

Coping with sexual concerns after cancer: the use of flexible coping

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Abstract

Introduction Although cancer treatment commonly has a negative impact on sexual functioning, sexual concerns are still largely undertreated in routine cancer care. The medical model that guides current approaches to sexual care in cancer does not adequately address key patient needs.

Methods In this paper, we describe a broader approach to understanding and treating sexual concerns in cancer that focuses on the construct of flexibility in behavioral and cognitive coping strategies. We previously presented this model in the context of general medical conditions. We now adapt this model to the context of cancer, focusing on issues related to the benefits of flexible coping, interventions that shift perspectives following cancer, and on coping as a couple.

Results We argue that coping flexibly with sexual concerns is likely to lead to improvements in mood and sexual and relationship satisfaction. We present clinical applications of the flexible coping model, including suggestions for assessment and sexual concerns and methods of introducing

flexible coping into both the content and process of clinical interactions with patients.

Discussion Finally, we discuss areas for future research, including the development of a validated instrument, the use of electronic methods of assessment, and intervention trials directly addressing flexibility in coping.

Keywords Sexuality · Cancer · Coping · Cognitive flexibility · Sexual function

Introduction

There are approximately 11 million cancer survivors in the USA, and this number is increasing [75]. Individuals who have had cancer are living longer and are increasingly concerned about their quality of life. One quality of life domain that is often impacted by cancer treatment is the sexual domain. Many cancer patients and their partners report concerns about their sexual quality of life and changes to their sexual functioning [29]. Being diagnosed with and treated for cancer can impact sexuality and intimacy through effects on physical, emotional, and social functioning. Physical changes associated with surgery and radiation can lead to the removal or atrophy of genitals or of nearby nerve tissue. This can cause male and female sexual arousal disorders, dyspareunia (painful intercourse), and orgasmic dysfunction [41, 44, 78, 83, 89]. Side effects from chemotherapy and other agents such as fatigue, nausea, and alopecia (i.e., hair loss), are often related to reduced sexual desire [3, 9, 36, 80]. Emotionally, a cancer diagnosis can affect sexuality through related stress, anxiety, or depression, body image changes due to surgical scars or damage to sexual organs or other body parts, and feelings of loss of masculinity or femininity that can arise

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due to hormonal therapies [34, 52, 64, 93]. In the interpersonal or social realm, with changes in couples' relationships from more of equal partners to a patient/caregiver relationship come threats to established sexual roles and sexual interest [82, 91]. Moreover, many couples who avoid sexual activity during treatment may find it more challenging to resume sex once the treatment is completed [16, 35]. The impact of cancer and its treatments on sexuality are important because evidence suggests that sexual concerns are strongly related to cancer-related quality of life including symptom severity, disease-related interference, and disease-related distress [74].

There is growing recognition that there are limitations in the ways that these sexual concerns are currently being addressed in cancer patients. There is also interest in novel and broader-based approaches to understanding and treating sexual aspects of quality of life in cancer [46, 65]. In this paper, we adapt the construct of flexible coping with sexual concerns, previously described in medical conditions [11], to cancer survivors.

We first offer an analysis of the status of current research on approaches to sexuality in cancer survivors and provide a review of limitations of current approaches. Next, we present a model of coping centering on the construct of flexibility that has implications for understanding how cancer survivors and their partners deal with their sexual concerns, both clinically and in terms of research on coping with sexual difficulties. Then, studies relevant to the construct of flexible coping with cancer-related sexual concerns are reviewed. Finally, implications of the construct of flexible coping for clinical practice are presented, and future areas for research concerning sexual care in cancer are discussed.

Status of current approaches to sexuality in cancer survivorship

Interventions in women with cancer

A recent review of interventions identified 12 studies that investigate sexuality or body image in women with cancer [4, 12, 13, 20, 25, 39, 40, 43, 53, 62, 70, 85]. These studies involved mostly breast cancer, with a few including women with mixed cancers [13, 39] or with gynecological cancer [20, 85], and included education and emotional support and/or cognitive behavioral skills training (i.e., cognitive restructuring and communication training). This review found the strongest intervention effects on sexual outcomes for studies that were couple-based and that included content directly focusing on sexual outcomes [12, 25, 53, 85]. Next, we discuss in greater detail four of the studies that utilized a couple-based approach and that contained at least

one session directly targeting improved sexual outcomes through either sexual counseling or sexual techniques from sex therapy (i.e., sensate focus exercises) [12, 25, 53, 85].

In an early study of a treatment addressing sexuality in cancer, Christensen [25] compared the effects of a structured, four-session, psychosocial intervention in 20 women post-mastectomy and their partners with a no-treatment control condition. The intervention consisted of patient and spouse education, communication training, emotional support, and sexual counseling. Significant treatment effects were found for patient and partner sexual adjustment and mood. Despite its small sample size, this intervention is important in helping lay the groundwork for current research interventions targeting sexuality for patients with cancer.

In a recent pilot study, Baucom et al. [12] compared a six-session, couple-based relationship enhancement intervention (RE) with treatment as usual in women with breast cancer. The intervention was innovative in focusing on coping as a couple and in teaching training in joint problem-solving, communication and emotional expression, and finding growth. Along with other improvements, results showed that women in the RE condition experienced significant improvements in sexual drive and satisfaction compared with those receiving treatment as usual. Interestingly, effects on male partners' sex drive and satisfaction were also highly significant. This study's innovativeness and comprehensive approach is likely to influence interventions to come addressing sexuality and other aspects of functioning in breast and other cancers.

One of the interventions with the greatest focus on sexuality in women with breast cancer (N=40) was conducted by Kalaitzi et al. [53]. This study compared a six-session intervention, which included patient and spouse education, communication training, and both sexual counseling and sex therapy techniques, with a no-treatment control group. Significant improvements were found in orgasm frequency, communicating desire, perceived attractiveness to their partner, body image, relationship satisfaction, and depression and state anxiety in the treatment group compared with the control group, suggesting that such an intervention can have benefits for a range of outcomes.

Finally, Scott et al. [85] randomly assigned 94 women treated for early stage breast or gynecological cancer and their partners to a seven-session coping intervention (CanCOPE) that included sessions addressing sexual concerns, education for the patient and spouse, communication training, cognitive coping skills, benefit finding, and couple-coping skills, with individual coping training for the woman, or a medical education control. Results of the study showed that women in the CanCOPE condition reported beneficial effects for sexual intimacy, perceived

acceptance of their postoperative appearance, and in their sexual self-schema (i.e., cognitive representation of the sexual self) [28] when compared to women receiving either an individual coping skills intervention or medical information alone. The intervention by Scott et al. was highly comprehensive and is notable in showing improvements of an intervention with a dyadic focus in sexual outcomes, body image, and sexual self-concept.

Taken together, findings from these studies suggest that directly addressing sexuality with couples-based approaches can yield significant benefits for sexual outcomes of women with cancer.

