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Comment on 'Psychological distress in patients with cancer: is screening the effective solution?'

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Sir,

Screening for psychological distress in patients with cancer is currently being debated in the *British Journal of Cancer*. Screening has been recommended, as elevated levels of distress have been consistently observed and clinicians tend to overlook the need of psychological support (Carlson *et al*, 2012; Carlson *et al*, 2013; National Comprehensive Cancer Network, 2013). On the other hand, it has been argued that screening should not be implemented, as the true benefit of screening and subsequent treatment of psychological distress is far from being definitively proven (Coyne, 2013).

Recent findings on human resilience in the face of potentially traumatic events (PTEs) provide a new perspective on detecting and treating psychological distress in patients with cancer. Humans show strong resilience in the face of potentially traumatic events, such as cancer diagnosis and treatment (Bonanno *et al*, 2011). This observation leads us to propose two alternative approaches towards detecting and treating psychological distress in patients with cancer: 'screening for psychological distress' and 'supporting resilience and case finding'.

PREVALENCE OF PSYCHOLOGICAL DISTRESS

A quantitative meta-analysis found that mood disorders were present in 38.2% (95% CI: 28.4–48.6%) of patients in oncology and haematology (Mitchell *et al*, 2011a). This review points to a high level of mood disorders in oncology and haematology. At the same time, this review shows that no signs of mood disorders were found in $100 - 38.2 = 61.8\%$ of patients. Despite life-threatening disease and frequently intensive treatment, the majority of patients are remarkably resilient. They may have a hard time in coping with these events, they may be in need of support – they do not show signs of mood disorders, however.

Bonanno *et al* (2011) reviewed literature on individual differences in reaction to PTEs, such as violence, natural disaster, or a life-threatening diagnosis. They identified four prototypical trajectories (see Figure 1): '*Resilience is characterized by transient symptoms, minimal impairment, and a relatively stable trajectory of healthy functioning even soon after the PTE; recovery is distinguished from resilience by elevated symptoms and some functional impairment after the PTE followed by a gradual return to normal levels of functioning; chronic distress is characterized by a sharp elevation in symptoms and in functional impairment that may persist for years after the PTE; finally, delayed distress is characterized by moderate to elevated symptoms soon after the PTE and a gradual worsening across time*' (p 514–515). Resilience is the most frequent response to PTEs (Bonanno *et al*, 2011). This applies to patients with cancer as well: resilience was the most frequent trajectory in breast cancer surgery survivors and in patients with colorectal cancer, occurring in 66% and 67% of patients, respectively (Hou *et al*, 2010; Lam *et al*, 2010).

SCREENING FOR PSYCHOLOGICAL DISTRESS

The immediate implication of these observations is that it is not easy to demonstrate the effectiveness of screening. With resilience occurring so frequently, screening necessarily aims at a minority of patients: in a

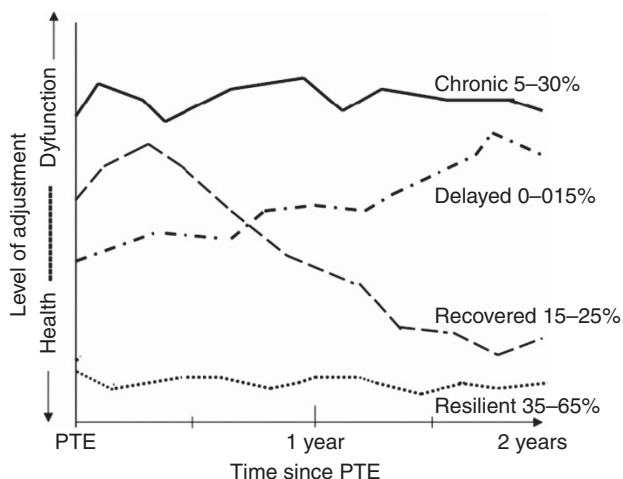*Correspondence: Professor J Dekker; E-mail: j.dekker@vumc.nl

Figure 1. Four prototypical trajectories of adjustment after potentially traumatic events (PTEs). Reproduced from Bonanno *et al* (2011) by kind permission of Annual Reviews.

recent trial on screening, a referral for treatment was given to 19.6% and 26.3% of the patients with lung and breast cancer, respectively (Carlson *et al*, 2010). Even if treatment would be highly effective, screening and subsequent treatment has limited impact on the entire sample, as the majority of the patients is not distressed nor treated.

