Psychoneurologic symptoms commonly reported by adolescents and young adults (AYAs) following hematopoetic stem cell transplantation (HSCT) include anxiety, depression, fatigue, and pain. Complementary and alternative medicine (CAM) appeals to AYAs as a means of coping with these symptoms. One example of CAM is a publicly available illness blog authored by a young adult woman undergoing HSCT.

## AT A GLANCE

- Internet ethnography was used to study the online illness blog; this relatively new method allows the researcher to understand the lived experience of an individual in an online world.
- Psychoneurologic symptoms experienced by a blogger aligned with symptoms outlined in previous qualitative studies of AYAs undergoing transplantation.
- Blogging is a CAM method that may be useful to the upcoming, technologically savvy population during times of intense stress and isolation, such as during HSCT.

#### **KEYWORDS**

hematopoietic stem cell transplantation; coping strategies; adolescents; young adults

# DIGITAL OBJECT IDENTIFIER 10.1188/17.CJON.531-533

# Hematopoietic Stem Cell Transplantation

Stress, psychoneurologic symptoms, and coping strategies in adolescents and young adults

Jennifer Nance, BSN, RN, and Sheila Judge Santacroce, PhD, RN, CPNP, FAANP

trategies to assist emerging adults (aged 18-28 years) and the adolescent and young adult (AYA) population overall in coping with cancerrelated stressors and psychoneurologic symptoms have been insufficient to improve the quality of cancer care (Peckham, Block, Buchanan, & Pommier, 2017; Robb et al., 2014). Psychoneurologic symptoms commonly reported by AYAs following hematopoietic stem cell transplantation (HSCT) include anxiety, depression, fatigue, and pain. The prevalence of these symptoms has spurred researchers to recommend that patients be screened for these symptoms prior to HSCT to inform personalized coping strategies (Kreitler & Kreitler, 2012; Tecchio et al., 2013).

Complementary and alternative medicine (CAM) appeals to AYAs (Kreitler & Kreitler, 2012), and the results of prior research examining various CAM strategies (e.g., creating music videos, writing creatively) with AYA patients with cancer are encouraging (Peckham et al., 2017; Robb et al., 2014). Writing about illness experiences may be a means to improve stress, coping, and psychoneurologic symptoms among AYAs diagnosed with cancer (Boniel-Nissim & Barak, 2013). One example is an illness blog authored by a young adult woman undergoing HSCT during treatment for acute myelogenous leukemia that was published online by the New York Times

(http://well.blogs.nytimes.com/author/su leika-jaouad). The purpose of this article is to analyze how the blogger described stressors, psychoneurologic symptoms, and coping strategies during reverse isolation following HSCT and to discuss how illness blogging may inform future research and practice.

## Methods

This project used a longitudinal design and Internet ethnography methods (Keim-Malpass, Steeves, & Kennedy, 2014) and was informed by McCain, Gray, Walter, and Robins' (2005) psychoneuroimmunologybased framework. This framework describes how illness-related stressors affect the nervous and immune systems and contribute to the development of psychoneurologic symptoms. The local institutional review board reviewed the project and determined that it was not research; therefore, approval was not required. As a courtesy, the public blogger was informed of the project by email. Twelve blog posts, published from March 29, 2012, to October 15, 2015, that mentioned HSCT were examined (Jaouad, 2015). Included posts were written starting two weeks before transplantation (day -13) through 50 days after transplantation (day 50). Directed content analysis was used to sort phrases by McCain et al.'s (2005) framework components (stress, psychoneurologic response to stress, coping strategy).