Published in final edited form as:

Fam Syst Health. 2008 ; 26(3): 296–316. doi:10.1037/a0012914.

Disclosure of Positive *BRCA1/2*-Mutation Status in Young Couples: The Journey From Uncertainty to Bonding Through Partner Support

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Abstract

BRCA1/2-positive women who learn their mutation status early in the life-course face unique challenges related to navigating the tasks of young adulthood. Using qualitative methods and grounded theory, the authors analyzed in-depth interviews with 11 women aged 26 to 35 who learned their mutation status before marriage. Their narratives illustrate the complexity of relationship formation, and highlight the potential for relationship-bonding and intimacy-building in the course of sharing mutation information. Disclosing *BRCA* mutation status to dating partners is often preceded by feelings of fear and anxiety, yet many participants reported that doing so has positive effects on relationships. Partners' abilities to respond with interest, empathy, and affection are associated with increased future intimacy, consistent with generally accepted principles within the family/couple systems field. Individual cancer risk perception and familial cancer experiences may affect the disclosure experience, which can be understood via Attachment Theory. Our findings provide clinical insight, identify new areas for research, and suggest ways to assist this unique population in their adjustment to being *BRCA* mutation-positive.

Keywords

BRCA1/2; breast/ovarian cancer risk perception; partner disclosure; couple relationships; qualitative research

Mutations in *BRCA1* and *BRCA2* predispose carriers to increased risk of developing both breast (50–85% lifetime risk) and ovarian cancer (15–40% lifetime risk) (Antoniou et al., 2003; Brose et al., 2002; Suthers, 2007); the corresponding risks in the general population are 12.8% and 1.5%, respectively (DevCan, 2005; Fay, 2004; Fay, Pfeiffer, Cronin, Le, & Feuer, 2003). Strategies to mitigate risk include intensive cancer screening, chemoprevention, and risk-reducing surgery (prophylactic mastectomy and/or salpingo-oophorectomy) (ACS, 2007; Babb et al., 2002; Eisinger et al., 1997; Foster et al., 2002). These vary in the extent to which they are effective, physically and emotionally acceptable to women at high genetic risk cancer, and practical at various life-course stages. For example, with regard to ovarian cancer, women who have not completed childbearing are not candidates for risk reducing salpingo-oophorectomy, but relying on screening (generally regarded as ineffective) may leave them susceptible uncertainty and continued vulnerability. Carriers must also consider the risk passing the *BRCA* mutation to their future children. *BRCA1/2* are passed from parent to offspring in an autosomal dominant pattern; each offspring has a 50% chance inheriting an abnormal copy of the gene from the parent (of either sex) who carries the mutation. Consequently, female *BRCA1/2* mutation carriers may face cancer-related distress including worry and anxiety (Watson et al., 1999), and may have both acute and chronic needs related to informational, tangible, and emotional support (Appleton, Fry, Rees, Rush, & Cull, 2000; Babb et al., 2002; Kenen & Peters, 2001; Koehly et al., 2008; Peters, Hoskins, Prindiville, Loud, & Greene, 2006).

These latter issues have been extensively explored, as have the bidirectional influences between marriage and the mutation-positive experience (Manne et al. 2004), and between marriage and the breast cancer experience (Dorval et al. 2005; Osborne, Ostir, Du, Peek, & Goodwin, 2005). Less attention has been paid the relationship implications of living with increased cancer risk in early adulthood. Young female *BRCA1/2* carriers face unique challenges vis-à-vis informing partners of their risk status as new relationships develop, because they are less likely to be in stable relationships or to have completed childbearing when they undergo genetic testing (Oktay & Walter, 1991). Only a single publication was identified regarding the impact of being a *BRCA1/2* mutation carrier on couple relationships (Werner-Lin, 2007). The current study is a qualitative analysis intended to elucidate this understudied area.

DISCLOSURE OF CANCER RISK STATUS & PARTNER RESPONSIVENESS

Disclosure of details about one's life is essential in the development of satisfying intimate relationships (Laurenceau, Barrett, & Pietromonaco, 1998; Troy & Lewis-Smith, 2006) and occurs naturally in the epigenesis of relationships (Wynne, 1984). As one discloses information that reveals the core of one's self-concept, *partner responsiveness* is required for intimacy development, and is characterized by a listener's own disclosure, expression of emotion, and performance of behaviors that convey attention, support, and affection.

(Laurenceau, Barrett, & Rovine, 2005). Partners who disclose personal information experience the exchange as intimate when the listener is perceived as understanding, validating, and caring—or when *perceived partner responsiveness* is high (Reis & Shaver, 1988).

Research on disclosure of sexually transmitted infections (STIs) in dating couples may provide insight into the challenges faced by disclosers of *BRCA1/2* mutation-positive status. Although there are clinical differences between the two genes, they are similar in that both have implications for the health of the couple and future children, and both are integrally related to dyadic interests in sexuality and childbearing. Research on STIs in dating couples suggests that women generally disclose or intend to disclose their infection status to partners in noncasual relationships, and worry about anger or rejection as a result (Green et al., 2003; Kahn et al., 2005; McCaffrey, Waller, Nazroo, & Wardle, 2006). Motivations to disclose include awareness of health implications for partners, attempts to strengthen relationships by sharing information, and a desire to share fully in response to increasing intimacy (Green et al., 2003; Kahn et al., 2005). Disclosure is less common in casual relationships (Kahn et al., 2005), or when the STI is not perceived as a threat to the partner's health (McCaffrey et al., 2006). Research on HPV disclosure suggests that women who frame disclosure as increased risk cervical cancer or abnormal PAP result, rather than as an STI, receive more support from partners and felt more comfortable during the process (McCaffrey et al. 2006). In this case, sharing medical risk information facilitates closeness and support in dating relationships, which may also be true for young female *BRCA1/2* mutation carriers, a hypothesis we seek clarify in this investigation.

