

Discriminatory power of a 25-item distress screening tool CancerSupportSource $^{\rm SM}$: a cross-sectional study of 251 cancer survivors

Miller Melissa F1, Mullins C. Daniel, Onukwugha Ebere, Gayer Christopher, Golant Mitch, Buzaglo Joanne S.

Cancer Support Community Research and Training Institute, Philadelphia, PA; University of Maryland School of Pharmacy, Baltimore, MD

Background: Distress screening and integrated psychosocial care is imperative for cancer patients, yet no tools are specifically tailored for the community provider setting where the majority of US patients are treated. Any screening tool must be validated and effective at discriminating those at risk for greater distress and the associated poorer health outcomes. The study objective was to test the discriminatory power of a 25-item distress screening tool CancerSupportSource for use among cancer survivors.

Methods: A total of 251 members (90% female, median age 57 years; mixed diagnoses, 46% breast, 9% gynecologic, 7% blood, 6% colorectal, 32% other) of a community-based cancer support network completed a web-based distress screening tool. Participants were asked to rate each of 25 items according to the question "Today, how concerned are you about…?" using a five-point scale (0 not at all to 4 very seriously concerned). A summary score was calculated as the count of items rated ≥2 and the item discrimination index (IDI) as the difference between proportions of high and low scorers rating an item≥2. Cut-points at 13 and 4 yielded equal-sized groups and were used to classify participants as high (n=59) and low scorers (n=60).

Results: Items with the greatest discriminatory power (IDI≥0.8) were: changes or disruptions in work, school or home life; worrying about the future and what lies ahead; feeling too tired to do the things you need or want to do; feeling sad or depressed; ability to exercise or be physically active; and feeling nervous or afraid. Conversely, items with the lowest IDI included: eating and nutrition; tobacco or substance use; transportation to treatment and appointments; considering taking your own life.

Conclusions: The results highlight, among 25 items of a distress screening tool, those items with the greatest discriminatory power to identify cancer survivors with psychosocial distress. Results suggest priority areas for distress screening and referral for support services.