Open Communication and Physical Intimacy in Young and Midlife Couples Surviving Cancer Beyond the First Year of Diagnosis

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OBJECTIVES: To assess the association between levels of dyadic coping (e.g., collaboration, communication) and sexual satisfaction in young and midlife couples surviving cancer beyond the first year of diagnosis.

SAMPLE & SETTING: This cross-sectional study included 49 young and midlife couples (aged 21–57 years) beyond the first year of diagnosis. Couples were from rural and urban areas.

METHODS & VARIABLES: A mailed survey was used to gather data from cancer survivors and their partners.

RESULTS: Controlling for cancer survivor sex and age, open communication was significantly associated with greater involvement in affectionate and sexual behaviors of the couple. Protective buffering behaviors (i.e., concealing worries and avoiding communication) were not significantly associated with engagement in physical intimacy. Perception of how much a partner openly communicates was more salient for engaging in physical intimacy than one's own open communication.

IMPLICATIONS FOR NURSING: Nurses should include partners in planned care, assess the concerns of the partner, and treat the couple as the unit of care.

KEYWORDS cancer; communication; sexuality; survivors; couples; physical intimacy
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It is estimated that there will be more than 22 million cancer survivors by 2030 (American Cancer Society, 2019). However, the incidence rate of cancer is still high (Siegel et al., 2020), which indicates that more people diagnosed with cancer and their partners are surviving a cancer experience and learning to live with the long-term effects. There is extensive research about the effect cancer has on a couple's life, but very little is known about longer-term effects on the couple because the majority of cancer research has been done during the first year of diagnosis or treatment (Chambers et al., 2015; Wittmann et al., 2013). In addition, most dyadic cancer research has focused on physical health and symptoms, such as pain (Haun et al., 2014; Lyons et al., 2014; Magsamen-Conrad et al., 2015), and mental health of the couple (e.g., depression, anxiety) (Falconier & Kuhn, 2019; Rottmann et al., 2016; Segrin & Badger, 2014; Shaffer et al., 2016), with far less focus on the impact of cancer on couples' sexual health.

Sexuality and sexual health are central to psychological health (World Health Organization, 2017). Cancer research has consistently shown sexual health and physical intimacy to be important to cancer survivors and their partners, and they are often cited as areas of unmet need during the cancer trajectory (Gorman, Smith, et al., 2020; Lindau et al., 2011; Reese et al., 2019). It is common for cancer survivors to experience sexual health problems, including negative body image, loss of sexual desire, and partner rejection (Gandhi et al., 2019; Sun et al., 2016), which can continue even after the completion of treatment and can negatively alter the couple's sexual life long term (Gorman, Smith, et al., 2020). Partners may also face difficulties in resuming sexual activities because

they are afraid of hurting the cancer survivor (Enzlin et al., 2017). Even after cancer treatment, partners may still fear resuming their sexual life with the cancer survivor for the following reasons: believing that initiating sexual activity is inappropriate, fear of rejection, and guilt toward their sexual needs (Enzlin et al., 2017).

There is strong evidence of the interdependent nature of mental and physical health within couples and the protective role of collaborative and dyadic coping behaviors (Falconier & Kuhn, 2019; Langer et al., 2017; Lee & Lyons, 2019). For example, couples with high levels of collaboration, open communication, and supportive behaviors about cancer when dealing with illness tend to have improved health and relational outcomes (Li & Loke, 2014; Milbury & Badr, 2013; Oh & Ryu, 2019; Regan et al., 2015; Traa et al., 2015). A well-illustrated example of this is a study by Manne et al. (2015) that found that holding back communication within couples involving a patient with prostate cancer was associated with worse psychological stress. The longer-term effect of couples' open communication or withholding communication about sexual health after cancer is still largely unknown. Although dyadic researchers have uncovered important facets of the impact of cancer on couples' sexual health (Bois et al., 2013; Gorman, Smith, et al., 2020), there is still limited research that has focused on longer-term effects and associated modifiable factors. The current study tackles an important gap in the literature by examining the impact of open communication about cancer in general on physical intimacy (affectionate and sexual behaviors) in young and midlife couples one to three years postdiagnosis of cancer.