Interventions in men with cancer

Despite the large number of studies examining the effects of prostate cancer on male sexuality, a recent review by Latini et al. [58] found only eight intervention trials that addressed sexuality directly [22, 38, 59, 63, 68, 69, 92, 95]. Four studies [22, 38, 69, 92] were found to be particularly innovative in that they taught strategies to deal with sexuality and sexual function problems. Surprisingly, only one of these studies incorporated sex therapy techniques (i.e., sensate focus) [22]. In contrast with comparable studies in women, these four studies have significantly larger sample sizes, ranging from 51 (couples) [22] to 101 (patients only) [69]. We now highlight these four studies in greater detail.

In one of the most comprehensive treatment interventions conducted in a cancer sample, Canada et al. [22] studied a four-session sexual rehabilitation program delivered either in couples or individual formats to 84 men with prostate cancer with erectile dysfunction and their partners. The intervention consisted of a sexual history discussion, communication training, sensate focus practice exercises, and suggestions for sexual problems and coping strategies, among other topics. Significant positive effects were found for erectile function, orgasmic function, intercourse satisfaction, overall satisfaction on the International Index of Erectile Function, and for partners' sexual function as well, irrespective of delivery in a joint or patient-only format. Although effects of the intervention diminished slightly by the 6-month follow-up, results are promising in that they show positive effects of a brief sexuality-focused intervention on multiple aspects of sexuality. One important limitation of this study was a high level of non-compliance or drop out with treatment ($n=33$).

Giesler et al. [38] tested the effects of a unique six-session, nurse-driven intervention in addressing the post-treatment adjustment needs of 99 prostate cancer patients and their partners. A computer program was used to assess and monitor patients' needs and to guide the individualized interventions delivered by nurses. The intervention consisted of targeted suggestions, educational material, and discussions with the nurse regarding needs and concerns.

At 7 and 12 months post-treatment, patients in the intervention condition reported significant improvements in sexual functioning, limitations on role functioning caused by sexual dysfunction, and cancer worry, compared with patients who received standard care. This study is particularly innovative because of its methodology in using nurses for delivery and employing computer-assisted technology to guide the intervention. Methodologies such as this may help to inform future interventions that can be tailored to individual patient needs.

Titta et al. [92] studied whether short-term psychodynamic therapy was helpful in facilitating use of intracavernosal injections for erectile dysfunction in 57 men treated for localized prostate cancer or muscle-invasive bladder cancer. Participants were randomized to receive either didactic information alone or didactic information along with telephone-based, short-term psychodynamic sexual counseling. Both groups experienced improved erectile function over the 18-month follow-up period, although men in the sexual-counseling group were more likely to be compliant with using the therapy. This study's focus on compliance with a medical treatment for erectile dysfunction offers a novel approach to designating treatment outcomes in a clinical trial addressing sexuality in the context of cancer.

Finally, Molton et al. [69] examined the effects of a 10-week group-based cognitive behavioral stress management intervention on sexual functioning in 101 men treated for localized prostate cancer. The intervention contained both educational and cognitive behavioral components (e.g., relaxation training and interpersonal skills). Results showed that men receiving the intervention reported significantly better sexual functioning than those in the control condition, who participated in a 4-h workshop with similar but abbreviated content as the formal intervention. The researchers found that the group intervention was effective at improving sexual functioning but that interpersonal sensitivity, a construct reflecting a problematic interpersonal style characterized by oversensitivity to criticism and a chronic perception of rejection and abandonment [69], moderated the effects of the treatment. Men with greater interpersonal sensitivity showed greater pre-post improvement in sexual functioning after completing the 10-week intervention than those in the intervention group with lower interpersonal sensitivity [69]. These findings are significant in suggesting that individual differences may influence the effects of psychosocial interventions for cancer populations.

Taken together, results of these studies show that psychosocial interventions hold promise for addressing the sexual needs of patients with prostate cancer. The studies reviewed suggest that sexuality is best addressed directly in both men and women. However, there remain significant limitations of the current approaches to sexuality in cancer survivorship.

Limitations of the current approaches to sexuality in cancer survivorship

Despite a fair number of research trials examining interventions that address sexual function and body image in cancer, there is a lack of clinical attention to sexual concerns in routine cancer care [9, 24, 29]. The topic of sexuality is often ignored even when cancer treatments are known to have significant effects on sexual function, as in the case of surgical removal of the rectum [24] or in the radiation treatment of gynecological cancer [18]. Providers may fail to bring up the issue of sexuality due to lack of adequate training, an opinion that sexual issues are unimportant relative to survival, their own assumptions related to patients' sexuality, embarrassment, and fear of being intrusive [29, 42, 51, 54]. Patients also may be reluctant to raise the issue themselves for many of these same reasons. Yet, there is evidence that many cancer patients would like to discuss issues of sexuality related to their cancer treatment with health care providers [18, 48].

If addressed, the approach to sexual issues in cancer tends to adhere to a medical model of sexuality that often falls short of addressing key patient concerns. When sexual concerns are raised within the context of cancer care, the goals of patient and the provider are often mismatched. Patients may desire information on practical strategies to cope with sexual changes and loss of intimacy, while the provider may focus on issues related to contraception, fertility, and menopausal or erectile status [49, 50]. This apparent disconnect is reflected in the research literature; compared with the large number of research studies that focus on the frequency and severity of sexual dysfunctions such as erectile dysfunction and or dyspareunia [46], there are far fewer studies investigating topics related to intimacy and broader effects on sexuality [6, 30, 37, 64].

Limitations in the current literature may be partly to blame for the inadequacy in the current status of addressing sexuality in cancer care. First, few intervention studies addressing adjustment following cancer target sexuality [12, 53, 85] and even fewer are entirely focused on addressing sexuality [22, 38, 69, 92], especially in women. This gap in the literature may perpetuate the belief that sexual concerns are not of great importance to patients and create challenges in the design of effective interventions. Second, studies that do address sexuality often lack comprehensive, standardized questionnaires assessing multiple aspects of sexuality, including sexual functioning, impact of the disease on their sexual lives, or on how patients or partners are coping with sexual difficulties. This makes it difficult to compare efficacy among studies and to gain a complete picture of the ways in which interventions may improve patients' and partners' ability to adjust to changes in their sexual lives. Moreover, knowledge of

