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Risk Factors for Anticipatory Grief in Family Members of Terminally Ill Veterans Receiving Palliative Care Services

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Anticipatory grief is the process associated with grieving the loss of loved ones in advance of their inevitable death. Because anticipatory grief has been associated with a variety of outcomes, risk factors for this condition deserve closer consideration. Fifty-seven family members of terminally ill, hospice-eligible veterans receiving palliative care services completed measures assessing psychosocial factors and conditions. Elevated anticipatory grief was found in families characterized by relational dependency, lower education, and poor grief-specific support, who also experienced discomfort with closeness and intimacy, neuroticism, spiritual crisis, and an inability to make sense of the loss. Thus, in this sample, anticipatory grief appears to be part of a cluster of factors and associated distress that call for early monitoring and possible intervention.

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Anticipatory grief (AG) is the process associated with grieving the loss of loved ones in advance of their inevitable death, as in the course of terminal illness (Rando, 2000; Theut, Jordan, Ross, & Deutsch, 1991). Grievers anticipate the unavoidable death in myriad ways (e.g., watching the patient’s physical decline, disposing of his/her estate and belongings). Anticipatory grief has been conceptualized as a multifaceted construct, characterized by a wide array of responses to the impending loss—including grief, depression, anxiety, irritability, guilt, and generalized functional impairment across multiple life domains (Fulton & Gottesman, 1980; Rando, 1986). Anticipatory grief encompasses many domains of the individual’s life—including the intrapsychic (e.g., emotions, cognitions, planning), interactional (i.e., relating to and helping the dying patient), and familial and social (i.e., relating to family and others; Rando, 1997). These processes can assist grievers in anticipating the loss and continuing their involvement with the dying patient. However, for some individuals the experience can be psychologically debilitating. AG has been linked to a variety of factors—including background characteristics of the caregiver and the dying patient and his/her disease, psychological distress, and maladaptive postloss bereavement (e.g., Al-Gamal & Long, 2010; Garand et al., 2012; Saldinger, Porterfield, & Cain, 2004). However, greater attention to correlates and risk factors for this condition is clearly warranted. In this study, risk factors of AG in 57 family members of terminally ill, hospice-eligible veterans receiving palliative care services were examined.

BACKGROUND

Often when an individual grieves in anticipation of a loved one’s approaching death, it affords the mourner a chance to process the loss in advance of bereavement. Ideally, he or she can integrate beforehand some of the tremendous changes portended by the loss, with the hope of attenuating the distress of bereavement once death occurs. The processes associated with AG often begin well before the death and may be complicated in the face of countless uncertainties surrounding the death itself. For instance, the patient’s unpredictable disease trajectory, treatment-choice quandaries, the physical responsibilities and demands placed on the caregiver, and the stress of making decisions not only on behalf of the patient (Luhrs et al., 2005) but also for the caregiver are all tasks associated with preloss grieving (Siegel & Weinstein, 1983).

Importantly, however, not all researchers espouse the benefits of AG. In fact, some study results indicate that fatal illness exposes family members to...
added tension and tremendous strain that calls into question the benefits of preloss grieving and may actually prevent necessary grief tasks from being pursued (Saldinger & Cain, 2005). Additionally, some researchers claim that an anticipated death produces poorer bereavement outcome than does an unexpected death (Saldinger, 2001; Saldinger et al., 1999; Saldinger et al., 2004), and that grief levels prior to the loss can exceed grief levels following the loss (Gilliland & Fleming, 1998; Parkes & Weiss, 1983). Other researchers report the opposite (Bennett & Vidal-Hall, 2000; Fiewiger & Smilowitz, 1984–1985; Hinds, 1985). Still other studies claim no association between AG and postloss psychological distress (see Carr, House, Wortman, Nesse, & Kessler, 2001). And, given the relatively germinal attempts to understand various aspects of AG, research is inconclusive about whether having time to prepare for a loved one’s passing is actually preparatory (Breen, 2012). But when AG works well for the mourner, it can represent a chance to prepare economically and socially (Carr et al., 2001), to relationally attend to unfinished business with the dying loved one, often fortifying the relationship in the patient’s final days (Blauner, 1966), and to segue naturally into bereavement (Rando, 1986).

Correlates of Anticipatory Grief

Studies examining risk factors for AG are relatively rare. However, empirically, AG has been associated with psychological distress—including intrusive thoughts and yearning (Carr et al., 2001); anxiety (Carr et al., 2001; Mystakidou et al., 2008); depression (Garand et al., 2012; Marwit & Meuser, 2002, 2005; Mystakidou et al., 2008); intense anger, emotional dysregulation, and other atypical grief reactions (Gilliland & Fleming, 1998); hopelessness (Mystakidou et al., 2008); lower levels of well-being (Marwit & Meuser, 2002, 2005); lower quality of life (Al-Gamal, 2013); and greater caregiver burden (Garand et al., 2012; Holley & Mast, 2009).