Existing health problems present unique challenges to emerging couple relationships; although breast/ovarian cancer previvorship (living with increased cancer risk in the absence of a diagnosis) (FORCE, 2005) does not present an immediate threat; it represents the threat of future illness, and therefore includes some of the psychosocial and relational implications of illness. Illness may threaten a woman's self-worth and jeopardize her ability form intimate relationships (Glass & Padrone, 1978). A young woman may be pulled *in* toward family when she is trying to differentiate (Combrinck-Graham, 1985), and exposed to issues surrounding body image and sexuality that may impede relationship development. When an illness experience begins during courtship, couples may realign the balance of agency and communion, allowing mutation-positive individuals to rely on partners for emotional and psychological support at a time when both might expect the dynamic to be equitable (Petersen, Kruczek, & Shaffner, 2003). Disclosure of a *BRCA1/2* mutation is uniquely ambiguous in that it prompts consideration of the *possibility* of eventual health problems for women and future children. However, parallels exist in that both situations force young couples to consider whether and how they can cooperatively manage health issues across the life-course.

CANCER RISK PERCEPTION ACROSS THE LIFE COURSE

The familial cancer experiences that underlie high perceived cancer risk for *BRCA1/2*-positive women may contribute to attachment difficulties that make disclosure about risk to partners difficult. In my (LH) experience working with women from HBOC families in a

clinical setting, the concepts of Attachment Theory seem particularly salient with regard to how *BRCA1/2*-positive women integrate family cancer experiences with their current methods of coping and communicating about cancer risk. Attachment Theory proposes that certain qualities of adult relationships are shaped in part by experiences in early relationships with primary attachment figures, usually parents. The relative security or insecurity of these relationships in the face of separation and loss contribute to shaping reactions to subsequent real or threatened separation from, or loss of, important others, to whom individuals seek attachment in response to threat (Bowlby, 1969). "Attachment theory ... provides a framework for understanding patients and their different ways of dealing with emotions, the way they tell their story, think about themselves and their dilemma, [and] their expectations and the nature of the relationships that they establish with others," (Evans, 2006, p. 60). The presence of *BRCA1/2* mutations can be conceptualized as a threat of loss within couple relationships, albeit a relatively ambiguous threat. Individuals and couples dealing with elevated cancer risk also cope with uncertainty regarding whether, when, and where cancer will develop. Prior research applying Attachment Theory to young couples demonstrates that healthy or secure attachment is associated with open communication and lower negativity (Kobak & Hazen, 1991) and greater overall satisfaction; attachment research examining couples coping with breast cancer suggests that partners experience increased desire for physical closeness, similar levels of emotional distress, decreased communication, and feelings of isolation (Shields, Travis, & Rousseau, 2000). However, Attachment Theory has not been previously used to examine the experiences of young, premarital couples in negotiating the presence of *BRCA1/2* mutations.

Cancer risk perception is important to understanding the impact of positive *BRCA1/2* mutation status; it is influenced by exposure to the cancer-related experiences of family members (Hallowell, 1999; Hopwood, 2000). Cancer-related illness or death may disrupt relationships with primary attachment figures, with implications for couple attachment in adulthood (Evans, 2006; Hopwood, 2000). Specifically, Hopwood hypothesizes that "[attachment] theory could also help to explain variations ... in ability to communicate about risk: feeling free to talk openly about the loss or risk would be associated with secure attachment/realistic risk, whereas being preoccupied and communicating negatively would be associated with insecure attachment/overestimating risk," (2000, p. 388) Availability of support is important in formulating accurate estimations of risk (Hopwood, 2000), and partners serve as important supporters during major life stresses, including breast cancer (Shields, Travis, & Rousseau, 2000; Wilson & Oswald, 2005).

Research demonstrates variation in cancer risk perception among *BRCA1/2* positive women. Those with significant family cancer histories tend to overestimate risk, even after genetic counseling, which seeks to align perceived and actual risk (McInerney-Leo et al., 2006). Lower perceived partner support was associated with increased cancer distress (of which perceived risk is a component) in a study of individuals in HBOC and HNPCC families (van Oostrom et al., 2007).

In normative development, *early adult hood* occupies the bulk of one's twenties and thirties; it involves the tasks of differentiation from family of origin, establishing oneself in work, forming and realigning around a marital system, and engaging in the multifaceted tasks of

childbearing and caregiving (Carter & McGoldrick, 1999; Oktay & Walter, 1991). Anticipatory loss “refers to the experience of living with possible, probable, or inevitable future loss,” (Rolland, 2006, p. 140), a concept that is certainly relevant to *BRCA1/2*+ women and those with whom they have close relationships. Anticipatory loss is characterized by feelings of uncertainty and fear, which may be managed through effective coping and adaptation (Rolland, 2006). For *BRCA*+ women, such stressors must be considered against the backdrop of family life cycle and development (McDaniel, Rolland, Feetham, & Miller, 2006). For those seeking partners and forming permanent relationships, their life situation may trigger thoughts of threats to permanence, including illness or death. Women who are aware that they carry a *BRCA1/2* mutation are faced with a second, major non-normative stressor related to effectively communicating information about cancer risk to new partners, perhaps in the context of feeling “[vulnerable] to rejection as potentially defective” (Rolland, 2006, p. 164).

It is not known how these women experience anxiety regarding partners’ reactions to mutation disclosure. For example, they may experience concern over partners’ willingness to alter individual/family life cycle plans in response to women’s heightened sense of urgency to progress through stages to mitigate the risk of cancer and pursue risk-reducing surgery. Further, intrafamily communication patterns regarding genetic cancer susceptibility may be established as soon as awareness of genetic risk exists (Rolland & Williams, 2006). It may be challenging for new partners to learn to navigate successfully within established family systems and communication patterns during the formation of new relationships with *BRCA1/2*+ women. We conducted an exploratory study to investigate the unique challenges faced by young female mutation carriers in navigating the tasks of early adulthood.

METHOD

Participants

This study was conducted as part of the NCI Clinical Genetics Branch Breast Imaging (BI) screening study of women in Hereditary Breast/Ovarian (HBOC) families (protocol #01-C-0009). The primary goals of the imaging protocol were to evaluate breast MRI and breast duct lavage as novel breast cancer screening strategies for women at increased genetic risk of breast cancer. The current study evolved from the psychosocial Colored Eco-Genetic Relationship Map (CEGRM) component of the BI study, in which we discussed issues of support, communication, and relationship dynamics with high-risk women annually (Kenen & Peters, 2001; Peters et al., 2006). Based on the occurrence of repeated therapeutic exchanges focused on themes of loss and relationships, we chose Attachment Theory as the major theoretical lens for the current study; however, other theories may also be valid and could be utilized in future research. Among the 200 BI participants, we identified and attempted to contact all 50 women who were known *BRCA1/2* carriers, aged <35, heterosexual, and either known to be unmarried or of unknown marital status during genetic testing. Of these, 13 were unresponsive after two attempts, six were unreachable, and seven were disqualified because they were married at genetic testing. A total of 24 women were eligible and willing to participate; 12 were randomly selected, and each gave informed

consent. Eleven completed digitally-recorded telephone interviews between January and April 2007; one could not be reached after providing informed consent.