patients' challenges in coping might help providers identify patients at greater need for services such as sexual counseling. Third, trials that test clinical approaches to sexual difficulties in cancer (even those using psychosocial interventions), especially those in men with cancer, tend to focus on alleviating the symptoms of sexual dysfunctions (e.g., erectile dysfunction and female sexual arousal disorder) and to neglect broader issues related to sexuality and intimacy (e.g., loss of sexual desire and loss of non-sexual intimate activities) [19, 22, 69]. Very few studies have included techniques known to improve sexual function and enjoyment in a broader sense, such as sex therapy exercises, in the content of the intervention, despite evidence that interventions teaching these techniques tend to report greater effects on sexual outcomes [58]. The few studies that have examined broader issues such as intimacy for cancer survivors have found more powerful effects on sexual outcomes [22, 85], suggesting that such a broad focus is indeed warranted. Fourth, studies have generally not investigated the timing of interventions addressing sexuality as they have tended to restrict participation to survivors who are post-treatment [86]. Although sexual concerns may be more salient for survivors who have completed treatment, there is some evidence that patients undergoing treatments such as chemotherapy also have sexual and intimacy needs, though the nature of these needs may differ [5]. The absence of research studies that include patients along the treatment trajectory limits knowledge on what kinds of interventions might be helpful for patients immediately after diagnosis, during treatment, or in the palliative care phase, and poses a challenge for the clinical care of patients at less well understood points along the cancer trajectory. Finally, while there is preliminary evidence that multimedia interventions (e.g., interventions utilizing telephone or computer-based approaches) may be helpful in assisting with adjustment to chronic illnesses in general as well as in cancer [21, 38, 85], multimedia interventions incorporating both assessment and treatment through use of computer-assisted systems are only beginning to be studied in the treatment of cancer-related sexual concerns [38]. Such methods may have potential for clinical applications in the context of a busy oncology clinic while also providing safe, effective valuable methods for data collection [1, 2].

A model of coping flexibly with sexual concerns

Previously, we [11] proposed a model of coping with sexual dysfunction in chronic illness that emphasized the construct of flexibility. Based on prior research in sexuality, self-concept, and coping, we argued that a more flexible notion of sexuality for individuals may be beneficial to individuals

who, because of chronic medical conditions, may not be able to engage in previous methods of sexual activity, including sexual intercourse. This model posits that individuals with cancer facing sexual concerns may differ in their initial level of flexibility, that individuals may change their level of flexibility by broadening the way they conceptualize sexual function and activity (i.e., through treatment approaches that enhance flexibility), and that their level of flexibility is likely going to have ramifications for psychosocial outcomes (sexual satisfaction, relationship satisfaction, and mood). This flexible coping model identifies two potential domains of response that can be altered to be more flexible in response to sexual concerns: (a) the definition of sexual function and activity and (b) the centrality of sexual function and activity (i.e., how critical sexual functioning and activity are within the patient's and partner's overall self-concepts).

In our prior discussion of flexible coping [11], we proposed that individuals experiencing threats to their sexual function and enjoyment may benefit from both “bottom-up” and “top-down” responses to sexual function disturbances. A “bottom-up” response implies cognitive and behavioral changes to the definition of sexual function (i.e., how sexuality is construed for an individual). Using coping theory as originally proposed by Folkman et al. [33] as a basis, the construct of flexible coping refers both to the process of appraisal used in assessing the challenges at hand, here sexual or intimate in nature, and to the strategies utilized by a person in confronting these challenges. As shown in Fig. 1a, a person with an inflexible definition of sexual function and activity may consider sexual activity to be synonymous with sexual intercourse. When confronted with an inability to engage in sexual intercourse, this individual may appraise this challenge (i.e., stressor) as being at odds with his or her capacity to be sexual and may use the strategy of avoidance of intimacy in dealing with this challenge. Therefore, both cognitive shifts (i.e., thinking about sexual function and activity differently) and behavioral shifts (i.e., engaging in a different sexual activity) constitute changes in an individual's definition of sexual function and activity.

In contrast, we propose that greater flexibility, as reflected in broader, less rigid thoughts and behaviors, is reflected in a more beneficial appraisal process of the challenge that is likely to lead to more effective coping strategies, which in turn, will lead to positive psychosocial outcomes (e.g., increased sexual satisfaction, relationship satisfaction, and mood). As shown in Fig. 1b, a person with a flexible definition of sexual function and activity views sexual intercourse, non-intercourse sexual activities, and non-sexual intimacy activities as being part of sexual activity. This individual is likely to appraise challenges as being more easily overcome and is likely to cope more

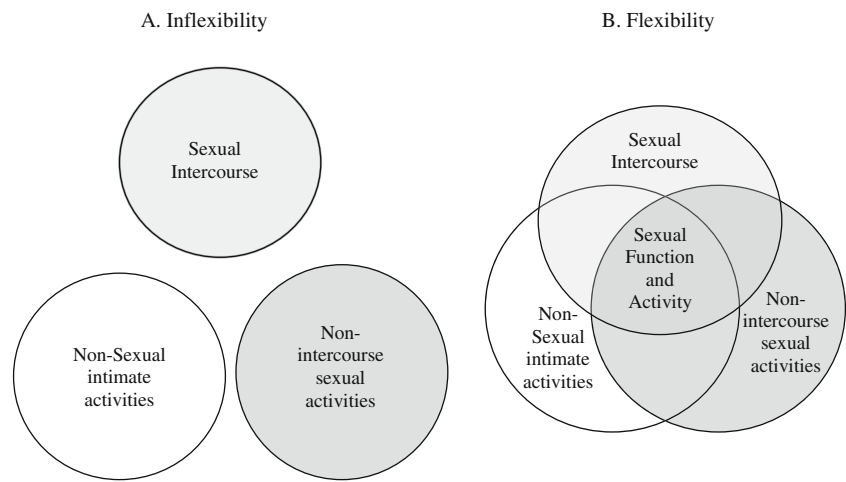
successfully with challenges such as those that limit the inability to engage in intercourse. A treatment approach utilizing the flexible coping construct might focus on a patient's ability to shift from an inflexible to a flexible definition of sexual function and activity; this shift involves considering a broader range of sexual and non-sexual intimacy activities. As shown in Fig. 2, an individual may engage in alternative forms of sexual activities through different behaviors, including oral sex or mutual caressing, when intercourse is not feasible or is uncomfortable; these activities, along with a cognitive concept of flexibility, would be characteristic of a flexible definition of sexual function and activity. Prior research supports the proposal that flexible coping has beneficial effects for individuals responding to stressful situations [23, 60] including beneficial effects on sexual satisfaction in responding to cancer-related sexual threats [7].