With regard to caregiver characteristics, AG is associated with being female (Garand et al., 2012) and having less education (Mystakidou et al., 2008). AG has been linked to caregiver decision making, as well. In working with 73 caregivers of cognitively impaired patients, Fowler, Hansen, Barnato, and Garand (2013) found that higher levels of AG predicted lower levels of positive problem solving (i.e., viewing problems as challenges vs. threats, being solution focused and optimistic), and higher negative problem solving (e.g., having maladaptive cognitive-emotional tendencies)—a disconcerting finding given the large number of decisions that caregivers must make on behalf of the patient (Luhrs et al., 2005).

In terms of the patient’s disease, a study by Ott, Sanders, and Kelber (2007) found that the patient’s disease severity (i.e., dementia) was proportionate to the caregiver’s AG. Similarly, higher AG was associated with newer versus older cancer diagnosis in a sample of parents grieving a child.
with cancer (Al-Gamal & Long, 2010), and metastases in adults with advanced cancer (Mystakidou et al., 2008). One study found that the higher the level of cognitive impairment in the patient the higher the level of AG in the caregiver (Garand et al., 2012). Given that severe cognitive difficulties often fuel behavioral dyscontrol, these findings might help explain Holley and Mast’s (2010) results showing that beyond such things as number of caregiving hours, disease severity, and physical impairments, the frequency of the patient’s behavioral problems (e.g., property destruction, embarrassing actions) was the best predictor of AG, with spousal caregivers reporting higher grief scores than adult-children caregivers.

Although studies exploring the role of existential issues in preloss grieving are scarce, one study with caregivers of dementia patients found that spiritual faith was an integral part of preparing for the loss (Sanders, Ott, Kelber, & Noonan, 2008). Another study’s findings suggested that the ability to make sense of the impending loss, specifically in terms of spiritual meaning making, was a critical aspect of AG (Clukey, 2008). Other studies underscore not only that terminally ill veterans’ end-of-life needs often get overlooked (Shreve, 2010), but also the mourner’s spiritual care needs remain largely unmet as their family member transitions to death (e.g., Slape, 2014). Our goal in the present study therefore was to evaluate the preloss bereavement experiences of family members who are anticipating the loss of a veteran as a result of terminal illness, and to assess demographic, relational, emotional, and existential risk factors for anticipatory grief. Specifically, the present study investigated the grief reactions of family members of veterans who had cared for their family member prior to a relatively short admission to a hospital-based palliative care setting in a Veterans Affairs (VA) medical center.

**METHOD**

Participants

Participants were 57 adult family members or friends (hereafter referred to as family members) who were anticipating the death of a terminally ill veteran in the palliative care unit (PCU) of the Memphis Veterans Affairs Medical Center (MVAMC). Demographic characteristics of the family members appear in Table 1.

All (n = 57) of the veterans in our sample were male and had been diagnosed with various types of terminal illnesses—including cancer, end-stage renal disease, dementia, chronic obstructive pulmonary disease (COPD), and other conditions. They ranged in age from 48–93 years old (M = 71.5 years, SD = 12.3 years), and 60% were Caucasian (n = 34), with the rest being African American (n = 23; 40.4%). Thirty-five percent (n = 20) had service-connected status. Their service was reflected in the following...
branches of the military: Army, \( n = 34 \) (59.6\%); Navy, \( n = 9 \) (15.8\%); Air Force, \( n = 6 \) (10.5\%); Marines, \( n = 5 \) (8.8\%); Unavailable, \( n = 3 \) (5.3\%).

During their final hospital admission prior to death, veterans in our sample received palliative care services for a period of 1 day to 6 weeks, with an average of approximately 2 weeks. Specifically, all patients had either acute care or intensive care “statuses” during their inpatient hospitalization. As the sample of 57 veterans was too small to permit detailed comparative analyses of distinctive aspects of their service experience (e.g., exposure to combat or other trauma, historical cohort, or deployment history), our intent was not to relate family member experiences to unique features associated