It can be argued that cancer care needs to be highly organised in order to make screening effective. Targeted selection, enhanced care, and stepped care seem essential organisational requirements. Targeted selection (or triage) involves administering and scoring of the screening instrument by someone other than the clinician – most frequently a nurse; those with high scores are offered a short interview to explore the need for treatment (Gilbody *et al*, 2005; Carlson *et al*, 2010). Enhanced care involves training of clinicians and nursing staff, participation of nursing staff or a specialised mental health provider, and several follow-up contacts. (O'Connor *et al*, 2009; Gilbody and Beck, 2010; Beekman *et al*, 2013). Stepped care involves applying both nurse-led interventions and specialised mental health interventions. Psychologically trained nurses seem to be highly qualified to deliver first-line psychological interventions (Galway *et al*, 2012). Because of their biomedical training, nurses can address psychological issues in the context of somatic care, which results in relatively effective first-line interventions (Galway *et al*, 2012). If the nurse-led psychological intervention is not sufficiently effective, mental health experts (psychologist, psychiatrist) may offer specialised care.

SUPPORTING RESILIENCE AND CASE FINDING

Bonanno *et al* (2011) identified a number of predictors of resilience, including personality (e.g., capacity for positive emotions), resources (emotional and social support), and demographics (male gender, older age, and greater education). These predictors of resilience correspond remarkably well to predictors of quality of life in patients with cancer: a systematic review on patients with haematological malignancies receiving stem cell transplantations showed that poor quality of life was predicted by pre-transplant psychological distress, receiving less social support, female gender, younger age, graft-*vs*-host disease, and specific conditioning regimens (Braamse *et al*, 2012).

These findings open the possibility of an alternative to screening for psychological distress. Because approximately two-thirds of patients with cancer are likely to be resilient (Hou *et al*, 2010; Lam *et al*. 2010; Mitchell *et al*, 2011a), the logical approach would

be to support resilience. Resilience may not come automatically – dealing with a life-threatening disease and intensive treatment requires a huge personal effort. Patients may need emotional support, provided by family and friends, as well as clinicians and nurses during routine care at the hospital (Galway *et al*, 2012).

Patients less likely to be resilient can be identified using empirically derived predictors of poor resilience ('yellow flags'). We suggest that a set of factors indicating increased risk of poor resilience can be developed using simple indicators of emotional or social support (e.g., absence of informal care provided by family members or friends), demographics (e.g., younger age), and specific characteristics of disease and treatment (e.g., graft-*vs*-host disease). Information on yellow flags is usually available in the medical file and does not require extensive testing.

In patients identified as being less likely to show resilience, case finding could be instituted. Case finding is to be distinguished from screening, both conceptually and operationally: '… *screening is the application of a diagnostic test or clinical assessment in order to optimally rule-out those without the disorder with minimal false negatives (missed cases). Screening is often performed in a large population as the first of several diagnostic tests. (…) … Case finding <is> … the application of a diagnostic test or clinical assessment in order to optimally identify those with the disorder with minimal false positives (…). Case finding is often performed in a selected population at high risk for the condition*' (p 150) (Mitchell *et al*, 2011b; Mitchell *et al*, 2012). We suggest to rely on case finding for the selected population of patients with yellow flags, indicating increased risk of poor resilience. If case finding shows the presence of psychological distress, the patient's need for treatment should be discussed; and nurse-led interventions as well as specialised treatment by a mental health expert could be offered, similar to the approach based on screening.

In conclusion, research on resilience provides a new perspective, which may help to solve the debate on detecting and treating psychological distress in patients with cancer. Because the majority of patients with cancer is resilient and may not need psychological treatment, screening is likely to be effective only if screening and treatment are highly organised. Alternatively, one could rely on supporting resilience; patients in need of psychological treatment can be identified based on an empirically derived set of risk factors (yellow flags) and case finding.

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