An appraisal of the evidence on the efficacy of bibliotherapy on anxiety, distress, and coping in patients with cancer is lacking in the literature. Bibliotherapy is a self-help intervention using a variety of tools, such as self-help workbooks, pamphlets, novels, and audiobooks, to improve mental health. This review identified nine original research articles that examined bibliotherapy as an intervention to alleviate the psychological issues associated with a cancer diagnosis. Data synthesis from these studies provides preliminary evidence that bibliotherapy is an acceptable and beneficial adjunct therapy for patients with cancer experiencing anxiety, depression, and ineffective coping.

AT A GLANCE
- Preliminary evidence shows that patients with cancer can benefit from bibliotherapy.
- Stress reduction, relief of anxiety and depression, and effective coping are among the most frequently patient-reported outcomes of bibliotherapy.
- Consistent use of the same instruments to measure patient-reported outcomes and randomized, controlled trials are warranted to draw solid conclusions and establish the causal link between bibliotherapy and patient-reported outcomes.

KEYWORDS
bibliotherapy; anxiety; cancer; coping; quality of life; breast cancer

DIGITAL OBJECT IDENTIFIER
10.1188/18.CJON.377-380

Bibliotherapy
Appraisal of evidence for patients diagnosed with cancer

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A 36-year-old yoga trainer, E.A., was referred to a breast cancer specialist in a large academic medical center in the Midwestern United States for further evaluation and consultation on treatment options for her newly diagnosed right breast cancer. Two weeks earlier, E.A. had a routine mammogram that showed a new right breast mass. Diagnostic mammogram and ultrasound of the right breast confirmed this mass with no suspicious lymphadenopathy. E.A.’s right breast mass biopsy demonstrated grade 3 infiltrating ductal carcinoma, which was weakly estrogen receptor–positive (1%–10%), progesterone receptor–negative, and HER2– by immunohistochemistry and fluorescent in situ hybridization techniques. The Ki-67 index of the cancer cells was 90%. A genomic test revealed a high-risk breast cancer subtype. Magnetic resonance imaging of the right breast showed a 3.5 cm x 3.2 cm x 2.1 cm mass in the right breast with no lymph node enlargement and no cortical thickening. Positron-emission tomography showed no metastatic disease. E.A. appeared very anxious while waiting for the breast cancer specialist. The oncology nurse provided E.A. with a novel to read to alleviate her anxiety via bibliotherapy.

Bibliotherapy refers to the use of any literature that supports good mental health and is a versatile and cost-effective intervention often used to supplement other types of therapy (GoodTherapy, 2016). The National Library of Medicine (2018) defines bibliotherapy as a form of psychotherapy in which the patient is given carefully selected material to read. Bibliotherapy is often used to treat common mental health problems, such as stress, depression, anxiety, and psychological disorders (Gots, 2016). In the hematology/oncology practice setting, patients may have feelings of anxiety and distress while being screened for cancer, waiting on results of tests, receiving a cancer diagnosis, being treated for cancer, or worrying that the cancer will come back. Despite the history of therapeutic benefits of bibliotherapy in numerous non–cancer-related health issues, such as sexual dysfunction (van Lankveld, 1998), anxiety disorders in children and adolescents (Amer, 1999; James, Soler, & Weatherall, 2005), and depression in older adults (Wilson, Mottram, & Vassilas, 2008), the efficacy of bibliotherapy in alleviating psychosocial health problems in patients diagnosed with cancer has not been previously examined in a systematic manner.

Overview
Patients diagnosed with cancer often experience anxiety and distress that can affect their overall quality of life (National Cancer Institute, 2015). Bibliotherapy is a therapeutic approach primarily used in a variety of mental health problems, such as anxiety and distress, in which written materials play a central role (Glasgow & Rosen, 1978).