### Table 1

<table>
<thead>
<tr>
<th>Demographic variable</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
<th>n</th>
<th>%</th>
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<td>Age in years</td>
<td>56.11</td>
<td>12.97</td>
<td>(29–87)</td>
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<tr>
<td># Positive supporters</td>
<td>2.88</td>
<td>1.16</td>
<td>(0–15+)</td>
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<tr>
<td># Negative social interactions</td>
<td>1.61</td>
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<td>(0–10+)</td>
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<td>Sex</td>
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<tr>
<td>Male</td>
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<td>26.32</td>
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<td>Race</td>
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<tr>
<td>Spouse</td>
<td>17</td>
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<tr>
<td>Daughter</td>
<td>14</td>
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<td>24.56</td>
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<td>Son</td>
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<td>17.54</td>
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<td>Sister</td>
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<td>14.04</td>
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<td>Other (e.g., niece)</td>
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<td>8.78</td>
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<tr>
<td>Education</td>
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<td>10.53</td>
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<tr>
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<td>$10,000–$24,999</td>
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<td>$100,000+</td>
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<tr>
<td>DNR</td>
<td>3</td>
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<tr>
<td>Faith tradition</td>
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</tr>
<tr>
<td>Christian</td>
<td>53</td>
<td></td>
<td></td>
<td>93.00</td>
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<tr>
<td>Secular/Nonreligious/Agnostic</td>
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<td></td>
<td>5.30</td>
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<tr>
<td>Other</td>
<td>1</td>
<td></td>
<td></td>
<td>1.80</td>
<td></td>
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</tbody>
</table>

*Note.* DNR = did not report.
with the patient’s service record or medical status. The goal was to investigate within this convenience sample, various predictors of AG, based on the literature regarding factors affecting bereavement outcome.

Materials and Procedure

Approval of study procedures was obtained from both the MVAMC and the University of Memphis’ institutional review boards. Participants were then recruited from the MVAMC inpatient PCU and also via referrals from the Palliative Care Consult Team (PCCT). The PCU is an eight-bed, acute care unit that provides services to veterans with advanced illnesses refractory to treatment and who require inpatient care for aggressive symptom control, and/or are imminently dying. The PCU interdisciplinary team members (IDT; e.g., physicians, nurses, social workers, psychologists, chaplains) work together to provide services for veterans in need of symptom palliation of a life-threatening condition. Specific services include advanced care planning, goals of care discussions, assistance with end-of-life issues, and pain and/or symptom management, among others. A subset of participants had a veteran who received palliative care services while admitted to other units of the hospital or through outpatient services.

The PCCT receives consult requests from a variety of hospital medical personnel and departments asking the team to evaluate veterans regarding a variety of issues (e.g., symptom control, code status, advance directives, goals of care, hospice eligibility). Based on the evaluation and recommendation of the PCCT, veterans who are suitable for transfer to the PCU are ranked by priority for admission. Some consult evaluations result in a determination that the veteran is hospice eligible. For the purposes of this study, to be hospice eligible the patient’s primary physician must certify that the veteran has a terminal illness and likely has less than 6 months to live. Both family members whose hospice-eligible loved one was admitted to the PCU and those who were not admitted were eligible to participate. It was during the consultation with a PCCT member or an IDT member (e.g., social worker, physician, psychologist) that our study was described to the family member, using the following script: “Here is a brochure explaining a study you might be interested in participating in, with contact information to learn more about participation or to ask questions.” To ensure independence in terms of the data and to prevent potential confounding aspects, only one family member per veteran was allowed to participate. If recruitment of a family member was not possible, we solicited the participation of an individual who visited the veteran during his/her hospital stay.

Interested participants were invited by the primary author (an IDT member) to read and sign the Informed Consent Agreement and HIPAA Authorization form. Participants received no monetary compensation for their participation, however, as with all patients’ family members, following
the death of their loved one they were offered bereavement support through the MVAMC’s chaplaincy program. Participants were asked to complete three assessments that varied in terms of time commitment. Only Time 1 assessment data have been analyzed for this study. At Time 1, participants provided data either by completing a battery of self-report, pencil and paper measures in person, or by completing researcher-administered measures in person or via phone, whichever was more convenient for the participant. With only the rare exception of another IDT member, the lead author collected the preponderance of the data.

Measures

As well as examining a variety of demographic factors, we assessed survivor-related characteristics using scales dealing with the following: (a) anticipatory grief, (b) relational dependency, (c) attachment style, (d) religious coping, (e) grief-specific social support, (f) end-of-life meaning making, and (g) neuroticism.

