreal, Quebec, Canada
- ⁷School of Social Work, McGill University, Montreal, Quebec, Canada