Cancer research that has included younger couples, those aged younger than 40 years, often does not specifically target the developmental stage of people aged 21–39 years, making it harder to draw conclusions about couples in this age range. However, developmental stage plays an important role, particularly for couples experiencing illness at an unexpected time in the life course (i.e., off-time). For example, in a study by Acquati and Kayser (2019), couples aged younger than 40 years had significantly higher depressive symptoms, clinical depression, and anxiety than couples aged 40 years or older. Previous research has suggested that younger couples are at high risk of developing worse outcomes, such as psychological stress and sexual issues, because of the lack of adjustment to the unexpected (off-time) health crisis (Berg & Upchurch, 2007; Manne et al., 2015), which could be due to the lack of well-formed coping behaviors for the couple (Berg & Upchurch, 2007). It can be particularly difficult for younger couples to adapt to sexual problems (Gorman, Drizin, et al., 2020; Gorman, Smith, et al., 2020).

There are several dyadic frameworks that have contributed to the dyadic science of illness during the past two decades, including work by the current authors. The current study is guided by the theory of dyadic illness management, which proposes that couples who collaborate and work together as a team will have better outcomes (Lyons & Lee, 2018). A notable strength of the theory is that there is a focus on the health of the dyad as a unit and the roles of shared appraisal and collaboration on optimizing dyadic health outcomes. In addition, the theory includes risk and protective contextual factors at the individual (e.g., sex), dyadic (e.g., developmental stage of the couple), familial (e.g., family support), and cultural (e.g., collective versus individualistic culture) levels. The theory was recently explored in a qualitative study of sexual health in young couples with cancer, which found that more collaborative management and open communication about sexual health was associated with more positive sexual health for the couple (Gorman, Smith, et al., 2020). The current study builds upon this work to examine the association between two types of communication within young and midlife couples surviving cancer and engagement in physical intimacy behaviors. Specifically, the authors aimed to examine whether active engagement (i.e., open communication) and protective buffering (i.e., concealing and avoiding communication) were associated with affectionate and sexual behaviors in young and midlife couples beyond the first year of diagnosis, controlling for the age and sex of the cancer survivor. The authors hypothesized that young and midlife couples who perceived their partner to engage in more active engagement (i.e., open communication) or less protective buffering (i.e., hiding worries or avoiding communication) would report greater levels of affectionate and sexual behaviors as a couple.

Methods

Participants and Procedures

Current data are drawn from a pilot study exploring the longer-term impact of cancer on young and midlife couples in urban and rural areas in Oregon (Lyons et al., 2021). Couples were eligible to participate if (a) the cancer survivor had been diagnosed with a primary invasive cancer in the past one to three years, (b) both the cancer survivor and their partner were

aged from 21 to 58 years, (c) both were able to speak and read English, and (d) both had access to a telephone and had resided together for at least one year. The term "partner" was used throughout the study to refer to a spouse or intimate partner residing with the cancer survivor. Couples included unmarried and same-sex partners. Couples were recruited through the Oregon State Cancer Registry using targeted mailings across the state of Oregon to cancer survivors who met initial eligibility criteria (i.e., diagnosis, time since diagnosis, age, and zip code). Strategic mailings to cancer survivors within rural and urban designated areas was purposeful, given the parent study's goal to examine rural–urban differences.

The recruitment procedure followed the standard protocol used by the cancer registry. The registry directly mailed letters to only those cancer survivors who had consented to be informed about research opportunities. Recruitment letters included contact information for the research team at Oregon Health and Science University in Portland. Interested participants were screened by telephone. For couples who were eligible and agreed to participate, a packet containing separate surveys for the cancer survivor and partner and separate consent forms was mailed to the couple. Couples were instructed to complete the surveys separately and return them, along with signed consent forms, in the provided stamped and addressed envelopes. These procedures are similar to those used by the current research team in all couple research and dyadic research at large. The study was approved by the institutional review board at Oregon Health and Science University (no. e15498).