ANTICIPATORY GRIEF

The Anticipatory Grief Scale (AGS; Theut et al., 1991), is a 27-item self-report tool designed to assess the bereavement experience of individuals whose spouses have been diagnosed with dementia; however, it can be used with individuals grieving the imminent loss of a loved one to terminal illness, more generally. For this study, we substituted references to “dementia” with “life-threatening illness.” Items are scored on a 5-point Likert scale, ranging from **strongly disagree** to **strongly agree**, with example items such as: “I get angry when I think about my loved one having [terminal diagnosis]” and “I feel I have adjusted to my relative’s illness.” The possible range of AGS scores is 27–135, with higher scores indicating higher levels of AG. Theut et al. (1991) found good internal consistency (α = .84) for this measure in a sample of wives grieving their husband’s dementia diagnosis. In our sample, internal consistency also was good (α = .89) for this scale.

RELATIONAL DEPENDENCY

The degree to which the participant depended on the ill loved one was assessed by adapting and averaging four items from the Dyadic Adjustment Scale (Spanier, 1976; see also Bonanno et al., 2002). Specifically, given the option of “yes” or “no,” participants were asked to respond to the following statements to describe their relationship with the veteran: “The idea of losing [my loved one] is terrifying to me;” “No one could ever take the place of [my loved one];” “If [my loved one] died, it would be the
worst thing that could happen to me;” “I would feel completely lost if I
didn’t have [my loved one].” Cronbach’s alpha revealed adequate internal
consistency using these questions in an elderly sample of bereaved
spouses ($\alpha = .80$; Bonanno et al., 2002). Cronbach’s alpha using this scale
with our sample was .72.

**ATTACHMENT STYLE**

The Adult Attachment Scale (AAS; Collins & Read, 1990) is an 18-item scale
that measures adult attachment-style dimensions including comfort with
closeness and intimacy (Close subscale), comfort with depending on others
(Depend subscale), and anxiety about being rejected or unloved (Anxiety
subscale). Each item is rated on a 5-point scale ranging from 1 = not at all
classic $characteristic$ to 5 = very characteristic. Collins and Read (1990) reported
Cronbach’s alpha coefficients of .69 for Close, .75 for Depend, and .72 for
Anxiety. Test-retest correlations for a 2-month period were .68 for Close,
.71 for Depend, and .52 for Anxiety. In terms of internal consistency, we
achieved the following Cronbach’s alphas in our sample: .62 for Close, .79
for Depend, and .56 for Anxiety.

**RELIGIOUS COPING**

Religious/spiritual coping was assessed using the Positive Religious
Coping (PRC) and Negative Religious Coping (NRC) subscales, respect-
ively, of the Brief RCOPE (Pargament, Smith, Koenig, & Perez, 1998).
The Brief RCOPE is a reliable and valid measure of religious coping,
using 14 items and 2 subscales to assess both PRC (e.g., “Focused on
religion to stop worrying about my problems”) and NRC (e.g., “Felt
punished by God for my lack of devotion”). The Brief RCOPE has shown
adequate internal reliability for both subscales ($\alpha = .80$ and .69, respect-
ively) in three distinct studies of distressed individuals (Pargament et al.,
1998), and in samples of bereaved African Americans (Burke, Neimeyer,
McDevitt-Murphy, Ippolito, & Roberts, 2011; PRC: $\alpha = .88$ and NRC:
$\alpha = .79$). For the current study, Cronbach’s alphas were: PRC: $\alpha = .89$
and NRC: $\alpha = .75$.

**GRIEF-SPECIFIC SOCIAL SUPPORT**

Social support related to the participant’s grieving processes was mea-
sured using the Inventory of Social Support (ISS; Hogan & Schmidt,
2002). The ISS is a 5-item, self-report questionnaire that uses a 5-point
Likert-type scale ranging from 1 = does not describe me at all to 5 = describes me very well, to measure available grief support, defined
as subjective social support in bereavement. A representative question
is: “I can get help for my grieving when I need it.” Cronbach’s alpha for this scale was .76 in a sample of bereaved parents, and test-retest reliability correlated over a 14-day period was .86. Convergent validity was assessed through negative correlations of the ISS with a psychometrically established scale of trauma avoidance and depression. Burke, Neimeyer, and McDevitt-Murphy’s (2010) examination of grief support among African American homicide survivors revealed adequate internal consistency (α = .77) using this measure. When using the ISS with our sample, internal consistency was α = .79.