In addition to “bottom-up” changes, a unique aspect of the model we propose is the process by which an individual can use a “top-down” approach to respond to sexual concerns by making changes in the centrality (i.e., importance) of sexual function and activity within his or her self-concept (see Fig. 2). Prior research on modification of self-concept [66] and goal disengagement (i.e., relinquishing efforts toward one goal in favor of efforts toward an alternative, meaningful goal) [96, 97] describes flexibility in the self-concept as beneficial in coping with stress and having positive outcomes for mood and well-being. Moreover, shifting efforts and goals from unattainable to attainable ones has been linked to psychological health in elderly individuals recovering from a major illness [31], in the parents of children with developmental disabilities [87], in individuals with chronic conditions such as age-related vision [17], and in chronic pain patients [79].¹

We build on this prior research by arguing that changes in the centrality (i.e., importance) of sexual function and activity within a person's self-concept can be made by relinquishing a focus on sexual functioning (e.g., erection) as key in the self-concept when this focus is no longer beneficial (i.e., when sexual intercourse is not possible due to physical dysfunction). Instead, an individual with sexual concerns may benefit from shifting efforts toward more feasible goals such as enjoying alternative activities that will foster intimacy (i.e., non-sexual intimacy-related activities). Both behavioral shifts (e.g., taking long walks with one's partner) and cognitive shifts (e.g., changing one's notion of what it means to have an intimate relationship) characterize changes in the centrality of sexual function that

¹ Please see the initial publication describing this model by Barsky, Friedman & Rosen [11] for a more detailed review of the research informing the construct of flexibility in coping with sexual challenges in the context of medical illness.

Fig. 1 Diagrams of inflexibility and flexibility in the definition of sexual function and activity



are likely to lead to positive outcomes for both the individual and the relationship in terms of increased sexual and relationship satisfaction and enhanced mood. Examples of the thoughts, behaviors, and psychosocial outcomes that characterize the stages of inflexible and flexible coping in the definition and centrality of sexual function and activity in cancer are shown in Tables 1 and 2, respectively.

A clinical illustration

We now present a clinical illustration of a male patient with colorectal cancer who has had a permanent colostomy due to his cancer surgery. Having a stoma and an external colostomy pouch for collection of stool can be extremely

disruptive to patients' body image and intimate relationships [64, 88]. Patients with stomas report poorer sexual functioning and more sexual concerns than patients without stomas [88]. Because these challenges could present a significant problem to a patient with overly rigid sexual beliefs, we choose the example of a colorectal cancer patient living with an ostomy as an appropriate example in which to apply the model of flexible coping with cancer-related sexual concerns. We want to stress that a male colorectal cancer patient serves as only one example of how low flexibility in coping might affect outcomes and, in turn, of how a treatment approach to this problem might seek to enhance flexibility. Neither the model of flexible coping nor the treatment approaches based on this model are applicable only to individuals sharing the profile of the patient given

Fig. 2 Model of flexible coping with cancer-related sexual concerns

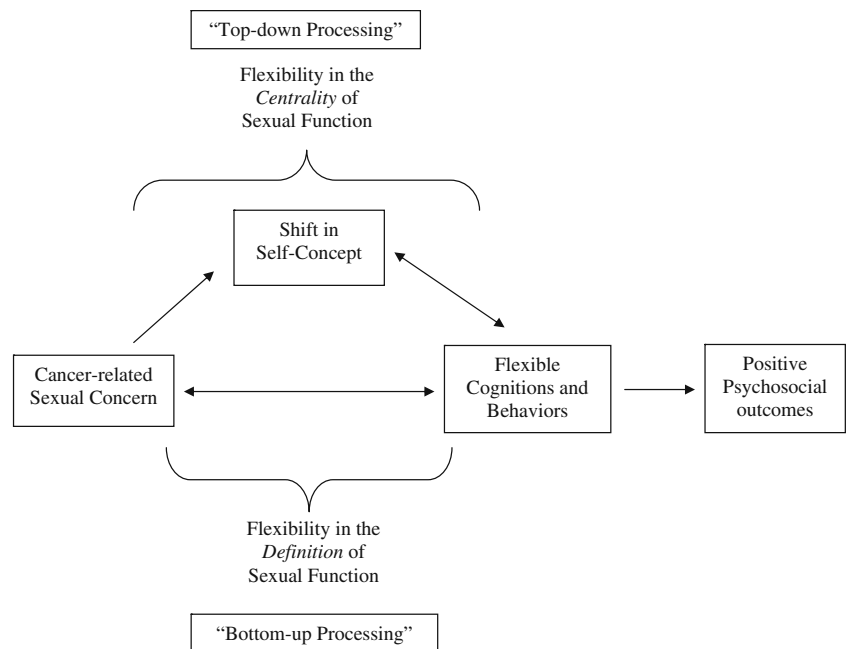


Table 1 Examples of stages of inflexible and flexible coping in the definition of sexual function and activity in cancer

Stage in coping process	Inflexible	Flexible
Thought	“Cancer has ruined our sex life. We won't be able to have intercourse again”	“Cancer has changed our sexual relationship but we can still have a good sex life, just in different ways than before”
Behavior	Avoiding sexual activity	Engaging in mutual masturbation
Psychosocial outcomes	Negative mood; poor sexual functioning; enhanced relationship functioning	Positive mood; enhanced sexual functioning; enhanced relationship functioning

in the illustrative example (i.e., married male patient with colorectal cancer) but are likely to be relevant to patients of either gender and of any relationship status.

John is a 72-year-old gentleman who has been married to his wife, Gwen, for 50 years. A retired mechanic, John underwent an abdominal perineal resection in the treatment for his rectal cancer 2 years ago and has a permanent colostomy. Gwen was a bookkeeper who raised four children and is active in their church. Although the couple had had an active, enjoyable sex life together prior to the surgery, the physical dysfunction and caretaking following the cancer surgery caused difficulties in maintaining a satisfying sexual relationship. John complained of complete erectile dysfunction and low sexual desire. In addition, Gwen complained that she felt more like John's caretaker after his surgery, often helping him to clean his ostomy, which made them feel more like patient and caregiver than lovers. They also noted that the ostomy was distracting during sexual activity.

John and Gwen both viewed sexual activity as important to their relationship although John was reluctant to refocus his attention to alternative goals such as intimacy; instead, he continued to search for solutions for his physical dysfunction (e.g., Viagra and penile injections). Gwen's suggestions to consider alternative sexual and intimacy-related goals and activities were met with resistance, and she became increasingly resentful. Both noticed that they had ceased engaging in non-sexual intimate activities (e.g., going dancing together) as well as sexual activities. John also pointed out that lately they had become “snappier” with one another.

John expressed thoughts that are typical of a rigid, narrow definition of sexual function and activity. When asked to define intimacy, he stated that “to me, intimacy

means having sex, by that I mean intercourse.” He also stated that his ostomy “got in the way,” and it seemed “unnatural to have sex with this thing on my stomach.” He expressed thoughts such as “I can't satisfy Gwen without intercourse” and “I can't even have sex anymore; I don't feel like a man.” When having these thoughts, he experienced sadness, hopelessness, shame, and anger. Because of these thoughts and emotions, John had avoided initiating sexual contact with Gwen for some time and had begun to feel quite depressed about the poor quality of their sexual relationship.