A total of 160 cancer survivors made contact with the study team. During telephone screening, 48 cancer survivors were screened as ineligible (38% did not have a partner; 40% did not meet the age criterion; and 22% did not meet diagnosis criteria, could not read English, or the survivor had died). An additional 33 of the 160 cancer survivors could not be reached with several attempts, and 2 declined to participate. After screening for eligibility, 77 couples were mailed surveys. Although the authors received surveys and consent forms for 57 cancer survivors and 56 partners, only 49 couples had complete data and consent forms and were included in the current analysis.

Measures

Active engagement was assessed using the five-item subscale of the Dyadic Coping measure (Buunk et al., 1996; Hagedoorn et al., 2000). Active engagement assesses the extent to which the cancer survivor and partner view each other's active involvement and support (e.g., "my partner tries to discuss cancer with me openly," "my partner asks me how I feel") (Buunk et al., 1996; Hagedoorn et al., 2000). Responses are rated on a five-item Likert-type scale from 1 (never) to 5 (very often), with higher scores indicating higher levels of perceived active engagement by one's partner. This subscale has exhibited high Cronbach's alphas (0.77–0.97) in studies of couples with cancer (Hagedoorn et al., 2000; Hinnen et al., 2007), including in the current study (cancer survivor: Cronbach's alpha = 0.89; partner: Cronbach's alpha = 0.81).

Protective buffering was assessed using the six-item subscale of the Dyadic Coping measure (Buunk et al., 1996; Hagedoorn et al., 2000). Protective buffering assesses the extent to which the cancer survivor and partner view each other's use of hiding concerns and denying worries (e.g., "my partner tries to hide his or her worries about me," "my partner just waves my worries aside") (Buunk et al., 1996; Hagedoorn et al., 2000). Responses are rated on a five-point Likert-type scale from 1 (never) to 5 (very often), with higher scores indicating higher levels of perceived protective buffering by one's partner. This subscale has shown high Cronbach's alphas (0.75–0.87) in studies of couples with cancer (Hinnen et al., 2007), including in the current study (cancer survivor: Cronbach's alpha = 0.77; partner: Cronbach's alpha = 0.65).

The Physical Intimacy Behavior Scale measures the frequency with which couples engage in four affectionate (i.e., touching, kissing, hugging, and caressing) and two sexual (i.e., sexual intercourse and foreplay) behaviors (Druley et al., 1997). The questions are measured on a four-point Likert-type scale from 1 (none of the time) to 4 (most or all of the time), with higher scores indicating greater engagement. The affectionate and sexual behavior subscales have demonstrated strong internal consistency and construct validity in women with chronic pain (Druley et al., 1997) and couples surviving cancer (Lyons et al., 2016), including in the current sample (cancer survivor affectionate behaviors: Cronbach's alpha = 0.94, partner affectionate behaviors: Cronbach's alpha = 0.94; cancer survivor sexual behaviors: Cronbach's alpha = 0.92; partner sexual behaviors: Cronbach's alpha = 0.94).

Analysis

Descriptive statistics were measured using IBM SPSS Statistics, version 26.0, to characterize couples in the sample. Paired-samples t tests were used to examine differences between cancer survivors and partners on continuous level variables, given the non-independent

nature of the data. Multilevel modeling was measured using Hierarchical Linear Modeling, version 7.2, to analyze physical intimacy data at the level of the couple to control for interdependencies between cancer survivor and partner data (Lyons & Lee, 2020; Lyons & Sayer, 2005). Multilevel modeling has several

TABLE 1. Sample Characteristics by Group

	Cancer Survivors (N = 49)		Partners (N = 49)	
Characteristic	**$\bar{X}$**	**SD**	**$\bar{X}$**	**SD**
Age (years)	43.49	9.01	43.86	9.72
Time living together (years)	16.53	9.73	–	–
Time since diagnosis (years)	2.18	0.56	–	–
Raw scores on key variables				
Active engagement/open communication	13.43	4.69	13.24	3.79
Protective buffering	9.29	4.94	7.42*	3.67*
Engagement in affectionate behaviors	11.21	3.88	10.84	3.13
Engagement in sexual behaviors	4.09	1.73	4.04	1.53
Characteristic		**n**		**n**
Sex				
Female		34		16
Male		15		33
Education				
College degree or higher		36		29
Less than college degree		13		20
Race				
White		44		40
Non-White		5		9
Ethnicity				
Non-Hispanic		43		43
Hispanic		6		6
Employment status				
Employed		30		37
Not employed		19		12
Residence				
Urban		27		27
Rural		22		22
Type of cancer				
Breast		10		–
Cervical/ovarian		5		–
Colon		5		–
Renal		5		–
Brain		4		–
Leukemia		4		–
Other (e.g., kidney, lung, lymphoma)		16		