END-OF-LIFE MEANING MAKING

The participant’s ability to make sense of the loved one’s prognosis and anticipated death was analyzed using the Integration of Stressful Life Experiences Scale (ISLES; Holland, Currier, Coleman, & Neimeyer, 2010). This scale uses a 5-point response format (1 = strongly agree to 5 = strongly disagree) and assesses the extent to which an event makes sense and allows for a hopeful, purposeful future for the participant. The ISLES consists of two subscales: Comprehensibility assesses the participant’s ability to make sense of a life stressor (e.g., I have made sense of this event), whereas Footing in the World measures the amount of disruption the participant has experienced in terms of his/her worldviews (e.g., values, goals, sense of purpose; e.g., My beliefs and values are less clear since this event). Items are scored such that higher scores indicate more adaptive integration of the loss. Recent studies with OEF/OIF veterans support the convergent and incremental validity of the ISLES as well as its internal consistency and test-retest reliability (Currier, Holland, Chisty, & Allen, 2011; Holland et al., 2010). In their two-sample study (n = 152, respectively), Burke et al. (2014) reported Cronbach’s alphas of .96 and .95 in community and college student samples, respectively. Strong internal consistency (α = .91) was achieved using the ISLES with this sample.

NEUROTICISM

The participant’s level of neurotic tendency was determined through use of the Neuroticism subscale of the Big Five Inventory (John & Srivastava, 1999). This 8-item subscale asks participants to indicate the extent to which they perceive themselves as being emotionally stable by responding to self-descriptive statements such as I see myself as someone who: worries a lot; is emotionally stable; is not easily upset. This subscale achieved a solid level of internal consistency (α = .85) in a recent adult bereavement study (Lee & Surething, 2013). With our sample internal consistency for this measure was α = .74.
Data Analysis Plan

The goal of the present study was to explore risk factors for AG in a sample of family members preparing for the death of their veteran family member. Pearson’s correlations were computed to determine the direction and strength of associations between predictor variables (i.e., risk factors related to the life of the veteran’s family member) and AGS scores as the outcome.

Independent-samples t-tests were conducted to compare AG scores in relation to gender (i.e., males vs. females) and race (i.e., African Americans vs. Caucasians). Also in relation to AG scores, one-way analyses of variance (ANOVAs) tests were conducted to compare the participant’s relationship with the veteran (i.e., Spouse, Child, Sibling, Other), level of education (i.e., Some High School; High School Diploma/GED; Some College; College Degree; Beyond College), annual household income (i.e., less than $10,000; $10,000–$24,999; $25,000–$49,999; $50,000–$74,999; $75,000–$99,999; over $100,000), the number of people the participant could count on, and the number of negative social interactions the participant could expect in relation to other people (i.e., 0; 1–3; 4–6; 7–14, over 14, respectively). In each case, preliminary analyses were conducted to rule out violations of the assumptions of linearity, normality, multicollinearity, and homoscedasticity.

RESULTS

Using Pearson’s correlations, our results revealed the following statistically significant associations in relation to AG (see Table 2): (a) relational dependency, (b) attachment (closeness/intimacy, dependence, and anxiety), (c) spiritual coping, (d) neuroticism, (e) social support, (f) meaning making, and (g) background factors.

Relational Dependency

Relational dependency (as measured by the Dyadic Adjustment Scale) and AG scores showed a positive relationship, such that family members with high levels of relational dependency upon the veteran also experienced high levels of AG.

Attachment (Closeness/Intimacy, Dependence, and Anxiety)

Our assessment of the association between AG and adult attachment revealed statistically significant findings in one of the three subscales. The analysis of AG and the participant’s comfort with closeness and intimacy in relationships (as measured by the Close subscale of the AAS) revealed a negative correlation trending significant, suggesting that individuals who
TABLE 2  Intercorrelations Between Anticipatory Grief and Study Variables (N= 57)

<table>
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Note. Relational Dependency (Dyadic Attachment Scale); AAS = Adult Attachment Scale subscales, Positive and Negative Religious Coping subscales (BRCP); Comprehensibility and Footing in the World subscales (ISLES = Integration of Stressful Life Events Scale); BIG5 = Big Five Inventory—Neuroticism subscale.

†p < .01, ‡p < .05, §p < .10.
are less comfortable in close relationships and have difficulty with intimacy and tend to experience higher levels of AG.

When we tested the relation between AG and the participant’s comfort with depending on others on one hand and whether the participant worries about being rejected or unloved on the other (as measured by the Depend subscale and the Anxiety subscale of the AAS, respectively), we found no statistically significant associations in relation to preloss grief scores.

Spiritual Coping
Positive Religious Coping (as measured by the PRC subscale of the Brief RCOPE) showed no significant association with AG. However, a statistically significant positive relation was found between AG and spiritual distress (as measured by the NRC subscale of the Brief RCOPE), such that grievers who struggled spiritually also struggled in terms of their grief.

