

# Self-Reported Distress

## Adult acute leukemia survivors during and after induction therapy

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**BACKGROUND:** Data suggest that acute leukemia survivors experience moderate to severe distress that does not significantly decline from diagnosis through survivorship.

**OBJECTIVES:** The purpose of this study is to assess acute leukemia survivors' level and source of self-reported distress from active cancer treatment through six months post-treatment.

**METHODS:** A cross-sectional group-comparison design was used. Male (n = 60) and female (n = 40) survivors aged 19–84 years were accrued from a National Cancer Institute–designated cancer center. Patients were sampled at four time points: during induction therapy, at completion, and at three and six months after the end of induction therapy. Distress was self-reported using the Distress Thermometer and its 38-item Problem List (PL). Analysis of variance and chi-square determined relationships among distress scores, PL endorsements, subscale scores, and time groups.

**FINDINGS:** Self-reported distress was elevated for all groups. Highest distress scores were found during induction therapy.

### KEYWORDS

distress; acute leukemia; induction therapy; Distress Thermometer

### DIGITAL OBJECT IDENTIFIER

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**ACUTE LEUKEMIA IS A LIFE-THREATENING CANCER** that affects all ages. It arises in the bone marrow and affects lymphocytes (acute lymphocytic leukemia [ALL]) or myeloid cells (acute myeloid leukemia [AML]) or acute promyelocytic leukemia [APL]) (Cornell & Palmer, 2012; Ferrara & Schiffer, 2013). Malignant cells rapidly multiply and obstruct normal hematopoiesis in the bone marrow, resulting in persistent pancytopenia (Ferrara & Schiffer, 2013; Fleming, 2012). Survival rates in adult-onset leukemia have increased with aggressive therapy (Beavers & Lester, 2010; Cornell & Palmer, 2012; Ferrara & Schiffer, 2013; Marcucci et al., 2014). The initial phase to treat acute leukemia is *induction therapy*, which commonly lasts four to six weeks, possibly more. Induction therapy is administered at the hospital as an inpatient. A person is diagnosed with an abnormal complete blood count and immediately admitted to the hospital from his or her provider's office or emergency department.

Few reports exist of the psychological impact of acute leukemia (Allart, Soubeyran, & Cousson-Gelie, 2013; Danhauer et al., 2013; Rodin et al., 2013) or its effect on quality of life (Korszun et al., 2014). The emotional impact from diagnosis may rapidly escalate as the newly diagnosed person recognizes the seriousness of the disease (Beavers & Lester, 2010). Patients are confronted with distressing treatment decisions and side effects with each chemotherapy cycle until the disease is under control. During treatment, social and spiritual disruption occurs, with prolonged hospital stays and isolation procedures (Beavers & Lester, 2010; Farsi, 2015).

Survivors have reported significant anxiety after diagnosis and during treatment (Beavers & Lester, 2010; Papadopoulou, Johnston, & Themessl-Huber, 2013) that may stem from multiple persistent physical and psychosocial issues (Jones et al., 2015; Jones, Parry, Devine, Main, & Okuyama, 2015; Kent, Mitchell, Oakley-Girban, & Arora, 2014; Korszun et al., 2014; Mattson, Demshar, & Daly, 2013; Warchala, Wojtyna, & Krysta, 2015; Zordan, Manitta, Nandurkar, Cole-Sinclair, & Philip, 2014), including suicide (Fang et al., 2014; Mohammadi et al., 2014). Management of psychological and physical distress is essential to avoid interference and alterations in quality of life (Feuerstein, Bruns, Pollman, & Todd, 2010; Kent et al., 2014). In addition, identification of suicidal risks and ideation is essential to any psychological assessment. In patients with cancer requiring palliative care, hopelessness and depression have