The average participants' age was 30. years (range, 26–36) at interview and 25. years (range, 21–33) at genetic testing. Women had known their mutation status for an average of 55 months (range, 36–90) at interview. The BI study is comprised almost exclusively of White women; because all non-White BI participants were ≥ 35 years old, our 11 participants were White. Participants' self-reported relationship status *at interview* was: three not in relationships (one divorced), four dating (either casually or seriously), and four married. At the time of genetic testing, all were unmarried: four were single, two were in casual relationships (one divorced), and five were in serious relationships. All women who had married since genetic testing were in relationships, either casual or serious, with their now-spouses at the time of testing.

All of the participants had significant family histories of breast cancer, but the degree of genetic relatedness and severity of cancers varied. All 11 participants were aware of and/or had experienced the breast/ovarian cancer-related death of at least one family member (mean number of family cancer deaths per participant = 1.4; range, 1–3); three participants (Jocelyn, Rylan, and Trina) had lost their mothers to one of these cancers, and one (Maelie) had lost a sister. No other cancer-related deaths among first-degree relatives were reported. Overall, breast/ovarian cancers were reported among two sisters, seven mothers, five maternal grandmothers, one paternal grandmother, five aunts, three great-aunts, and five cousins. The mean number of breast/ovarian cancer cases among participants was 2.6/family (range, 1–8).

Telephone interviews lasted from 40 to 120 minutes, and were conducted by LH, who had at least one previous, face-to-face encounter with most of the participants during the CEGRM sessions in the BI study, assessing social and relational functioning and exchange of informational, tangible, and emotional support in one's social network via therapeutic exchange (Kenen & Peters, 2001; Peters et al., 2006). These prior discussions may have facilitated participants discussing personal relationship information in the context of their experiences as mutation carriers.

Data Collection and Analysis

Informed consent was obtained as follows. First, all participants consented to the BI study. Those who enrolled in the current study provided additional written informed consent between the screening and qualitative interviews. Verbal consent was also acquired at the start of the interview. Participants were informed that pseudonyms would be used in any published material based on these interviews, that participation was completely voluntary, that they could withdraw from the study at any time or refuse to answer any question, and that their decision regarding participation would not affect their ability to participate in the BI study or in future studies conducted through CGB. Each agreed to have her interview recorded and transcribed, and was promised a summary of findings. Interviews were digitally recorded and transcribed verbatim by the interviewing researcher (LH).

Interview questions were open-ended and semi structured, guided by a prepared outline. Topics included: perceived risk of breast/ovarian cancer; relationship status and intensity during genetic testing; development and trajectory of relationships; attitudes and values about relationships and marriage; past or planned communication about cancer risk with partners, and attendant emotions; partners' reactions to information about risk; loved ones' expectations regarding relationships and marriage; and perceived impact that being a *BRCA1/2* mutation carrier has had or may have on romantic relationships. Probes were used to elicit further information, as prompted by the interviews.

The lack of previous research on this specific population necessitates in-depth qualitative analysis to identify and describe the most pertinent issues and describe the complex ways in which *BRCA1/2*-positive women think, behave, and create meaning (Daly, 2007). Qualitative research and grounded theory allow for the discovery, identification, and pursuit of new variables as they emerge, aided by the modification or supplementation of interview questions throughout the study process and the researchers' suspension of preconceived notions (Ambert, Adler, Adler, & Detzner, 1995; Daly, 2007; Strauss & Corbin, 1990). Open-ended questions are used to elicit participants' thoughts and ideas regarding *sensitizing concepts*, with awareness that other concepts may emerge that contribute to a more complete understanding of the topic and population being examined. This permits development of a substantive theory unique to a specific area of inquiry, rather than a higher-level formal theory (Daly, 2007). Here, for example, *the impact of family cancer experiences on current relationship functioning* (based on our ideas about Attachment Theory) was a sensitizing concept; themes related to anxiety, relationship strengthening, and partner support emerged in its exploration. Finally, theoretical sensitivity (Glaser, 1978) was facilitated by the researchers' continued involvement with members of the study population in the context of the BI study.

Open coding was applied to interview transcript segments (Strauss & Corbin, 1990). We focused on repeated use of words, phrases, and ideas by multiple participants, and coded purely on content. For example, each participant was asked specifically about her relationship status at the time of genetic testing; all responses were then coded into categories (not dating, dating casually, dating seriously). In the next wave of axial coding, we searched across and within cases for relationships between coding categories to further our understanding of broader phenomena; for instance, themes around the experience of disclosure in the context of couple relationships emerged in response to a variety of questions. We reassembled data based on emergent themes, and recoded based higher-order concepts until we reached theoretical saturation (Patton, 2002). We used a final wave of selective coding bring together the most illustrative data tell a core story about the process of disclosure for women in the study (Daly, 2007).

To maximize the trustworthiness of the data, we evaluated its credibility, transfer ability, dependability, and confirmability (Lincoln & Guba, 1985). Credibility was strengthened by a specific research focus, and through peer review and debriefing throughout the research process. Transfer ability was facilitated by our providing thorough contextual description to frame this research, as well as its central assumptions, which will allow others to make their own judgments regarding transfer ability of findings (Trochim, 2006). Accounting for

changes in research context, when applicable, serves to increase the dependability of findings (Trochim, 2006). Confirmability was increased by the use of a stance of “empathic neutrality” (Patton, 2002, p. 50), being empathic toward participants but neutral regarding the findings. We conducted a confirmability audit to examine data collection and analysis, allowing for recognition of potential bias (Trochim, 2006). Table 2 provides a model of the process of partner disclosure and a skeleton of relevant interview topics; it is a condensed version of the results that follow.