John and Gwen were open to sexual counseling. The goals of the counseling approach were to help them make behavioral and cognitive changes that would facilitate their coping more flexibly with their concerns and resume their satisfying intimate relationship. Behaviorally, treatment focused on introducing the couple to a broader range of sexual activities. Because John had a relatively traditional notion of intimacy as consisting almost exclusively of sexual intercourse, he was initially somewhat skeptical about the ability of other sexual activities (e.g., oral sex) to “be a substitute” for sexual intercourse. The treatment approach therefore began with an introduction to sensate focus exercises [67]. In sensate focus exercises, partners take turns pleasuring one another with the goal of focusing on the physical sensations rather than having intercourse or orgasms. Engaging in these exercises allowed them to experiment and explore sexual activities that did not involve intercourse as well as practice communicating openly with one another regarding their experiences. In addition to the sensate focus exercises, John and Gwen had the idea of engaging in sexual activity in the bath or shower, when they could easily respond to cleanliness concerns. This change of scenery was novel and erotic to them both while providing them with a way of dealing with John's ostomy during sexual activity.

Table 2 Examples of stages of inflexible and flexible coping in the centrality of sexual function and activity in cancer

Stage in coping process	Inflexible	Flexible
Thought	“If we could get back to having sex again like we did before the treatment, we could have our intimate life back”	“After the treatment, we show our intimacy through sharing laughs and enjoying our time together”
Behavior	Neglecting intimacy in relationship	Scheduling a weekly “date night”
Psychosocial outcomes	Negative mood; poor relationship functioning	Positive mood; enhanced relationship functioning

The more John and Gwen experienced enjoyment in novel sexual and other intimate activities, the more flexible they found themselves to be in their coping. Specifically, experimenting with new, enjoyable sexual activities allowed John and Gwen to experience direct positive benefits of their experimentation, including increased sexual desire and arousal, and enhanced feelings of intimacy. This experimentation also helped them challenge initial inflexible thoughts and shift their definition of sexual function and activity. For instance, as he and his wife began to enjoy additional kinds of sexual activity, including manual stimulation and “outercourse” (rubbing of the genitals outside the vagina), John gained substantial evidence against his thoughts that sexual activity was necessarily defined as intercourse. In addition, John was able to see that by engaging in these sexual activities, he was able to satisfy Gwen, thereby confronting his initial thought that he was unable to satisfy her sexually without intercourse. Further, by allowing himself to explore alternative means of sexual activity, he successfully challenged the thought of not feeling like a man and was able to recapture his identity as a sexual person and a virile man. John and Gwen learned that they could enjoy sexual activities regardless of whether a full erection and intercourse were present. This illustrates the process of becoming flexible in one's definition of sexual function and activity. Moreover, by focusing on engaging in non-sexual intimate activities such as eating out at restaurants and holding hands while talking during their evening conversations, John and Gwen effectively shifted their centrality of sexual function and activity within their relationship. These changes led to increased relationship and sexual satisfaction for both John and Gwen, and John noticed particular improvements in his mood and self-esteem.

Flexible coping with cancer-related sexual concerns: current status of the research

In this section, we critically review studies relevant to the concept of flexible coping with cancer-related sexual concerns. We focus on three areas: issues related to shifts in cognitive perspectives following cancer, the potential benefits of flexible coping for the self-concept, and coping as a couple.

One of the most interesting findings emerging from recent studies of cancer patients and their partners is that over the course of cancer, couples are able to shift their perspectives on intimacy and sexuality. In this section, we focus on two qualitative studies [71, 94] and two intervention studies [65, 85] relevant to this notion of shifting such perspectives.

A recent study described the account of a completely impotent testosterone-suppressed prostate cancer patient

who had failed to respond to conventional medical approaches to erectile dysfunction [94]. The authors describe how, over the period of 5 years, this patient was able to gradually change his perspective from one of resistance and discomfort with alternative sexual practice (i.e., using a belted penile prosthesis or “dildo”) to one of acceptance and enjoyment. This man found support from a friend who had used alternative sexual activities, and through this support was able to overcome his initial reluctance. Importantly, the patient began to think of the object, not as a replacement for his penis, but as “something completely different.” Cognitive flexibility appears to have been the key in allowing the patient to engage in alternative sexual activity. Also critical was his partner's openness to alternative sexual activity. Ultimately, this man was able to enjoy a mutually satisfying sexual relationship with his partner using this alternative activity. This case account illustrates the process of making cognitive and behavioral shifts in one's approach to sexual function and activity and the positive outcomes that follow such shifts.

In a qualitative study, Oliff [71] examined the experiences of impotence of 15 men treated for prostate cancer. Using a semi-structured interview, he collected information on the impact of impotence on participants' views of masculinity, sexuality, and intimate relationships. Through content analysis of the interviews, he found that many men reported shifting from an intercourse-based perspective of sexual functioning to a broader, more intimacy-based perspective following their prostate cancer treatment. Along with this shift in perspective came changes in behavior including mutual caressing and oral sex as well as non-sexual intimacy activities including cuddling and going out to eat together. Oliff argued that these shifts were critical in enabling these men to adapt successfully to the physical changes brought on by the prostate cancer treatment. This study underscores the importance of flexibility, in thoughts and behaviors, in coping with sexual concerns following cancer.

Psychosocial interventions may have the potential to alter aspects of individuals' sexual self-perceptions. In the study described earlier by Scott et al. [85], the authors examined how a coping intervention could produce shifts in patients' sexual schema. Though not explicitly stated as such, this intervention aimed to enhance coping flexibility (such as broadening coping repertoires and cognitive appraisals) and used sexual therapy techniques. Women taking part in the couple-coping training intervention condition reported significantly more positive sexual self-schemas (i.e., cognitive representation of the sexual self) [28] when compared to women receiving either an individual coping skills intervention or medical information alone, as well as improvements in sexual intimacy and perceived partner acceptance of their postoperative appear-

ance. Findings from this study suggest that psychosocial interventions have the potential to lead to shifts in sexually relevant self-perceptions in women having cancer. Furthermore, as noted earlier, the success of this intervention's broad approach in addressing sexual concerns suggests that such a broad perspective on sexuality and intimacy may be an important component of successful interventions addressing sexuality in cancer.

There is evidence from several research studies that the context of the relationship is important when addressing sexual concerns for cancer survivors in relationships. First, in contrast with intervention studies in women that were administered to the patient alone, only the couple-based interventions [12, 25, 53, 85] addressing sexuality and body image have found significant effects on sexual outcomes. Second, findings from a recent study by Manne and Badr [65] suggest that shifting from viewing a sexual concern on an individual level to that of the relationship can have significant benefits. Specifically, Manne and Badr [65] tested a pilot Intimacy-Enhancing Couples' Therapy (IECT) intervention in 16 women with early stage breast cancer and their partners. The IECT intervention was designed to improve intimacy; one primary target was helping couples to view their relationship challenges in couples' terms. Findings showed that IECT significantly improved certain outcomes related to intimacy, including significant increases in patient cancer-specific closeness and a trend toward increases in general relationship closeness. Shifting focus from coping as an individual to coping as a couple thus appears to be an important aspect of coping with sexual concerns in cancer. Although the benefits of including both members of the couple in a sexuality-focused intervention seem to be less clear for male cancer survivors, interpersonal sensitivity was found to be a moderator of improvement in an intervention for sexual concerns in prostate cancer [69]. This may suggest that addressing interpersonal issues might be helpful for men whose sexual challenges after cancer are more interpersonal in nature.