* $p < 0.05$

Note. Comparisons of means were conducted using paired t tests. Scores on active engagement and protective buffering ranged from 1 to 5, with higher scores indicating higher levels of perceived active engagement and protective buffering. Scores on affectionate behaviors and sexual behaviors ranged from 1 to 4, with higher scores indicating more engagement in physical intimacy behaviors.

advantages for the analysis of dyadic data. The dyad is considered to be the unit of analysis rather than the individual cancer survivor or partner. In addition, these dyadic models control for the interdependence in outcomes within the couple (i.e., physical intimacy behaviors). Finally, actor (e.g., cancer survivor communication variables predicting cancer survivor physical intimacy behaviors) and partner effects (e.g., partner communication variables predicting cancer survivor physical intimacy behaviors) can be examined. Two unadjusted (i.e., no covariates) within-dyad models were run to estimate the population averages of both physical intimacy subscales (i.e., affectionate behaviors and sexual behaviors) within couples.

Adjusted between-dyad models were run to examine the roles of (a) active engagement on both physical intimacy subscales and (b) protective buffering on both physical intimacy subscales for a total of four models. Each of these between-dyad models consisted of simultaneous regression equations for cancer survivors and their partners controlling for survivor age and sex. Hierarchical Linear Modeling uses full-information, maximum-likelihood estimation, which approximates parameter values based on available data to obtain unbiased estimates. Finally, given the small sample size in this study, effect sizes (r) were calculated and reported in tables using Cohen's r guidelines of r = 0.1 (small), r = 0.3 (medium), and r = 0.5 (large).

Results

Sample Characteristics

Table 1 displays the sociodemographic characteristics for the sample of 49 couples and relevant variables examined in this study. Cancer survivors were, on average, aged 43.49 years (SD = 9.01), with 43% of the sample being aged from 27 to 40 years. Cancer survivors were predominantly female, non-Hispanic, and living in an urban area, with a college degree or higher. Breast cancer was the most commonly reported type of cancer. Couples had resided together for an average of 16.53 years (SD = 9.73). The sample contained one same-sex couple. The average time since diagnosis was 2.18 years (SD = 0.56). Cancer survivors and their partners did not significantly differ in how much they engaged in physical intimacy behaviors (affectionate or sexual behaviors) with each other. Cancer survivors and partners also did not significantly differ in how much they perceived each other engaging in open communication (i.e., active engagement) ($p > 0.05$). However, cancer survivors were significantly more likely to perceive their partners as engaging in protective buffering behaviors than their partners perceived them ($p < 0.05$).

Correlates With Affectionate Behaviors

Table 2 shows the multilevel model results for predicting couple engagement in affectionate behaviors, controlling for sex and age of the cancer survivor. Results of the first model include two significant actor effects. First, the cancer survivor's perception of their partner's active engagement significantly predicted levels of affectionate behaviors by the cancer survivor ($p < 0.001$, large effect size = 0.5). The more the cancer survivor perceived their partner to openly communicate with them, the more often the cancer survivor reported engaging in affectionate behaviors with their partner. Second, the partner's perception of the cancer survivor's active engagement significantly predicted levels of affectionate behaviors by the partner ($p < 0.001$, large effect size = 0.52). The more the partner perceived the cancer survivor to openly communicate with them, the more often the partner reported engaging in affectionate behaviors with the cancer survivor.

The second model shows the results of protective buffering on affectionate behaviors. There were no significant associations between protective buffering and affectionate behaviors for either cancer survivor or partner. The age of the cancer survivor was significantly associated with engagement in both affectionate behaviors by both members of the couple. The older the cancer survivor, the less the couple engaged in affectionate behaviors with each other ($p < 0.05$).