Objectives
The purposes of this review are to appraise the evidence on the efficacy of bibliotherapy for alleviating anxiety, depression, and other psychosocial outcome variables in patients diagnosed with cancer and to describe the patient-reported psychosocial outcomes and their measures in research studies involving bibliotherapy.
### TABLE 1.
STUDIES ON THE EFFICACY OF BIBLIO THERAPY IN PATIENTS WITH CANCER

<table>
<thead>
<tr>
<th>STUDY</th>
<th>DESIGN, SAMPLE, AND SETTING</th>
<th>TOOLS AND DATA ANALYSIS</th>
<th>FINDINGS</th>
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<td>Hammer et al., 2017</td>
<td>Exploratory and descriptive study involving 17 self-referred cancer survivors with various cancer diagnoses</td>
<td>24-week intervention called Active Book Club with audiobook listening, walking, and supervised book club meetings. Thematic analysis of pre- and postintervention semi-structured interviews and self-administered questionnaires were used to assess mental health and physical activity behaviors, as well as retention, attendance, and adherence.</td>
<td>The authors concluded that audiobooks may bring new meaning to physical activity and serve as a relief from individual concerns. Some stories affected participants negatively, and there was a high dropout rate.</td>
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<td>Huang et al., 2015</td>
<td>Qualitative design</td>
<td>This study used 45 books discussing early-stage breast cancer written for children aged 3–12 years. Content analysis was used.</td>
<td>These books were found to be beneficial to children and adults, cost effective, and helpful to patients in terms of emotional expression.</td>
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<td>Krebber et al., 2017</td>
<td>Qualitative study with 16 patients with head and neck and lung cancer</td>
<td>2 guided self-help interventions via Internet or booklet were used. Perceived benefits were derived from thematic analysis of qualitative interviews.</td>
<td>Most patients reported that they found the intervention to be beneficial regarding learning what matters in life, being able to put things in perspective, and feeling an enhanced internal locus of control.</td>
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<td>Moccia, 2013</td>
<td>Qualitative design in children with terminal cancer</td>
<td>The book Milo’s Special Kite was created to serve as a bibliotherapeutic tool for children with terminal cancer by allowing them to relate to the story character. Qualitative content analysis of existing children’s books related to death was used, and researchers measured coping.</td>
<td>Results suggest that this book may optimally support children dying of cancer and their family members.</td>
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<td>Roberts et al., 2016</td>
<td>Descriptive, qualitative study with 18 patients with cancer recruited from psychosocial support cancer centers of two tertiary care teaching hospitals in Canada</td>
<td>A self-help workbook, Mastering the Art of Coping in Good Times and Bad, was used. Content analysis was performed using data-coding method. Acceptability and benefits of bibliotherapy were derived through content analysis of qualitative data from interviews.</td>
<td>The workbook was acceptable as an intervention to manage stress. 17 of 18 participants reported that they would recommend the workbook to other patients with cancer. The workbook reinforced existing coping skills, positive thinking, mindfulness, and appreciation of the importance of relationships.</td>
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<td>Schneider et al., 2013</td>
<td>Descriptive, mixed quasiexperimental and qualitative design in 21 patients with cancer (most had lymphoblastic leukemia) who were undergoing or had recently completed treatment</td>
<td>The book Nikki’s Day at Chemo was developed for this study, using coping strategies for a child diagnosed with cancer. The intervention was provided in a patient’s home by a caseworker. Paired-samples t tests were used to determine the change in the Child Outcome Rating Scale.</td>
<td>Perceptions of intrapersonal functioning improved, and physiologic arousal decreased immediately after the initial book reading. The participants consistently recalled the specifics of the coping strategies employed in the book. Parent and child were empowered to cope with cancer together.</td>
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<td>Semple et al., 2006</td>
<td>Descriptive, qualitative study with 28 newly diagnosed patients with head and neck cancer</td>
<td>Psychoeducational intervention program with one-to-one therapy, group therapy, or workbook exercises; content analysis was used to determine preferences for psychoeducational interventions, self-esteem, and anxiety.</td>
<td>Patients preferred the more individualized one-to-one therapy, followed closely by workbook exercises. Group therapy was least preferred.</td>
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<tr>
<td>Semple et al., 2009</td>
<td>Quasiexperimental design in a sample of 54 patients with predetermined psychological dysfunction; 25 participants self-selected into the experimental group, with 29 participants in the control group.</td>
<td>The Psychosocial Intervention Programme was delivered in participants’ homes with a minimum of 2 sessions and a maximum of 6 sessions. Booklets were designed for each of the 8 problem-related areas (anxiety, depression, eating and drinking, fatigue, appearance, speech, smoking cessation, and finance). Questionnaires and analysis of covariance were used to measure anxiety, depression, coping, and quality of life with a 3-month follow-up.</td>
<td>Participants reported reduction in psychological distress (anxiety and depression) and improved social functioning and quality of life for the experimental group, which was sustained into the 3-month follow-up period. All participants reported that they found the bibliotherapeutic texts to be helpful.</td>
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**Note**: Level of evidence for all studies was VI, except Semple et al. (2009) and Schneider et al. (2013), which were level III.
Methods
This review was conducted using Whitttemore and Knafl’s (2005) integrative literature review framework, which consists of specifying the review purpose, performing a literature search using computerized databases, evaluating data using primary sources, analyzing and synthesizing data, presenting the results, and arriving at a conclusion that has evidence-based practice applications (Whittemore & Knafl, 2005).