RESULTS

Preparing for Disclosure

Risk Perception—Participants varied in their feelings of vulnerability to cancer; whereas some perceived their risk to be within the range reported in current literature, several believed that cancer was inevitable if they did not do something to prevent it. Women frequently cited the experiences of family members as highly influential in their estimations of cancer risk. Grace’s mother was diagnosed with breast cancer when Grace was in her early 20s, and four of her mother’s cousins were survivors; she was also aware of several maternal great-aunts having died of breast cancer at young ages. When asked about her own cancer risk, she stated:

My view of the risk is that, if I don’t have the [risk-reducing] surgery or there’s not a new technology that comes out, I will have breast cancer ... between the ages of 30 and ... 45. think it’s like a hundred percent ... like 99.9 ... with so many people having ... breast cancer at such a young age, just can’t imagine getting to 50 without having it ... I’m not ... the 87% chance in my lifetime ... any medical professional will say ... it’s not definite, but the reality is, I have to think that way in order to ... find it before it gets me. (Grace, 28, married)

Grace uses her extremely high risk perception to motivate herself to screen regularly. Rylan, who had known about her mutation for 3 years, also perceived her risk as very high.

I would not be surprised at all if I got [cancer] this year, because my mother was 31 when she got it, and I’m already 32. So it wouldn’t surprise me at all if I got it. Or if I had it right now, at this moment ... because she was so young when she got it. I (Rylan, 31, Dating casually) Rylan’s risk perception and feeling that cancer could strike at any time is influenced by her mother’s experience, which began with a breast cancer diagnosis before Rylan’s birth. A second cancer resulted in her mother’s death when Rylan was 15; this surprised Rylan, because her mother had never indicated that death was a possibility. In Rylan’s words, the family “didn’t communicate ... very well or enough about it.” This may have contributed to attachment issues, including hesitancy about relationships and whether to seek a permanent one. In intermittent therapy, Rylan focused on her relationship with and loss of her mother more than any other topic.

Some women reported their cancer risk as lower than that reported in the literature. Serena, a single 28-year-old, had known she was mutation-positive since age 21. She recalled her mother’s experience with cancer as personally difficult. It occurred while Serena was in high school; her mother sought treatment in another city, leaving Serena at home alone. Serena de

scribed her risk as “Pretty high ... I’ve got higher chance than ... people without the gene have. But it’s still 50–50.” Serena had not yet found a person she would consider as a potential spouse, but was feeling some pressure from family to do so. While it may simply reflect binary thinking about risk, Serena’s underestimation may also be an unconscious adaptive strategy to increase her dating viability; understating her risk as “50–50” may influence communication with partners about risk, perhaps facilitating an easier conversation than if she described her risk as 80%. Other participants in stable, supportive marriages may feel free to characterize their risk as very high, since they no longer have to worry about discouraging potential partners.

Anticipating Disclosure—Many participants felt anxious or fearful before disclosure, worrying that being mutation-positive might adversely alter men’s perception of them. Estella, 28, was in a serious relationship with Tyson when she was tested at 23. She remembered:

I [had] these two dissimilar fears: one that he would see it as such a big deal that he wouldn’t see me as a potential mate anymore, and the other ... that he would see it as sort of not as big of a deal as I saw it as, and therefore he would ... not be showing that he cared. And I would say more the second one ... I wasn’t worried that he would ... dump me or something ... but there’s always that little voice in the back of your head. (Estella, 28, married)

Fear that disclosing a *BRCA1/2* mutation might complicate relationships was a common theme. Maelie was in a serious relationship when tested, and Bradley went with her to the appointment in which she received her mutation test results. Maelie believed that this process was much simpler than what she would have experienced if she had to disclose her results to a new partner later, and envisioned circumstances in which disclosing her mutation in a new relationship could emotionally overwhelm a partner. She wondered, “when, and how, and at what point in your relationship ... what do you tell them ... and when? I think that would be really difficult to decide.” Maelie suggested that this type of disclosure and sharing has the potential to bring about a level of intimacy that is “too much” in a new relationship.

Jocelyn, a single 34-year-old who was tested at 26, described her fear that revealing her mutation might make her seem a less viable potential mate to a partner. Her primary experience with cancer was through her mother, who developed breast cancer when Jocelyn was too young to remember. Some years later, her mother developed ovarian cancer, and passed away when Jocelyn was in college. A maternal aunt also died from breast cancer. In the eight years since testing, Jocelyn disclosed her mutation to several boyfriends, but had recently decided to be more selective in sharing, due to prior negative experiences. She articulated a desire to time disclosure appropriately within the development of a relationship, because she felt that some level of investment would be necessary to avoid the partner being “scared off” by the disclosure.

... they’ll feel that I’m flawed some way, that ... they’re gonna end with me, marry me, and in five years I’m gonna have breast cancer ... and they’ll have to deal with that. Especially with breast cancer ... you know men and breasts ... if you’re gonna

have to get a mastectomy or some thing ... just at the point ... at which they're not so in love with you that they'll do anything ... they may scared off by things like that ... at point before they're really invested you. (Jocelyn, 34, single)

Even as Jocelyn feared that her mutation positive status might scare a partner away, she also worried that a partner might respond with *too much* concern, presenting different relationship challenge. She stated, "I don't need someone stressing me out, making me feel like I should be more worried than I am." Serena, another single participant, identified similar fears.

I hope that whoever I'm with at the time is going to support me ... but ... that's Always a possibility that they might take it in a very different way and decide that's not something that they want to be involved with ... you can't control how people take it ... would hope that whoever I pick to tell won't run off scared ... but that's not something you can guarantee. So, you just don't know how people are gonna react to certain things. (Serena, 28, single)

In the years immediately after her genetic testing, Serena felt rather hopeless about finding a partner; she feared that once partner learned of her mutation and cancer risk, he would no longer be interested her as a mate. She stated, "It affected me for a while ... I went through a period ... where I [thought], 'well, no one's gonna want to get involved with me ... I've got really good chance of developing cancer, why would they want to get involved?'" Serena recalled this period as a sad one in her life; however, she no longer has those fears. She remembered, "It was tough ... I doubted myself a lot. And I think I pulled away from some potentially good relationships ... for [that] reason. But ... since then, that ... is not even a factor." When asked how she was able to move beyond that negative emotional state, Serena recalled "just by telling myself, and realizing to myself that there's not much that I can do to control something like that, and I shouldn't let it control me." Serena seems to have successfully adapted to her mutation-positive status partially by focusing on positive, self-affirming cognitions, and the concept of control was a powerful tool for her in this important transition.