Discussion

Clinical implications

The construct of flexibility may be particularly relevant in the context of developing clinical approaches to addressing sexual concerns in the context of routine cancer care. The reality of the modern cancer clinic is that there are multiple care providers and many competing demands for clinician and patient time. How do we integrate another poignant but potentially less pressing demand? In this section, we discuss how the flexible coping construct may add to

available clinical approaches, and discuss the assessment and treatment of sexual concerns and of flexible coping for patients with cancer and their partners.

Although the clinical approach to foster flexible coping is heavily informed by previous clinical approaches to sexual problems in sexual and marital therapy (i.e., the PLISSIT model and sensate focus exercises) [10, 67], the construct of flexible coping adds to prior approaches in several ways. First, focusing on the construct of flexibility in coping may facilitate a more targeted approach than sex therapy more generally. This may be especially helpful when considering the often brief length of time allowed for providers to confront side effects of treatments and other quality of life issues. Second, while sexual counseling is likely to be one context in which the flexible coping model can be applied, there are likely to be multiple contexts in which this model may be applicable in addressing sexual concerns in cancer. For instance, educational materials could be written and given to patients that include a discussion about flexibility and inflexibility and suggestions for greater flexibility in coping with sexual concerns. These materials could be given to patients who, in the assessment process, appear likely to benefit from additional information about flexibility (i.e., those with some difficulties in shifting to a flexible approach but who do not seem to require intensive therapy). Third, because of the nature of the flexible coping construct as consisting of multiple concepts of sexuality, this construct may reflect patients' own evolving perceptions of sexuality across their cancer trajectory. An approach to treatment that emphasizes flexibility may be particularly well-suited to addressing the variability in sexuality and sexual needs as they change across the cancer trajectory. For instance, focusing more on intimacy and closeness as an alternative definition of sexual function and activity may be more in sync with patients' needs while in active treatment or in a palliative care phase.

Lastly, the flexible coping model includes a novel approach to treatment that involves changing the centrality of sexual function and activity in individuals' self-concepts. While most prior research seems to aim to change what we call the definition of sexual function by broadening one's ideas and behaviors related to sex and intimacy, changing the centrality of sexual function within the self-concept may prove to be a novel approach to addressing sexual concerns. Given that prostate cancer patients who view sexual function as a core element of their masculine self-concepts have more difficulty coping [69], an appropriate approach may be to help them shift their self-concept directly through making "top-down" changes. The self-concept as a direct target for change is an element of empirically supported cognitive behavioral treatments for bulimia nervosa, in which the high value of shape and weight concerns in the self-concept is a target of treatments

[8]. Similarly, this strategy could prove beneficial for patients (or partners) for whom sexual performance or adherence to gender roles are highly central to their self-concepts and therefore make them more vulnerable to the negative impact of cancer treatment on these aspects of their self-concept. For such individuals, making a “top-down” change may be helpful in addition to changes in the definition or when making changes in the definition are hindered by a self-concept that is overly rigid. Further research should examine how gender roles influence sexual adjustment for women after cancer.

A major goal of sexual care in cancer, in our conceptualization, is to foster a flexible definition of sexual function. Work toward this goal begins with an assessment of sexual concerns. An adequate assessment of sexual concerns can validate patients' and partners' concerns and give them permission to ask questions, share concerns, and express frustrations [10]. Prior to assessing coping status, a full sexual assessment that includes an evaluation of current level of sexual functioning and primary concerns, type of cancer treatment, medical diagnoses and medication use, and pre-morbid level of sexual concerns and function [26, 77] should be conducted. However, this may not be practical in a busy cancer clinic with multiple competing demands. A number of resources are available to assist in helping oncology professionals assess sexuality in their patients, as a start to addressing their patients' concerns [29, 73, 82].

In tandem with a sexual assessment, an assessment of flexible coping is also necessary. A measurement tool that could capture the construct of flexibility in coping could lead to a better understanding of sexual distress in the context of cancer and other medical conditions. Before such a measurement tool is available, however, an assessment of flexible coping can be accomplished by asking targeted questions. As a start, an efficient assessment should focus on simple questions pertaining to a broader sense of intimacy in addition to sexual performance. By asking questions related to patients' sexuality and intimacy, rather than about sexual performance or fertility alone, a provider is validating the importance of such concerns [49]. Flexible coping may be relevant to any person coping with sexual difficulties as a threat to their sexual lives, regardless of the person's age, marital status, sexual preference, level of disease, or other relevant demographic and medical characteristics.

Given prior research supporting the need for sexual information at various phases along the cancer trajectory [72], having a discussion regarding flexible coping may also be important at all phases along this trajectory. A discussion of flexibility in coping early in the treatment decision-making process may be one method of assisting patients to weigh their own preferences and values with

objective information given by the provider or other resources pertaining to effects of treatment on sexuality [57]. Providers may address flexibility in coping during this phase by asking questions such as: “How important is the ability to have sexual intercourse in your decision-making process?” “Can you imagine having a fulfilling sexual or intimate relationship without sexual intercourse being a part of it?” During active treatment, given that sexual needs may change to be more centered on intimacy as opposed to sexual intercourse [5], providers may wish to alter their approach sexuality and flexible coping accordingly. For instance, providers begin a discussion in the following way, “I know you told me that in addition to the fatigue, you've been bothered by a loss of interest in sex. Are you interested in having some kind of physical intimacy even while you're undergoing treatment? Have you and your spouse discussed ways that you can accomplish this?” Finally, during the post-treatment survivorship phase, as in our clinical illustration given above, the provider may have asked questions such as the following: “Have you been able to enjoy your intimate relationship after your surgery?” and “Are there ways you and your partner have been able to find to enjoy intimacy with one another other than intercourse?” Responses that indicate a willingness to consider from alternative perspectives such as “It was hard at first but we have found other ways to be intimate now even with the ostomy” can indicate the presence of flexible coping. In contrast, a response such as the following might indicate inflexible coping: “We've discussed what we can do to improve our sex life but having sex with the ostomy right there just doesn't feel right to me.” The previous questions mostly pertain to assessing the definition of sexual function. Centrality may be assessed through questions such as, “How important do you feel sexual intercourse is in having a satisfying sexual relationship with your partner?” and “How important is your ability to be ‘sexually functional’ in how you view yourself?” Questions such as these have been widely used in the assessment of other disorders such as anorexia nervosa and bulimia nervosa in gauging the value of a patient's body/shape and weight within his or her self-evaluation [27]. A provider can also assess whether the patient and his or her partner are coping on a couple level by asking, “How do you feel you have been coping with your sexual concerns together, as a couple?”