Neuroticism
AG and the family member’s level of neuroticism (as measured by the Neuroticism subscale of the Big Five Inventory) were positively correlated, such that adults in our sample with higher levels of AG had correspondingly higher levels of neuroticism.

Social Support
In testing the relation between AG and the participant’s perceived level of grief-specific social support (as measured by the Inventory of Social Support), we found that higher levels of AG were associated with lower levels of social support.

Meaning Making
The correlation between meaning making (as measured by the Integration of Stressful Life Experiences Scale; ISLES Total Scores) and levels of AG showed an inverse relationship, with higher levels of AG associated with lower levels of meaning making. Significantly, inability to make meaning of pending death was the single strongest correlate of AG in the study. Meaning making was also inversely correlated with relational dependency, negative religious coping, and neuroticism, while being positively associated with comfort with close, interdependent relationships, and levels of social support and education.

Using more fine-grained assessments of meaning making, we analyzed the participants’ ability to comprehend the meaning of the life stressor (as measured by the ISLES Comprehensibility subscale) and the amount of...
disruption experienced by the life stressor in terms of respondents’ worldviews (as measured by the ISLES Footing in the World subscale) in relation to AG. We found less ability to make sense of the veteran’s terminal illness (e.g., prognosis, anticipated death) to be associated with higher levels of AG. Likewise, greater disruption in people’s footing in the world was correlated with higher AG, as well.

Background Factors

Finally, exploring categories of potential risk factors in our sample produced no statistically significant difference in participants’ AG scores as a function of gender: males, $M = 76.27$, $SD = 16.36$; females, $M = 79.26$, $SD = 17.43$; $t(55) = -.58$, $p = .56$, two-tailed, $\eta^2 = .014$; race: Caucasians, $M = 80.23$, $SD = 15.88$; African Americans, $M = 75.68$, $SD = 18.84$; $t(55) = .98$, $p = .33$, $\eta^2 = .012$; income: $F(5, 48) = 1.33$, $p = .27$, $\eta^2 = .12$; relationship to the veteran: $F(4, 47) = 2.00$, $p = .11$, $\eta^2 = .15$; number of positive supporters: $F(4, 51) = 1.49$, $p = .22$, $\eta^2 = .11$; or, number of negative social interactions: $F(3, 52) = 1.09$, $p = .36$, $\eta^2 = .06$.

However, there was a statistically significant difference in AG scores as a function of levels of education in our sample: $F(4, 50) = 4.47$, $p < .01$, $\eta^2 = .26$. Post-hoc comparison using the Tukey HSD revealed that the AG mean score for High School Diploma/GED ($M = 80.83$, $SD = 16.94$) was significantly higher than Beyond College ($M = 59.80$, $SD = 9.09$) and was trending significant from College Degree ($M = 66.78$, $SD = 17.30$). Some College ($M = 85.05$, $SD = 13.62$) differed significantly from both College Degree and Beyond College. Overall, these results indicated that participants in our sample with lower levels of education experienced higher levels of grief.

**DISCUSSION**

We evaluated anticipatory grieving in 57 family members of terminally ill, hospice-eligible veterans receiving palliative care services to identify factors that were associated with preloss grieving. We discovered that family members who were less educated, had a dependent relationship with the patient, were uncomfortable with intimate or close relationships, had a tendency to worry excessively, were spiritually distressed, felt unsupported by others as they grieved, and struggled to make sense of the veterans’ forthcoming death were more likely to be psychologically debilitated by their grief. Our findings illuminate a constellation of factors that can make the end-of-life mourning process more problematic for family members, and, in turn, signals the need for early assessment and treatment.
Demographics

Consistent with other researchers (Al-Gamal, 2013; Valizadeh, Zamanzadeh, & Rahiminia, 2013), we found no differences in our sample between males and females who were anticipating losses. However, along with studies of preloss (Mystakidou et al., 2008) and postloss grief assessments (Burke & Neimeyer, 2012), our results indicated that having a lower level of educational achievement may predispose an individual to a more difficult grief experience. Perhaps families with higher educational achievement have access to greater resources, increased resourcefulness, or greater medical literacy, leading to more satisfying interactions with treatment staff or better ability to make sense of their family member’s diagnosis, treatment, and prognosis.

Relational

In a similar vein, in terms of relational dependency, family members in our sample who reported struggling most with AG also were those with a greater tendency to rely heavily on the person they were about to lose. Although one study claimed no association between dependency and grief (Cleiren, 1993), other studies support such a link, particularly with spouses (e.g., Carr, 2004). Perhaps this is because aspects of close relationships often change following the diagnosis of a terminal disease. One study with patients and their spouses highlighted a heightened expression of love and a change in the basis of their commitment after receiving a cancer diagnosis compared to before (Swensen & Fuller, 1992). Rando (1986) writes that in AG, spouses “can move closer behaviorally or socially, while starting to move away intra-psychically” (p. 125), which may be a psychological process that is particularly challenging for relationally dependent persons.