Although they discussed fears about the negative impact of disclosure, participants also hoped that it could be a positive experience. Jocelyn emphasized that her ability to convey information in the right way would significantly impact the way a partner received the news.

I think it'll be positive, and I think if I can convey that it's not a definite, and that I'm doing what I can to ... work with it and get screening ... I just, I can't expect that someone will have a really bad reaction to this news. Because it's not end-of-the-world news. (Jocelyn, 34, single)

Another burden is described here, whereby Jocelyn feels responsible for figuring out the "right way" to break the news about her mutation status, and if the news is not well-received, then she will bear the responsibility for it not having gone better.

Timing of Disclosure—Women who did not experience testing and partner disclosure contemporaneously discussed the importance of timing disclosure appropriately within a developing relationship. A common theme emerged around allowing a discussion about

BRCA to surface naturally in the context of other topics during the process of getting to know one another. Jill remembered the first time that she talked about her mutation with her boyfriend, Brock:

We were ... talking about our grandparents, and I had told him that my grandma had died, and so we sort of got started talking about it ... I told him that ... there's this genetic link in our family ... and he ... had kind of wondered why I was so involved with breast cancer research and fundraising, why I made it a point to go to all these different things ... I told him that was why. So ... we were talking about family stuff ... when I told him. (Jill, 28, dating)

Similarly, Rylan remembered that she shared information about her mutation with Byron on the anniversary of her mother's death, which occurred about 2 weeks after they had started dating

I think it was pretty early ... like a couple of weeks after I met him that I mentioned it, because ... the anniversary of my mother's death was [on the] 16th, which was ... about two weeks after we started dating, so I think ... on that day, I think I told him what day it was and kind of told him a little bit about that and ... I may have ... told him ... I have this gene that she had, and so I go to the NIH ... once or twice a year to participate in this study. (Rylan, 31, Dating casually)

Single participants frequently reported that, in addition to hoping that disclosure would come about naturally in the context of other conversations, they would need to feel a sufficient level of intensity in the relationship before disclosure. Jocelyn, who had previously disclosed to a number of different partners over several years with varying results, hoped that her regular doctor visits would provide opportunities to disclose to partners in the future.

... it might have to come up in a context where I'm ... getting a procedure and saying, "I have a doctor's appointment and this is what it's about" ... it would have to be in ... a context so they don't just feel like it was dumped on them out of nowhere ... in some ways I don't want to make it a bigger deal than it needs to be ... which I think, having a whole "let's sit down and discuss" might make it ... I think it would be in the context of, "I had this doctor's appointment, and this is what it's for, and this is why I have to do this ..." so not blowing it out of proportion, but also I don't want to mitigate it, like it's nothing. (Jocelyn, 34, single)

Here, Jocelyn explained that she intends to seek a balance between communicating that having the mutation is not a big deal (allowing disclosure to emerge in the context of normal conversation) while also communicating its seriousness (being careful not to downplay it). This may reflect lessons she has learned from previous disclosure experiences, in which partners felt "fear ... or worry, concern, [and] pity." Similarly, Jill remembered relationships she had before meeting Brock, her current boyfriend. She chose not to disclose her mutation status to those partners because she did not feel that those relationships were at appropriate levels of intensity.

... the last [men I've dated] I haven't really told ... because I just didn't care enough about them or think that they were the right person that needed to ...

understand all of that ... That's something pretty big to bring to a relationship, and you have to work [it] in kind of easy, because men ... they get scared, and they don't understand what that means, so ... you have to educate them kind of slowly on that ... I personally wouldn't just tell ... a guy I've been on a couple of dates with, "oh yeah, by the way, I've got this and this and this." I think it just makes me more cautious ... about just telling everybody ... I think you have to be selective in who you tell that information to (Jill, 28, dating)

Jill has chosen to disclose her mutation only to others with whom she feels a strong connection, and whom she believes will be able to handle the situation. For Jill and others like her, a high level of relationship intimacy is needed before disclosure can occur.

Experiencing Disclosure

Most participants had experienced least one partner disclosure of their mutation status, and most reported positive experiences. Approaches to disclosure were diverse. Among those in relationships when tested, some invited their partners attend family meetings, doctor appointments, or genetic counseling visits, which case they received the information together. Others reported that despite being in relationships during their testing, their partners did not accompany them appointments; they disclosed the results their partners in temporally related, but separate processes. For example, Grace had already started genetic counseling and preparing for testing when she met Jason; they had been dating for two months when she got her results. She recalled, "He was with me the night before I got my results and he was the first person I called when got out. I think that he really wanted to there for me."

A third group of women were single when they were tested, but have since started new relationships; several had disclosed their mutations to new partners. Jill, a 28-year-old woman in a relationship she classified as neither serious nor casual, was emphatic about discussing her mutation status with Brock, even though he was not quite ready for such a conversation.

... he's a man, he's gonna avoid what he doesn't understand, and so he was like, "oh, we don't talk about this." And [I said], "No, that's not [acceptable]." ... Of course, he didn't want to talk about it because he thought it would hurt my feelings, and he didn't understand that I wasn't like that about it ... so he kind of tip-toed around it for a long time and I finally told him, it's not a big deal ... we can talk about this ... He's a lot better now. (Jill, 28, dating)

When asked to recall what the disclosure conversation had been like, many women could not describe a specific event. Instead, they reported vivid memories of the period of their lives and relationships in which disclosure was occurring. This suggests that disclosure of *BRCA1/2* mutation status may not be a single moment in time, but rather a *process* that occurs gradually. Women do not simply sit their partners down one day and give them a single piece of information; instead, they help their partners come to a reasonable understanding over time.

Partners' Reactions—There was variation regarding partners' responses to disclosure, but most women reported that their partners were supportive. Estella remembered that Tyson was a steady support for her, working hard to understand the information that he was being given.

I just remember a feeling of being ... cared for ... he didn't know what that meant, and he was asking a lot of questions about, "well, what does that mean?" and ... "are you okay, physically, and are you worried about it?" ... Instead of [saying] "oh, okay, no big deal," ... he just made me feel like he would be there for me no matter what ended up happening." (Estella, 28, married)

Tyson's reaction was neither to "brush off" nor to perceive Estella's mutation as problem he could not handle, both of which she had feared before disclosure. His ability to support her and convey that he was interested in what she was saying enabled Estella to experience the disclosure as positive. Similarly, Kristy remembered that Spencer had been supportive and had been able to take a logical stance, which Kristy found helpful because both she and her mother were emotionally distressed during and after the testing process. She recalled, "He wasn't ... happy about it, I think he was a little concerned, but otherwise ... think he was just more focused on making sure I was doing all right ... my mom and were really upset, he was more grounded.

