

## No Evidence for Depression Screening in Rheumatoid Arthritis, Psoriasis, or Psoriatic Arthritis

To the Editor:

Members of the Canadian Dermatology-Rheumatology Comorbidity Initiative recently recommended routine depression screening among patients with rheumatoid arthritis (RA), psoriasis (PsO), and psoriatic arthritis (PsA)<sup>1</sup>. Although this is described as an evidence-based recommendation, the only evidence that was presented was that patients with these conditions may have a higher prevalence of depression than people without chronic medical diseases and that 2 cohort studies have associated depression with a worse prognosis in RA.

Depression screening involves administering self-report questionnaires or small sets of questions to identify patients who may have depression, but who are not already diagnosed or being treated for depression<sup>2</sup>. For a depression screening program to be successful, patients not already known to have depression must agree to be screened, a significant number of new cases must be identified with relatively few false-positive screens, and newly identified patients must engage in treatment with successful outcomes<sup>3</sup>.

There are well-established criteria for evaluating when routine screening for any condition should be considered and recommended<sup>4,5</sup>. It may be reasonable to evaluate the potential of a screening program to improve health outcomes for conditions that are common and important, cannot be readily detected without screening, are effectively treated, and if outcomes would be improved by intervening before symptoms are readily apparent without screening. Screening methods should be accurate and have only a tolerably small risk of false-positive results. Actual recommendations for implementation of screening in practice should be based on evidence that the health benefits of screening would outweigh potential harms, ideally from well-conducted randomized controlled trials (RCT). The Canadian Dermatology-Rheumatology Comorbidity Initiative group, however, did not conduct a systematic review to assess the likely benefits or harms of screening for depression and did not present any evidence that it would benefit patients.

In fact, no appropriately designed and well-conducted trials of depression screening in rheumatology patients, dermatology patients, or any other patient group have demonstrated that depression screening improves depression outcomes when patients who are screened for depression are compared with patients who are not screened<sup>3,6,7</sup>. In 2013, the Canadian Task Force on Preventive Health Care recommended against screening for depression<sup>8</sup>. The Task Force did conduct a systematic review of depression screening interventions, but did not identify any trials that met criteria for consideration. In addition to the lack of evidence of benefit from depression screening, the Task Force was concerned that there would be a very high rate of false-positive screens.

A 2008 Cochrane systematic review, which used less stringent inclusion criteria than the Task Force review, assessed 5 RCT and reported that depression screening did not reduce depressive symptoms (SD -0.02, 95% CI -0.25 to 0.20)<sup>9</sup>. There are a number of reasons why depression screening has not been shown to be effective and why we should not assume that it would improve mental health outcomes in the absence of solid evidence from well-conducted RCT. For one thing, available screening tools tend to identify more patients without depression than the number of patients who have depression, but are not otherwise identified and treated<sup>2</sup>. In addition, standard depression treatments that have been shown to benefit patients with high levels of depressive symptomatology may not provide substantive benefits to patients with less obvious symptoms who would not be identified without screening<sup>3</sup>.

Depression screening of all Canadian patients with RA, PsO, and PsA would result in the consumption of large amounts of scarce healthcare resources. Although administering a screening questionnaire in itself would not be expensive, screening also involves followup assessments to separate true-positive screens from false-positive screens, consultations to determine the best treatment option (including watchful waiting), and treatment and followup services<sup>10</sup>. There is a well-known maxim that all screening programs do harm and that some do good as well<sup>10</sup>, and depression screening would unintentionally harm some patients. If screening were implemented,

some patients who receive antidepressant medication following a positive depression screen and assessment will not benefit, but will experience unpleasant and in some cases, serious adverse effects. In addition, messaging related to false-positive screens could lead to the diminishment of the sense of well-being among some patients who are not otherwise concerned about their mental health<sup>3</sup>.

There are many examples of recommendations for screening procedures that are not based on evidence. These recommendations tend to call for more services, but all too frequently do not improve patient outcomes<sup>10</sup>. Implementation of the Canadian Dermatology-Rheumatology Comorbidity Initiative recommendation, which was not based on any evidence that screening would improve health outcomes, would result in the consumption of important resources and would not be expected to improve the mental health of patients with RA, PsO, and PsA.

BRETT D. THOMBS, PhD, Lady Davis Institute, Jewish General Hospital, and the Departments of Psychiatry; Medicine; Epidemiology, Biostatistics, and Occupational Health; Educational and Counseling Psychology; Psychology; and the School of Nursing, McGill University, Montreal, Quebec, Canada; MARIE HUDSON, MD, MPH, Lady Davis Institute, Jewish General Hospital, and the Department of Medicine, McGill University, Montreal, Quebec, Canada. Brett Thombs was supported by an Investigator Salary Award from the Arthritis Society. Dr. Hudson was supported by a Fonds de Recherche du Québec – Santé Clinical Research Scholar award. Address correspondence to B.D. Thombs, Jewish General Hospital, 4333 Cote Ste Catherine Road, Montreal, Quebec H3T 1E4, Canada. E-mail: brett.thombs@mcgill.ca

### REFERENCES

1. Roubille C, Richer V, Starnino T, McCourt C, McFarlane A, Fleming P, et al. Evidence-based recommendations for the management of comorbidities in rheumatoid arthritis, psoriasis, and psoriatic arthritis: expert opinion of the Canadian Dermatology-Rheumatology Comorbidity Initiative. *J Rheumatol* 2015;42:1767-80.
2. Thombs BD, Arthurs E, El-Baalbaki G, Meijer A, Ziegelstein RC, Steele R. Risk of bias from inclusion of patients who already have diagnosis of or are undergoing treatment for depression in diagnostic accuracy studies of screening tools for depression: systematic review. *BMJ* 2011;343:d4825.
3. Thombs BD, Coyne JC, Cuijpers P, de Jonge P, Gilbody S, Ioannidis JP, et al. Rethinking recommendations for screening for depression in primary care. *CMAJ* 2012;184:413-8.
4. Wilson JMG, Jungner G. Principles and practices of screening for disease. [Internet. Accessed January 27, 2016.] Available from: [apps.who.int/iris/bitstream/10665/37650/1/WHO\\_PHP\\_34.pdf](http://apps.who.int/iris/bitstream/10665/37650/1/WHO_PHP_34.pdf)
5. Shakespeare J. Evaluation of screening for postnatal depression against the NSC handbook criteria. UK: National Screening Committee; 2001.
6. Thombs BD, Ziegelstein RC, Roseman M, Kloda LA, Ioannidis JP. There are no randomized controlled trials that support the United States Preventive Services Task Force guideline on screening for depression in primary care: a systematic review. *BMC Med* 2014;12:13.
7. Thombs BD, Ziegelstein RC. Does depression screening improve depression outcomes in primary care? *BMJ* 2014;348:g1253.
8. Canadian Task Force on Preventive Health Care, Joffres M, Jaramillo A, Dickinson J, Lewin G, Pottie K, et al. Recommendations on screening for depression in adults. *CMAJ* 2013;185:775-82.
9. Gilbody S, Sheldon T, House A. Screening and case-finding instruments for depression: a meta-analysis. *CMAJ* 2008; 178:997-1003.
10. Raffle A, Gray M. Screening: evidence and practice. UK: Oxford University Press; 2007.

*J Rheumatol* 2016;43:5; doi:10.3899/jrheum.151223