Correlates With Sexual Behaviors

Table 3 shows the multilevel model results for predicting couple engagement in sexual behaviors, controlling for the sex and age of the cancer survivor. Results of the first model include one significant actor effect. The perception of the cancer survivor of their partner's active engagement significantly predicted levels of sexual behaviors by the cancer survivor ($p < 0.05$, moderate effect size = 0.34). The more the cancer survivor perceived their partner to openly communicate with them, the more often the cancer survivor reported engaging in sexual behaviors with their partner. In addition, a moderate effect size was observed for the partner's perception of the cancer survivor's open communication on partner sexual behavior (effect size = 0.28). The second model shows the results of protective buffering on sexual behaviors. There were no significant associations between protective buffering and sexual

TABLE 2. Multilevel Models Predicting Couple Engagement in Affectionate Behaviors

	Cancer Survivors (N = 49)			Partners (N = 49)		
Fixed Effect	**B**	**SE**	**ES (r)**	**B**	**SE**	**ES (r)**
Model 1: Active engagement						
Cancer survivor age	−0.08	0.05	0.24	−0.08	0.04*	0.3
Cancer survivor sex	0.41	0.99	0.06	−0.84	0.76	0.17
Active engagement (cancer survivor)	0.39	0.1**	0.5	0.09	0.08	0.17
Active engagement (partner)	0.17	0.12	0.21	0.39	0.1**	0.52
Model 2: Protective buffering						
Cancer survivor age	−0.13	0.06*	0.33	−0.11	0.05*	0.35
Cancer survivor sex	−0.29	1.18	0.04	−1	0.95	0.17
Protective buffering (cancer survivor)	−0.09	0.11	0.13	−0.04	0.09	0.07
Protective buffering (partner)	−0.03	0.15	0.03	−0.16	0.12	0.22

* $p < 0.05$; ** $p < 0.001$
ES—effect size; SE—standard error
Note. B represents unstandardized coefficients. Higher scores on active engagement indicate that the respondent perceived their partner to engage in more open communication and active engagement behavior. Higher scores on protective buffering indicate that the respondent perceived their partner to avoid communication and engage in more protective buffering behavior.

behaviors for either member of the couple. The age of the cancer survivor was significantly associated with survivor engagement in sexual behaviors. The older the cancer survivor, the less often they engaged in sexual behaviors with the partner ($p < 0.05$).

Discussion

The current study is the first known to examine the roles of active engagement and protective buffering on affectionate and sexual behaviors in a rural–urban sample of young and midlife couples surviving cancer beyond the first year of diagnosis. Several findings are noteworthy. Although both cancer survivors and partners perceived each other to engage in similar levels of open communication (i.e., active engagement), cancer survivors perceived their partners to engage in significantly more concealing and avoiding communication than their partners did of them. Second, there were no differences in level of engagement in either affectionate or sexual behaviors reported by cancer survivors or partners. Third, open communication appeared to play a more important role in physical intimacy of the couple than hiding worries or avoiding communication. Finally, results from this study suggest that one's own perception of how much one's partner openly communicates is more salient for engaging in physical intimacy than one's own open communication.

Open communication (also known as active engagement) and protective buffering are two types of dyadic coping behaviors described by dyadic theories and frameworks as distinct ways couples cope and manage with illness (Berg & Upchurch, 2007; Lyons & Lee, 2018; Regan et al., 2015). One is not considered to be the absence of the other. The current findings support these distinctive roles because each type of dyadic communication played a different role in terms of physical intimacy within the couple. First, open communication about cancer in general (the items did not specifically reference sexual health or physical intimacy, but couples may have thought about these topics when responding) played a salient role in engagement in physical intimacy within couples; protective buffering did not. This suggests that it is not simply enough to reduce the level of protective buffering behaviors that members of the couple engage in to increase physical intimacy. Rather, being actively engaged in open communication with one's partner around the context of cancer may optimize the emotional and relational openness and trust that are important for physical intimacy. These findings suggest not only the differential roles of these ways of communicating within the couple, but also the importance of designing couple communication interventions strategically for specific outcomes. Protective buffering and concealment of worries and concerns have shown strong associations with greater depressive symptoms and negative health outcomes (Lyons et al., 2019, 2020), suggesting those behaviors may play a more salient role for the specific communication and management of illness and symptoms

within the couple. Clearly, both forms of communication are important targets for optimizing the physical, mental, and relational health of the couple, albeit in different ways.