Attachment-Related

Our assessment of attachment and its relation to AG revealed that participants who characteristically found it hard to draw near to or be intimate with others also struggled with the thought of losing their veteran family member. These findings align with studies that found that individuals with avoidant, anxious, insecure attachment styles have difficulty when it comes to losing a treasured family member (Brown, Nesse, House, & Utz, 2009; Meier, Carr, Currier & Neimeyer, 2013; van der Houwen et al., 2010; Wijngaards-de Meij et al., 2007a, 2007b). It may be that subjectively disappointing or traumatic early childhood experiences involving a primary attachment figure (e.g., parent, caregiver), followed by a satisfying adult relationship, such as those with a spouse or a parent who then dies, set the bereaved individual up for a more problematic grief response, especially
as the griever comes to terms with losing an attachment figure who represented a major source of security. However, evaluating this latter speculation would require a more nuanced assessment of the history of attachment to early family members and subsequent relationships (including the patient) than the present study permitted.

Anxiety-Related

Similar to other bereavement researchers (van der Houwen et al., 2010; Wijngaards-de Meij et al., 2007b), we found that highly anxious individuals in our study experienced greater grief-related difficulties. The course of a terminal illness can be lengthy, full of “unknowns” in terms of diagnosis, treatment, and prognosis, and have a trajectory that is characterized by constant change. For the person who is grieving, this scenario often requires ongoing psychological adjustment, while the caregiver watches and waits as the patient waxes and wanes in response to the progression of disease and deteriorating health. Given this, it is not surprising that a predisposition toward anxiety might surface and compromise one’s ability to cope with looming loss. Such findings call for early intervention by psychosocial staff (e.g., social workers, psychologists, chaplains), specifically to facilitate better end-of-life coping and, if possible, circumvent greater postloss distress.

Spiritual Distress

In the current sample, we discovered that positive religious coping was unrelated to anticipatory grief, which was contrary to studies of pending death (Clukey, 2008; Sanders et al., 2008; Slape, 2014) but replicated findings in the context of bereavement (Burke & Neimeyer, 2014; Burke et al., 2011). Specifically, our results showing an association between the grief of anticipating a family member’s death and negative religious coping comports with other studies demonstrating a link between complicated grief following loss and spiritual struggle (Burke & Neimeyer, 2014; Burke, Neimeyer, Holland, et al., 2014; Burke et al., 2011; Burke, Neimeyer, Young, Piazza Bonin, & Davis, 2014). For families, watching a terminally ill family member draw near to death, with its frequent attendant pain and loss of cognitive and physical functioning, not knowing when the end will come or what it will be like, can elicit myriad existential questions, fears, and emotions. In the absence of satisfactory answers, which is often the case (Burke, Neimeyer, Young, et al., 2014), maladaptive grieving can ensue.

Meaning Making

Similarly, grieving individuals in our sample who had difficulty making sense of their family member’s prognosis and predicted death tended to
struggle with higher levels of AG. Sense making has long been tied to preloss grieving (Duke, 1998) and has substantial research support as a predictor of complicated grief following the death as well (e.g., Lichtenthal, Burke, & Neimeyer, 2011). In fact, in a sample of 250 bereaved spouses, Coleman and Neimeyer (2010) discovered that an ongoing search for meaning predicted both concurrent and prospective grief, with high grief scores enduring for 4 years after the death in many cases. Conversely, when sense making did occur in their sample, it prospectively predicted greater overall well-being. In the present study, the finding that an inability to make sense of the loss was the strongest single predictor of AG underscores the relevance of meaning making in unwelcome life transitions, a factor that is all the more striking in view of the association of a struggle for meaning with negative religious coping, neuroticism, and relational dependency, and the positive relationship between meaning made and education, relational security, and social support. Such findings argue for the relevance of meaning-oriented interventions in the palliative care environment as well as in postloss bereavement (Neimeyer, 2015a). For example, Swigart, Lidz, Butterworth, and Arnold (1996) argue that telling the patient’s life story is an important way that families can not only come to terms with the dying person’s death but also create a sense of purpose surrounding their life. Such a suggestion is compatible with the dignity therapy protocol developed by Chochinov and his colleagues (e.g., McClement et al., 2007) in which in-depth recorded interviews with the palliative care patient about his or her life experiences and lessons are then shared movingly with the family, assisting all parties with making sense of the patient’s life through conserving his or her legacy. More broadly, the linkage of a struggle for meaning in anticipation of the death of a family member as well as in its aftermath suggests the usefulness of specific techniques of grief therapy whose aim is to help professionals assist clients in finding sense and significance in their changing lives (Neimeyer, 2015b).