Integrative Literature Search
PubMed, PsycINFO®, ProQuest, and Academic Search Complete computerized databases were search for relevant literature. The search terms included keywords and Medical Subject Heading (MeSH) terms, such as bibliotherapy, anxiety, depression, coping, quality of life, and cancer. The Boolean operators NOT and AND were used to yield highly relevant articles. In addition, the search was limited to peer-reviewed articles published from 1985–2017. Original research articles that specified bibliotherapy as an intervention in patients diagnosed with cancer and articles that conveyed evidence from the opinions of authorities or reports of expert committees on the therapeutic effects of bibliotherapy on patients with cancer are also included in the final data analysis. Nine articles were included in the final analysis.

Results
Of these nine studies, six used qualitative study design. All nine studies concluded that bibliotherapy is beneficial to patients with cancer (see Table 1). In addition, bibliotherapy is primarily studied in terms of its association with reduced levels of anxiety and depression and improved coping skills (see Table 2). The most commonly used tools to measure anxiety and depression are the Hospital Anxiety and Depression Scale (HADS) and the Child Outcome Rating Scale (CORS). The CORS instrument is intended to measure anxiety, depression, and general functioning (coping) for children aged 6–12 years.

Discussion
Overall, the studies included in this review reported positive results. Of note, researchers have measured various patient-reported outcomes using different measures. Most of the outcomes measured are within the psychological domain; however, there was heterogeneity in the outcomes measured and measures used. Future studies on bibliotherapy in patients diagnosed with cancer should consistently measure key outcomes, such as anxiety, depression, and coping, and should use the same measures to determine the effect size of bibliotherapy on these key outcomes.

Limitations
The studies that met the inclusion and exclusion criteria in this review have small sample sizes that limit the generalizability of the findings. The inclusion and exclusion criteria are arbitrarily determined, and they may have introduced unintended selection bias effect. The use of various measures for a specific outcome presents serious limitation in determining the strength of association between bibliotherapy and its therapeutic benefits. The consistent use of standardized measures for anxiety, depression, and coping is recommended in future studies to facilitate meaningful comparisons and draw solid conclusions.

Data Analysis
The nine original research studies included in the data analysis are categorized and summarized according to bibliotherapeutic approaches, patient-reported outcomes, effectiveness of bibliotherapy and level of evidence using Melnyk and Fineout-Overholt’s (2011) hierarchy of evidence. The patient-reported outcomes and the tools used to measure them are presented according to the highest and lowest frequency of reporting to identify key outcomes associated with bibliotherapy in patients with cancer.
Conclusion
Bibliotherapy appears to be acceptable and beneficial in alleviating patient-reported anxiety and depression and improving coping skills in patients diagnosed with cancer. Randomized, controlled trials are lacking to establish the causal relationship between bibliotherapy and patient-reported outcomes.

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The authors take full responsibility for this content and did not receive honoraria or disclose any relevant financial relationships.

REFERENCES

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