Levels of open communication were reported as similar within couples in the current sample, but cancer survivors perceived their partner to conceal more and avoid communicating more than their partners perceived them doing so. Partners often struggle to know how to support their partner with cancer or know how much they should discuss the cancer rather than distract from the topic. Male partners are more likely to want to fix the problem rather than engaging in reciprocal disclosure (something that has been found to be particularly important to female cancer survivors) (Manne et al., 2019, 2020). Although it is possible that sex played a role (most partners were men), the models controlled for sex of the cancer survivor. It may be more likely that the role of being a partner leads to greater avoidance or holding back in communication to protect the cancer survivor more than the cancer survivor wanted (Enzlin et al., 2017; Manne et al., 2020). Clearly, more research is needed to tease apart the factors associated with protective buffering in young and midlife couples surviving cancer.

Results from this study also suggest that perceptions about a partner's communication seem to be most salient for physical intimacy (affectionate and sexual behaviors) than being perceived as openly communicating by one's partner. Although these findings represent the way communication was assessed in the current study (i.e., measures asked each member of the couple to rate their partner's communication), it is possible that the perception or appraisal of one's partner's communication is more salient than one's own communication behaviors for physical intimacy. The perception that one's partner is openly communicating (e.g., "tries to discuss the cancer with me," "asks me how I feel," "is full of understanding," "makes me feel I am not alone") may be an important part of the supportive behaviors and collaboration that promote emotional and physical intimacy. The findings support the need for dyadic interventions around communication and supportive behaviors within couples surviving cancer.

Both members of the couple engaged more in physical affection when they perceived more open communication from their respective partner. However, only cancer survivors were more likely to engage in sexual behaviors when they perceived more open communication from their partner. No such association was found for partners. Consistent with prior research (Enzlin et al., 2017), this may be indicative of a hesitation or reluctance on the part of partners to initiate sex because of guilt or discomfort expressing sexual desires. Renegotiations of the sexual relationship are often necessary for couples surviving cancer (Enzlin et al., 2017). Future studies should examine whether couples struggling with sexual health issues benefit more from dyadic

TABLE 3. Multilevel Models Predicting Couple Engagement in Sexual Behaviors

	Cancer Survivors (N = 49)			Partners (N = 49)		
Fixed Effect	**B**	**SE**	**ES (r)**	**B**	**SE**	**ES (r)**
Model 1: Active engagement						
Cancer survivor age	−0.05	0.02*	0.29	−0.03	0.02	0.24
Cancer survivor sex	−0.1	0.49	0.03	0.18	0.45	0.06
Active engagement (cancer survivor)	0.12	0.05*	0.34	−0.02	0.05	0.06
Active engagement (partner)	0.02	0.06	0.05	0.11	0.06	0.28
Model 2: Protective buffering						
Cancer survivor age	−0.06	0.03*	0.32	−0.04	0.02	0.25
Cancer survivor sex	−0.57	0.54	0.16	0.18	0.5	0.06
Protective buffering (cancer survivor)	0.05	0.05	0.15	0.01	0.05	0.01
Protective buffering (partner)	0.02	0.07	0.04	−0.02	0.06	0.05

* $p < 0.05$
ES—effect size; SE—standard error
Note. B represents unstandardized coefficients. Higher scores on active engagement indicate that the respondent perceived their partner to engage in more open communication and active engagement behavior. Higher scores on protective buffering indicate that the respondent perceived their partner to avoid communication and engage in more protective buffering behavior.

interventions targeted at specific communication around sexual issues rather than more generic communication about cancer (Gorman, Drizin, et al., 2020; Gorman, Smith, et al., 2020).