Using the information provided by the assessment of sexuality and of flexibility in coping with sexual challenges, treatment goals of increasing flexible coping with sexual concerns and an appropriate treatment path can be established. Previous models of addressing sexual concerns in cancer care, such as the PLISSIT model, provide an appropriate framework in which to respond to patient needs. The PLISSIT model [10] consists of increasing

degrees of response to patients' sexual concerns, from permission to patients to discuss their sexual concerns, to limited information regarding sexuality, to specific suggestions for providers who are able to give such suggestions, culminating in intensive therapy conducted by appropriate mental health professionals (e.g., sex therapists and couple counselors) for patients who have more significant distress and concerns. Providers can give information or suggestions (e.g., literature and referrals to relevant websites), depending on their level of comfort and knowledge in the area. Those who are not qualified to provide information may engage other staff in the treatment process and provide adequate literature and other resources. Staff members who are trained and feel comfortable doing so may provide brief counseling to patients directly [81].² A practical solution in a busy cancer clinic is to have one or two mid-level providers trained in assessment and treatment of sexual concerns, so that their skills can be called upon as needed. Finally, in some cases, such as in addressing highly persistent, complex, overlapping sexual concerns, providers may consider referrals for sexual counseling [81]. When significant marital distress or psychiatric concerns are present, a provider should take care to be sure that the patient and partner receive adequate referrals to appropriate resources, such as a qualified mental health professional.

A counseling approach that focuses on increasing flexibility is heavily informed by empirically supported techniques from sex and marital therapy that have been shown to broaden coping skills using cognitive strategies (i.e., learning to recognize problematic, inflexible thoughts that interfere with intimacy and to replace them with more adaptive, flexible thoughts) and behavioral exercises (e.g., sensate focus; see Tables 1 and 2 for examples) [58, 67, 86]. Behavioral exercises should proceed in a stepped fashion such that small changes in behavior (e.g., holding hands) precede large changes in behavior (e.g., trying a novel sexual activity) in accordance with the couple's success at achieving the prior behavior change. Any successful changes in behaviors or thoughts toward more flexible coping should be recognized and validated. In addition, the provider should encourage the patient and/or partner to use his or her own behavior as means of challenging inflexible thoughts, as described in the clinical illustration. As shown in the case account described by Warkentin et al. [94], developing flexible coping is a

process that may take several years. Counselors and health professionals should be aware of this and exhibit patience when working with patients and partners to adopt flexible coping. Although members of the cancer care team may or may not themselves provide such direct suggestions or counseling, they should be aware of the kinds of activities that would be considered a part of flexible and effective coping, including altering sexual activities and sexual positions, wearing lingerie to hide scars and ostomy appliances, using the bath or shower as a place for intimacy, and similar methods of accommodation [47, 81]. Providers should also be aware of the potentially helpful role of sexual enhancement products, such as lubricants, massage oils, and vibrators that could be used not only to alleviate painful sex and other symptoms but also to enhance intimacy [45].

Future directions for research on flexible coping in cancer

In this section, we discuss ideas for future research pertaining to sexual concerns in cancer, assessment of concerns, and treatment using a flexible coping model. First, as mentioned in the prior section, research is needed to develop methods of assessing patients' current levels of flexible coping regarding sexual concerns. Having validated measures available is an important first step in future research on flexible coping with sexual concerns. A flexible coping measure should assess for the presence and intensity of rigidity/flexibility in both thoughts and behaviors related to sexual concerns. This type of assessment could be given either electronically or in a paper and pencil format. The limitations of paper and pencil measurement tools have been cited in the research literature [90]. Recently, methods such as daily diaries and daily process approaches have been used to gain more dynamic data than can be provided by paper and pencil measures [55, 56]. However, a self-report measure such as a paper and pencil questionnaire may serve as an important first step in the assessment of flexible coping. Ultimately, future research on the assessment of this construct would be beneficial in developing and testing multiple methods (e.g., measuring flexible coping behaviors such as engaging in an alternative sexual activity).

As a construct that relates to individuals' own perceptions of sexuality and self-concept related to sexuality, flexible coping is conceptualized on an individual level, and assessments of flexibility should be developed with this in mind. However, because of the nature of sexuality as typically occurring in the context of an interpersonal relationship, for persons involved in an intimate relationship, the context of the relationship should also be considered. Further, an approach to treatment emphasizing flexible coping will be most successful if both the patient and his or her partner are involved and are willing to engage in a process of examining and possibly challenging

² Brief sexual counseling in cancer may include: education for the patient and partner about how cancer treatment can affect sexual function; suggestions on methods of comfortably resuming sex; encouragement of more open communication about sex between partners; help in coping with physical changes that cause feelings of unattractiveness and that hinder resumption of sexual activity; and referrals or resources to patients obtain treatment for specific sexual problems.

their cognitive perceptions of sexuality. However, if one partner is unavailable or unwilling to engage in treatment addressing flexible coping, working with the patient (or partner) alone may be necessary and beneficial; helping one partner to change his or her behavior through an individual approach may lead to reciprocal changes in the partner, for instance. Future research should test this by comparing a flexible coping treatment in couple format against the same intervention delivered to individuals alone. In addition, for patients who are unwilling to work on increasing flexibility directly, less direct or intensive methods, such as brief discussions with a provider that encourage engaging in enjoyable activities as a couple, may be helpful in facilitating positive behavioral change and lessening distress. Despite the fact that flexibility may most often be relevant to individuals in a dyadic context, couple-specific coping measures have generally not been widely used [14, 15, 61]. Rather, just as individual measures have historically been used to gain data on dyadic concepts (i.e., marital satisfaction and communication), it may be possible to gain important information on individual flexibility, as it relates to relationship functioning. For instance, interpersonal correlates of flexibility might be ascertained by a study in which partners of those who score high on inflexible coping are compared with partners of those who have more flexible coping on various outcome measures. It will also be important to study how the duration of a relationship may influence the use of flexible coping.

With a validated measure, it would be possible to examine change in flexibility over time and in response to both medical and non-medical interventions. This could lead to the design of prospective and longitudinal studies testing the impact of interventions (i.e., psychosocial and medical) on coping and related outcomes (e.g., sexual satisfaction and intimacy). Given prior findings that sexual dysfunction can lead to rigid sexual thinking [76], it would be interesting to know whether successful medical approaches to sexual dysfunction might actually facilitate more flexible coping. The use of assessment tools to measure flexible coping would also be helpful: in examining relationships between flexible coping and other domains of sexual and relationship function (e.g., intimacy and presence of sexual disorders); on the relative importance of the definition versus the centrality of sexuality in one's flexible coping approach; and on how flexible coping differs across certain groups (i.e., patients vs. partners, older couples, and couples with more entrenched patterns of sexual behavior). It is also important to study how flexibility may differ based on gender or on patient vs. partner status. Because most studies of cancer-related sexuality have occurred in either breast or prostate, research has not offered adequate data to draw conclusions on which gender might be "more flexible," either in the definition of

sexual function, or in the centrality of sexual function, or in whether either gender may be better able to engage in or benefit from approaches that emphasize flexibility. More research will be needed to establish the presence and possible meaning of any gender differences in flexibility in terms of age, gender, and other characteristics. In our view, the principle that flexibility in coping with such changes is relevant to both genders should be used to guide research at the present time. Further, while the construct of flexible coping applies to individuals regardless of sexual orientation (i.e., heterosexual, homosexual, and bisexual), we do not know how flexible coping or benefit from treatment improving flexibility may differ across individuals with various sexual orientations. Ultimately, it may be possible to screen and identify patients (and partners) who are more at risk for long-term sexual distress following cancer treatment because of inflexible coping.

