Anxiety and depression among long-term survivors of cancer in Australia: results of a population-based survey

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To the Editor: We applaud the attempt by Boyes and colleagues to ascertain the level of psychological distress experienced by patients over the years following diagnosis with cancer, through a retrospective, cross-sectional survey of New South Wales cancer registrants.[1] However, we believe several methodological limitations ought to reduce the confidence with which the authors drew their conclusions. The authors' comment that "life after cancer is not all doom and gloom" was, perhaps, intended to be a little facetious. From a scientific point of view, however, such a statement is also very difficult to ever disprove — of course it isn't *all* doom and gloom. Further, the authors' assertion that psychosocial wellbeing several years after cancer diagnosis is comparable with that of the general population cannot be substantiated by studies conducted by this method.

As the survey was cross-sectional, we have no information about the level of distress experienced during the years since diagnosis. A longitudinal design is now de rigueur in this field for this reason. Certainly, clinical experience shows us that many patients actually do experience "doom and gloom" often, indeed, arising from "insidious and relentless disease" — this group may not, however, be well represented by a cancer registry survey sampling 5 years after diagnosis.

Selection bias is a major problem. Of the sample of 2029 eligible, randomly selected people, 655 (32%) were deemed ineligible, with one of the exclusion criteria being not "mentally capable of participating". Could this sizable subgroup have included those who were distressed? Also, of the eligible sample of 1374, 366 (27%) declined to participate. What were the reasons for refusal? Were some too distressed to participate? In summary, how were the 37% who did not participate in the study faring 5 years after diagnosis?

The Hospital Anxiety and Depression Scale (HADS), used by Boyes et al to detect psychological distress in early-stage breast cancer, under-reports distress when recommended cut-off scores are used, compared with a structured clinical interview validated to provide *Diagnostic and statistical manual of mental disorders*, fourth edition (DSM-IV[2]) diagnoses.[3] In other words, the HADS is known to lack sensitivity and positive predictive power in the cancer setting. Other cancer researchers found the same.[4,5] Further, measuring distress only in terms of anxiety and depression 5 years into the adjustment process fails to capture the quality of continuing distress and the degree to which traumatic growth and other forms of meaning-based adjustment have been achieved. The limitations of the HADS should have been better acknowledged.

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1 Boyes AW, Girgis A, Zucca AC, Lecathelinais C. Anxiety and depression among long-term survivors of cancer in Australia: results of a population-based survey. *Med J Aust* 2009; 190 (7 Suppl): S94-S98.
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In reply: We thank Couper and colleagues for their interest in our article,[1] but reiterate that we focused on anxiety and depression experienced by long-term cancer survivors, specifically at 5–6 years after diagnosis. We agree that longitudinal studies are vital for understanding the level of psychological distress experienced during the years since diagnosis, and as discussed in our article, we are currently undertaking a longitudinal study with a diversity of cancer patients to assess a comprehensive range of physical, psychological, social and lifestyle effects of cancer.

Although opinions on the performance of the Hospital Anxiety and Depression Scale (HADS) vary, it is one of the most popular measures of psychological distress, and has been used extensively across the cancer continuum.[2] A recent review of the validity of the HADS concluded that it performs well in screening for caseness of anxiety disorders and depression in a range of patient populations, including patients with cancer, and in the general population.[3]

We acknowledge that our study had the strengths and limitations normally associated with recruiting through a population-based cancer registry.[4] Nevertheless, our results are consistent with a growing body of evidence indicating that most cancer survivors are doing well 5 or more years after diagnosis.[5] We believe our conclusions are justified.

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