Some women reported that disclosing their mutation status to their partners enabled the partners to feel more included in cancer-related issues, leading to positive relationship changes. Before informing Brock about her mutation, Jill was involved in many discussions about her mutation and its implications that did not include her boyfriend.

I think that sharing all that with him made him feel a little more important or involved, or ... like he was part of things ... or kind of like in the special kids club ... he gets to be a part of and ... help me with decisions ... so think it's made him feel better. (Jill, 28, dating)

The open discussion of the mutation test result within Jill and Brock's relationship created opportunities for closeness and sharing in areas from which Brock previously felt excluded.

Although these experiences illustrate high level of involvement on the part of partners and clear paths toward increased intimacy, other women described partners who were not as responsive or openly communicative. Recall that Rylan had only been dating Byron for a couple weeks when she told him about her mutation. Although he was willing to listen to her and conveyed a support, their dynamic was more one-sided than those described by Estella and Kristy.

He seemed interested ... he seemed sympathetic to ... my mom's death, and ... he was sensitive to it. He ... didn't say too much but gave me pats on the back and shoulder and stuff ... things like that, to let me know ... he doesn't ask a lot of questions, I think "cuz he doesn't want to upset me. And maybe he just doesn't want to find out if it would or not, but ... or he just I doesn't want to upset me, so ... he doesn't probe too much about it. (Rylan, 31, Dating casually) "

Alicia had been dating Mitch for 2 years when she found out she carried a *BRCA* mutation. She described his reaction as supportive, but not overly communicative. They seemed less connected on this issue than other subjects described.

... he just sort of took it in stride, it didn't seem to faze him, and if things happen they happen ... I don't know if he ... understands everything, but he knows enough ... I don't think he's done any research on his own ... he knows that I'm at increased risk for breast, he knows that I'm at increased risk for ovarian cancer. He sees the ... stuff lying around, he'll ask me how my appointments are, he'll ask me ... if I want him to go. I never do. (Alicia, 36, Dating seriously)

This dynamic no doubt exists because of both individuals' unique contributions. Alicia's independence may lead her to refuse Mitch's offers to accompany her to appointments, while his relaxed attitude may limit his performance of actively supportive behaviors. Mitch's behavior is also compatible with his use of "blunting" as a coping strategy for his fear (Miller, 1987), and Alicia's willingness to "let him off the hook" may be her way of protecting him from having to fully face this difficult issue.

Although some women experienced men's instrumental responses to *BRCA* disclosure as supportive and helpful, others found their partner's desire to "fix the problem" of *BRCA* a bit frustrating. Acacia described Charlie's willingness to spend time researching *BRCA* and assisting her in locating resources as helpful and as way that he demonstrated interest in the issue and commitment to the relationship. They seem to have developed a cohesive team-approach to dealing with her mutation status, which she experienced as positive, helpful and supportive. Conversely, Jill was annoyed with Brock's desire help find a solution.

There [were] times where ... he just would get annoying ... he was trying, but ... he's a problem-solver, so he was trying to understand the problem and figure out how he could fix it. That was the hardest part, to ... get through him ... "I want you to be involved but this isn't your deal, and I'm gonna this my way, 'cuz it's for me, and you can't fix it, so let's get that through our heads and then we'll be fine." 'Cuz [said things like], "Well, why don't you do this and then ... this won't happen. Well, it's not like that ... (Jill, 28, dat ing)

It seems likely that Jill's desire to remain in control of the situation and of decisions about how to manage her positive mutation status, while also maintaining connection within the relationship, contributed to lack of collaboration.

A small number of women described partners' reactions that were less than positive; none of these relationships were on going at the time of the interviews. Among our participants, Jocelyn had known about her mutation the longest and had disclosed her mutation to several partners. She had experienced a number of different reactions; most were recalled as fairly positive, but in a few relationships sharing the mutation result had a negative impact. She recalled one former boyfriend who had experienced cancer in his own family: "There [was one] ... who lost both of his parents to cancer at different times. When he found out about this ... I feel like he [thought], 'oh, I can't do that again' ... it might have had [an] impact on ... his decision." In another relationship, Jocelyn disclosed to an oncologist boyfriend. She recalled, "He felt sorry and worried for me," and she experienced this reaction as negative.

Jocelyn did not mind a partner wanting to take care of her, but a feeling pity for her was not acceptable.

Relationship Bonding—Several women at various relationship stages recalled disclosure and partners' responses as having bonded them more closely as couples. Estella and Tyson dated in high school and college, broke up for six months, and got back together right before Estella started the genetic testing process. Tyson's ability to support her was evidence to her that getting back together was the right decision: "He reacted so supportively that ... I guess I maybe saw him more as someone I could be with permanently ... " it's just another ... proof to me that ... [being with him] is right." Grace recalled that although she and Jason had just started dating, his willingness to support her through the process of testing highlighted his potential as a permanent partner.

I think it really strengthened things a lot. And the idea that he was able to ... go through all that fear with me, and go through all the worry with me ... from the beginning he took it very seriously, and so I think that he was able to ... just jump into support mode ... I think it definitely bonded us ... [it] sort of ... confirmed that, if he can deal with all this, so early in the relationship ... he's a pretty good guy ... A good one. A keeper. (Grace, 28, married)

Maelie had been dating Bradley for several years when her older sister was diagnosed with breast cancer at 28. Maelie's sister tested positive for a *BRCA* mutation, and Maelie was tested soon thereafter. Sharing her mutation status with Bradley precipitated a discussion about having children, specifically *when* they would do so. She recalled, "We talked about having children much sooner, just based on the things you read, that it's better for me to have children earlier than wait." Similarly, Kristy reported that going through the process of testing with Spencer by her side was a good way of "testing" their ability to handle difficult situations together.