An important area of future research is the development of interventions that test flexible treatment approaches directly in cancer. We are currently testing a novel, pilot Intimacy Enhancement protocol in colorectal cancer patients and their partners that fosters a broader approach to sexual activity and function for couples in which one partner has been or is being treated for colorectal cancer. As opposed to focusing on a particular sexual dysfunction, this brief, telephone-based couples' intervention addresses a range of sexual and intimacy-related concerns. This intervention provides training in behavioral, cognitive, and communication-based skills designed to help couples cope more flexibly with their own particular sexual and intimacy concerns. The exercises introduced during sessions and as practice between sessions help couples explore a broader range of sexual activities, substitute flexible for more rigid thoughts about their sexual function and activity, and learn communication skills that helps them achieve their intimacy goals. Information gained through this study, and through a larger, controlled trial that we have planned will further our understanding of how to increase the use of flexible coping and positive relationship outcomes in cancer survivors.

We draw the distinction between the model of flexible coping and treatment approaches utilizing this model. Whereas the model applies to all patients with cancer who are faced with challenges to their sexual function or activity, the actual approach to treatment used for a particular patient may differ depending on several factors (i.e., willingness to engage in therapy and initial level of rigidity). Patients who are initially quite high in flexibility may be coping adequately with sexual concerns and may never appear for counseling; by contrast, those who are at the other end of the scale may require in-depth therapy to target this inflexibility. Future research is needed to determine how patients differ not only on initial levels of flexible coping but also in terms of their willingness to

engage in and benefit from treatments seeking to enhance such flexibility.

An especially interesting area for future research may be investigating the timing of assessment and intervention addressing flexible coping. We have conducted research showing that sexual problems remain stable and are relevant to multiple outcomes (e.g., quality of life and disease-related distress) along the continuum of cancer care [74]. However, the nature of these concerns may change according to the point along the continuum. For instance, a recent report by Andersen [5] that examined the trajectory of sexual activities in women with breast cancer recurrence supports the notion that intimacy is an important aspect of life for patients in the midst of treatment for cancer. In a sample of 41 patients who had recurred, in the group with recurrent disease, frequency of sexual intercourse decreased significantly while the frequency of kissing increased, suggesting that physical intimacy remains important, may be expressed in ways other than intercourse, and may actually increase during diagnosis, reflecting patients' need for intimacy even during treatment. In order to determine the best time to administer interventions addressing sexuality in cancer, it will be necessary to study this question directly by comparing outcomes of patients based on their length of time since diagnosis and perhaps entering patients into study conditions based on different lengths of time since diagnosis. However, further research may illuminate how concerns differ in nature across the continuum, with intimacy and closeness being important during treatment and specific sexual concerns becoming more pressing during the survivorship phase. Although such thoughts are currently speculative, perhaps maintaining some degree of physical intimacy in the treatment phase would help a couple resume sexual intimacy when the patient completes treatment. Interventions that address non-sexual physical intimacy concerns could potentially be beneficial at this point in the continuum. There may also be benefits of intervening prior to the cancer treatment (e.g., surgery) so as to prevent the occurrence of distress related to sexual concerns. A brief intervention given prior to or at the time of treatment by a nurse or other health professional could educate patients and partners on potential sexual side effects of certain treatment, give them brief information about effective coping (i.e., flexible coping), and provide resources (e.g., websites for people living with ostomies). A benefit of this approach is that it might prepare patients and their partners for possible sexual or intimacy challenges; a potential downside is that it may open the doors for patients to see problems where previously they may not have noticed them.

Electronic methods hold particular promise for assessment and treatment of sexual concerns and of flexible coping with such concerns [38]. Several studies conducted by our lab used electronic tablet computers to gather

information on patient-related outcomes in outpatient cancer clinics at Duke University [2, 32]. These tablets generate a report that identifies and summarizes a number of cancer-related symptoms (e.g., pain and sexual difficulties), which is given to the provider to use clinically during the patient visit; patients may be more likely to report sensitive symptoms like sexual concerns in a computerized format than when using pen and paper [32]. Previously, we have used information collected in this method to study sexual concerns in breast and gastrointestinal cancer cohorts, finding that sexual concerns were common, persistent, and related to a number of other domains of function (e.g., health-related quality of life, symptom severity, and disease-related distress) in both cohorts [74]. These data suggest that there are significant benefits to assessing sexual issues during routine cancer clinic visits. Adding an assessment of flexible coping may further optimize care. Preliminary evidence from a similar study used to address adjustment concerns in prostate cancer patients was used by Giesler et al. [38] and described earlier in this paper. Evidence from telephone-based intervention studies is also promising [21, 84].

In addition to the value electronic methods may hold for assessing sexual concerns and flexible coping, electronic means may also be used in the future as ways to supplement or reinforce the flexible coping message to patients. Moreover, for patients (or partners) who refuse sexual counseling, educational methods, along with discussions with providers, may prove helpful alternatives that still get across the message of flexibility. Videos that both normalize patients' and partners' experiences as well as provide them with information and resources could be presented to patients and partners, either on electronic tablet computers in the clinic (with ear buds for privacy) or for use at home. These videos could feature vignettes of actual patients who have experienced common sexual or physical intimacy concerns and detail the strategies they have used to cope successfully with these concerns using a flexible approach. Examples of rigid and flexible coping (i.e., thoughts and behaviors) could be contrasted while effective communication could be modeled. Patients could also be directed to educational web sites or media, using brochures or tip sheets.

Conclusions

Research suggests that for many cancer survivors, sexual concerns are extremely common, persistent, and associated with other important domains of function. Yet, sexual concerns are not often addressed in routine cancer care, and when they are, a medical approach limits the beneficial nature of these interactions for patients. We propose a

model of coping flexibly with sexual concerns cancer survivorship that offers an alternative, broader approach to addressing sexual concerns in cancer care that may be more applicable to patients' key needs. Future research will be necessary to develop methods of assessing flexible coping and in finding the most effective ways to implement this concept clinically into routine cancer care. Addressing sexuality in cancer care is ultimately necessary in ensuring comprehensive patient-centered care.

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