The age of the cancer survivor was significantly associated with engagement in affectionate and sexual behaviors. Specifically, older partners were significantly less likely to engage in affectionate behaviors, and older cancer survivors were significantly less likely to engage in sexual behaviors. It is difficult to make conclusions about the role of developmental stage, given the small sample size, but further research is needed to understand the role of age in physical intimacy for couples with cancer.

Limitations and Strengths

The current study has several limitations that should be noted. First, the sample size is small, which limited the number of variables included in the model and did not allow for testing of the moderating roles of age or sex of cancer survivors. The parent study was a pilot, and it is likely (given some of the effect sizes) that there was not adequate power to detect all significant associations in the current analysis. Larger, adequately powered, and more diverse samples are needed to replicate results and advance the knowledge base in this area. Second, although the hypotheses were directional and guided by the theory of dyadic illness management, the study was cross-sectional. Therefore, the authors cannot determine directionality of the findings. Longitudinal research that identifies the modifiable risk and protective factors associated with long-term couple outcomes is warranted. Third, the secondary nature of the analysis limited the variables that were available to examine. The authors also need to acknowledge that the sample was predominantly White; therefore, the authors cannot generalize findings to other racial or ethnic groups. Future work is needed to build upon these findings and address these limitations to advance this important field of study, particularly in diverse and underrepresented populations.

Despite these limitations and the nature of this study, there are several notable strengths and implications of this work. First, few studies have examined younger couples surviving cancer beyond the first year of diagnosis. The current study explored the role of two types of communication on the physical intimacy of young and midlife couples one to three years postdiagnosis. Second, although there has been a recent increase in studies specifically targeting young adults and young couples with cancer, there is still very little known about this vulnerable population. The current study targeted young and midlife couples, and 21 of 49 couples were aged from 27 to 40 years. Future research is needed to make more concerted efforts to include couples across the life span to begin to understand the unique needs and experiences of couples at different developmental stages. Third, most studies of couples with cancer focus on breast or prostate cancer so that role and biologic sex are confounded. The current study included several cancer diagnoses so that sex of the cancer survivor could be examined distinctly from the role.

KNOWLEDGE TRANSLATION

- Open communication within couples beyond the first year of a cancer diagnosis plays an important role for physical intimacy behaviors of the couple.
- Nurses are well situated to target the cancer survivor and their partner as the unit of care to facilitate more open communication.
- Couple interventions that focus specifically on sexual health and physical intimacy challenges may be particularly important.

Implications for Research

This study also has theoretical, research, and clinical implications. First, the study provides strong evidence for the guiding theory of dyadic illness management (Lyons & Lee, 2018) and adapted work by Gorman, Smith, et al. (2020) for sexual health by confirming the importance of collaborative dyadic management behaviors, such as open communication within the couple. Second, further research in this area is needed to replicate this work in larger, more diverse samples and to explore these concepts within couples from diverse cultures. Third, longitudinal work is needed to examine these associations over the cancer trajectory to determine whether these protective effects are sustained. Fourth, given the off-time nature of cancer for young and midlife couples and the importance of communication and disclosure for many women, research that explicitly examines the moderating roles of age and sex may help to inform tailored interventions. Finally, this study provides additional evidence for the need for dyadic interventions to optimize the health of the couple surviving cancer. Targeted dyadic interventions that focus on the specific challenges of sexual health and physical intimacy for the couple could be explored.

Implications for Nursing and Conclusion

This study focused on assessing the impact of active engagement and protective buffering on physical intimacy in young and midlife couples surviving cancer beyond the first year of diagnosis. The findings provide

further evidence that the negative impact of cancer not only endures past treatment, but also affects both members of the couple. It is vital for nurses to include partners in clinical planning, educational sessions, and follow-ups. The current findings provide support for the call for oncology nurses to treat the couple as the unit of care (Northouse, 2012). Nurses can play a pivotal role in fostering the strengths of the couple and facilitating discussions about the impact of cancer on both of them, identifying the couple's needs and providing support and resources. Nurses are well situated to assess the concerns of the partner, who is often overlooked during the cancer trajectory.

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