[Getting tested] was one of the bigger decisions in my life, so I think was ... a good thing to go through together to see how we make ... life altering decisions with one another ... was thrilled that he was so supportive through it all, and ... it was a very bonding experience ... it made us a little closer ... at that Time I [already] knew that [he] was somebody that wanted to [be with] ... I definitely started to consider him more serious of a boyfriend when he went through all that with me ... because he was just so supportive through it all and ... he knew something more personal about me, and ... he was very supportive ... proving that he was around for the long haul. (Kristy, 27, Dating seriously)

Rylan also described feeling closer to Byron after sharing information about her mutation.

I think ... at that early point in the relationship ... learning anything about the other person kind of brings you closer together, so ... it's just a part of me that I want him to know about, that I'd want anyone to know about ... So, definitely, I think, well it was one of the things that helped us ... know each other better, and bring us close together. (Rylan, 31, Dating casually)

Both of these relationships were moving toward permanence at the time of interviews. Kristy lived with Spencer and they were contemplating engagement. Rylan was looking forward to a vacation with Byron, which she hoped would further bond them as a couple.

Women who were single when interviewed also believed disclosing their mutation could be a bonding experience in future relationships, and hoped that disclosure would bring up other issues that should be addressed in the context of relationship development. At 34, Jocelyn was concerned about being able to marry and create a family in what she perceived was little available time given her age and desire to pursue risk-reducing surgery. Becoming a mother was an important goal, and she had considered other options for family creation (e.g., artificial insemination). She had a vague mental “deadline”, I after which she might implement an alternative plan; this “deadline” age increased as she got older. Her thoughts about disclosing her mutation status to a future partner seemed to focus on facilitating a discussion about these issues.

I think, by sharing something like that, [I’m] showing a level of honesty and trust in the person and ... I’m sort of making an investment in the person It sort of, for better or for worse, but I think for better, can bring up discussions about ... having children ... and things having to do with fertility and all of that, which can be good, again, not early in a relationship, obviously, but ... you have some extra reasons to think about those things. (Jocelyn, 34, single)

For these women, conversations about mutations and their implications for health and family life were seen as facilitating closeness and connection in relationships, exemplifying the idea that personal disclosure can facilitate intimacy when it is met with a supportive response from the partner, as has been the experience of many of these women. Those who had not yet disclosed their mutation status to permanent partners reported believing that disclosure has the potential to facilitate intimacy and to serve as opportune segues to other important relationship issues.

Living Beyond Disclosure

Carrying a *BRCA1/2* mutation has life long implications and presents challenges for couples at various life stages. A partner’s ability to provide support for a mutation-positive woman early in a relationship may facilitate relationship health and longevity. Estella described Tyson’s role in helping her cope with the anxiety she experiences as her annual screenings approach, characterized by worry that a potentially life-changing cancer would be identified.

... the recurring yearly ... anxiety that I get, that he helps me with, really where it comes up in our relationship now ... he [supports me] mostly by talking and ... listening Mostly by listening. He’s offered to come with me a couple of times ... but it’s really just sort of helping me calm down and feel like it’s gonna be okay ... it feels really nice. (Estella, 28, married)

Similar worries will likely be with Estella for the rest of her life; therefore, Tyson’s ability to support her through these phases of anxiety bodes well for the healthy continuation of their relationship and their ability to successfully navigate anxiety and other *BRCA*-related

stresses that may arise later in their marriage, such as risk reducing surgery or a cancer diagnosis.

Shortly after Grace learned her mutation status, she heard of a job in cancer education and discussed applying for it with Jason. He worried that the stress of the job would be difficult for her, but promised to support whatever decision she made. Grace has now been working in cancer education for several years, during which Jason has become a breast cancer “advocate.”

... someone will talk about their girlfriend had a breast cancer scare and [he'll say] ... “we got in this really deep conversation and I was telling him about your risk ... and the two women we were having dinner with ... didn't want any part of the conversation! It was ... as though they think that they're never gonna get breast cancer!” And it's just really cute because I see him becoming this little advocate for me and my causes. (Grace, 28, married)

Despite the extent to which Grace and Jason had bonded and the high level of support that she consistently received from him, Grace expressed some lingering fears about how her *BRCA* mutation may someday impact their marriage. Specifically, she was concerned about Jason's ability to deal with the changes to her body that would occur as a result of a future mastectomy

... one thing that does scare me is that he gets really freaked out about ... how skin ... looks after a burn ... That ... scares me a little, 'cuz ... I will have scars, and [I wonder], will he be able [to handle it]? And ... over and over, he [says], “oh, that's totally different, that's not even the same thing,” but there's a little part of me that fears that that will bother him. (Grace, 28, married)

Grace's awareness of potential challenges seems realistic. As couples like Grace and Jason navigate their lives and relationships with awareness of a *BRCA1/2* mutation, such concerns are likely to resurface over time, especially during life cycle transitions. A history of support within the relationship seems likely to facilitate successful handling of such challenges.

DISCUSSION

The experiences of our *BRCA1/2*-positive participants illustrate unique challenges in navigating young adulthood, specifically in establishing permanent couple relationships. They identified challenges related to self-doubt about desirability as relationship partners, fear and anxiety about partners' reactions to disclosure of mutation status, concern about timing of disclosure, and integrating partners' reactions to disclosure with their own methods of living with increased risk. They described how communication regarding genetic risk occurs gradually over time and can be a bonding experience within couple relationships, and they identified ways their partners have provided *BRCA1/2* related support since disclosure.

Young *BRCA1/2*-positive women must inform partners of their mutation statuses while balancing their own fears and anxieties about health and stability of relationships, and data from this study enables us to better understand this process in the context of Attachment

Theory. Our participants demonstrated variation in cancer risk perception. Several participants viewed cancer as inevitable; this high-risk perception was related to vivid family experiences with cancer. Relevant literature suggests that very high perceived risk may be related to lack of healthy attachment and to negative communication (Hopwood, 2000); however, among our participants those with higher perceived risk often demonstrated effective partner communication and described healthy partner attachment. Although these women had witnessed loved ones going through cancer diagnosis and treatment, they were not the participants who had *lost mothers* to cancer; their ability to form attachments in close relationships may have been less adversely affected by these experiences. In fact, such experiences may have *strengthened* these attachment bonds, just as communication about risk-strengthened bonds between partners after mutation test result disclosure. Among the three women who had experienced the death of their mother as a result of breast/ovarian cancer, none were married and two were not in relationships, although they had been coping with the death for a decade or more. Family experiences with cancer appear to be related to current relationship status, and both of these issues seem peripherally connected to risk perception. Lower risk perception may be an adaptive strategy used to facilitate positive conversations with partners as a way to improve one's desirability as a partner. This possible relationship between attachment, risk perception, and couple relationships represents a new direction in research on living with high risk status, and warrants further study.