The Role of Social Support

Consistent with other bereavement studies, both preloss (Duke, 1998) and postloss (e.g., Bonanno et al., 2002), our results suggesting that insufficient support exacerbates AG emphasizes the importance of adequate social support while grieving. Although family and social relationships and one’s inherent role and identity within those relationships may change somewhat once the patient dies (Coombs, 2010), Johansson and Grimby (2012) emphasized that rather than replacing one’s existing personal support with professional support from health care workers, family members should seek to maintain and foster important, long-term relationships, especially as death approaches. Positive findings regarding the role of
family therapy in the palliative care context (Kissane & Parnes, 2014) reinforce this conclusion.

Risk Factors for Anticipatory Grief

Many of the risk factors found in the study align with the more extensively investigated postloss bereavement literature. For example, Burke and Neimeyer’s (2012) systematic examination of 43 studies that explored antecedents and predictors of postloss grief identified consistent prospective predictors of intense grieving. Their review identified the following risk factors as most salient: (a) low levels of social support, (b) anxious/avoidant/insecure attachment style, (c) discovering or identifying the body (in cases of violent death), (d) being the spouse or parent of the deceased, (e) high predeath marital dependence, and (f) high neuroticism. However, in this study, we identified several factors beyond those listed here as well as ones that are infrequently examined in AG research, such as the distress associated with lack of meaning and spiritual crisis. In fact, these two factors might be interrelated. When bereaved individuals feel as if they have lost their previous connection with God and/or their spiritual community, when they have more questions than answers, when the looming death of their loved ones elicits newly formed existential questions, they likely will struggle with spiritual meaning making, while simultaneously wrestling with secular issues, such as negotiating the sometimes contrary and confusing medical world in which they are embroiled. The significant correlation between issues of meaning and spirituality in the present study supports this interpretation, as does previous research suggesting that inability to find meaning in the loss may mediate the impact of spiritual struggle on complicated grief (Lichtenthal et al., 2011). Overall, results extend the field’s understanding of risk factors of grieving into the palliative care context, and the lives of family members who are preparing for a veteran’s death from a life-limiting disease.

Study Limitations

The present study displayed several strengths, such as the utilization of carefully validated measures of major constructs, and in conducting a contemporaneous rather than retrospective assessment of AG in the palliative care setting. However, a larger sample would have enabled more detailed statistical analyses that might have identified significant interactions between predictors that were not feasible to investigate given the current number of participants. Our sample included family members anticipating the loss of male veterans in later life. Future studies might uncover additional aspects of AG that are specific to individuals who are grieving a female family member or a child in the context of pediatric settings. Focusing on the current
sample (family members of terminally ill, hospice-eligible veterans, who are predominantly Christian, and living in the mid-South) also constrains our ability to generalize to bereaved adults who are anticipating other types of losses, religions, or regions of the world. Nonetheless, a study strength was the ability to test risk factors of preloss grief in a distinctive sample that has to date been overlooked by researchers.

**CONCLUSION**

Periyakoil and Von Gunten (2007) highlighted the challenges faced by the burgeoning field of palliative care and the necessary growing pains it experiences as end-of-life issues become a larger focus of care for medical institutions across the United States. Fortunately, research also has increasingly focused on the psychosocial issues facing terminally ill patients and their family members. In terms of preloss grieving, many current clinical assumptions about AG stem from entrenched yet often contradictory theories about a construct that many researchers find challenging to define and describe (e.g., Rando, 2000; Saldinger & Cain, 2005). However, findings are ambiguous regarding outcomes associated with AG, as well as if or how helpful it is for the individual who is grieving to have advance knowledge that a family member will soon die. Still, although only a limited number of studies have been conducted on this subject, the link between AG and psychological distress consistently has been documented. This study explored several aspects of predeath loss, such as how well grievers make sense of their experiences, how well they filter the loss through the lens of their faith, the role of their social network in facilitating a positive outcome, the influence of compromised childhood attachments, and the power that relational dependency holds for adult relationships between caregiver and patient, all of which may add to the current discourse in this area. In addition, however, research must identify best practices in preloss interventions that are utilized to ameliorate distress and to ease the transition for family members living in the shadow of impending loss.

**ACKNOWLEDGMENTS**

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