Framing the stressors of *BRCA1/2* within the life cycle perspective allows for recognition of the unique challenges and issues faced by young women (McDaniel et al., 2006). Rolland's concept of anticipatory loss (2006) fits nicely with our findings on the experience of anxiety/fear before disclosing mutation status to partners, and parallels exist with the experiences of women facing other health challenges (Green et al., 2003; Kahn et al., 2005; McCaffrey et al., 2006). Carrying a *BRCA1/2* mutation elicits fear of loss of health, body parts, or life, which is difficult to reconcile with life cycle tasks of young adulthood that bring to mind health and hopefulness. Given their personal high risk of cancer and the need to consider prophylactic surgeries for the highest degree of risk reduction, women experienced uncertainty about men's willingness to select them as partners. Management of anxiety about negative outcomes of disclosure to partners by remaining hopeful and attempting to frame the issue positively fits with Rolland's assertions on management of anticipatory loss through coping and adaptation (2006).

Our findings indicate that appropriate partner responsiveness is an essential consideration in examining how young couples cope with *BRCA1/2* mutations. Our participants identified a specific range of desirable partner responses to disclosure, characterized by sufficient concern to demonstrate caring and relationship investment, but not so much concern that the participants' own level of anxiety would be increased or that would show that a partner was "scared off" by the news. Women wanted their partners to respond with understanding, validation, and caring—or high level of *perceived partner responsiveness* (Reis & Shaver, 1988).

Women who are single during genetic testing for *BRCA1/2* must consider the timing of disclosure to new partners, doing so early enough so as not to be seen as keeping a secret but not so early as to be perceived as raising issues that are more serious than warranted by the

level of intimacy. Disclosure conversations that emerge naturally in the context of other discussions may minimize anxiety that might arise in conversations focused solely on the mutation. Women's need to feel sufficient level of connection with a partner before sharing information about mutation status may be a protective measure, meant to increase the probability that disclosure will be met with support and understanding by a partner who is invested in the relationship.

In many of the relationships in this study, men's immediate reactions to the news of their partners' mutations demonstrated the beginning of support and nurturing with regard to *BRCA1/2*-related issues, and many continued this support over time. Our data suggest that men can be successful in responding supportively, and that disclosure is often experienced as having bonded partners more closely. Many women in continuing relationships described feeling closer to their partners after disclosure, and emphasized that their partners' ability to respond supportively served as verification that relationships were "right" or that the men themselves were "good guys." The success of these relationships in the time since disclosure suggests that our couples will likely be able to handle other *BRCA1/2*-related stressors over their life-course.

In light of the relational implications of mutation-positive status explored here, systems therapy with high-risk women and their partners/families would be a useful addition to the current set of interventions and treatment modalities typically offered to this population. Family and couple therapists with specific training in Medical Family Therapy would be valuable members of health care teams that provide genetic counseling and testing (McDaniel, Hepworth, & Doherty, 1992). A mental health professional trained to help individuals and families deal with medical issues and risk could offer important psychosocial preventive services to women, for example, like Serena, who dealt with feelings of hopelessness regarding her ability to find a partner in light of her mutation. Although Serena eventually overcame these feelings on her own, she spent two difficult years dealing with them and that experience may have been shortened or eliminated had she had access to a competent and effective therapist in the weeks and months surrounding her receipt of test results.

A strength of this study is its focus on the experiences of young women over time as they progress through the normative life cycle task of relationship formation after learning they are *BRCA1/2*-positive. To date, much of the psychosocial research on *BRCA1/2*-positive individuals has focused on psychological and emotional states immediately after genetic testing and in the period surrounding risk-reducing surgeries. Our data represent unique and timely information for all health care providers who care for individuals at high genetic risk of cancer. Limitations include our small sample size and homogenous sample, limiting the ability to generalize these findings to larger groups. A different group of young *BRCA1/2*-positive women may have produced a different set of qualitative data related to these issues that is no less objectively grounded. Many of our questions were retrospective, and in some cases women were asked to remember events that had happened several years ago, resulting in recall bias. That all participants were recruited from one preexisting clinical cohort involved in an intensive screening study suggests that our subjects may not be representative of all *BRCA1/2* positive women.

CONCLUSION

Dealing with a *BRCA1/2* mutation within the context of a relationship is ongoing process that does not end with disclosure and its immediate impact. The implications of being mutation-positive are lifelong, and will present challenges for couples at various life stages. A number them will likely face cancer diagnoses, and in some this will happen at unusually young ages. Others may elect risk-reducing surgical procedures that bring their own potential morbidities, both physical and emotional. Most will consider how and when to create their own families. Ideally, individuals who are at high genetic risk cancer will have access to multidisciplinary health care teams to leverage the full range of professional health care services as required. All of these experiences will be critically shaped by the changing contexts the relationships in which these women are embedded. Further qualitative research should focus on these issues and give voice to women at this and other stages of the life cycle. Once relevant issues are identified, quantitative research may provide further insight related to the effectiveness of various coping strategies, and effectively identify how multidisciplinary health care teams can best assist women at high genetic risk of cancer to improve their quality of life and survival.

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Table 1

Participant Characteristics

"Name"	Age & RelStat at testing	Age & RelStat at interview	Partner's name	Family cancer history
Acacia	22, Serious	28, Married	Charlie	<i>M</i> -B; <i>MGM</i> *-B,O
Alicia	31, Serious	36, Serious	Mitch	<i>S</i> -B; <i>MGM</i> *-B; <i>C</i> -O
Estella	23, Serious	28, Married	Tyson	<i>M</i> -B; <i>MGM</i> *-O
Grace	23, Casual	28, Married	Jason	<i>M</i> -B; <i>GAX</i> 3*-B; <i>Cx4</i> -B
Jill	25, Single	28, ??	Brock	<i>MGM</i> *-Br; <i>A</i> * B
Jocelyn	26, Single	34, Single		<i>M</i> *-B,O; <i>A</i> *-B
Kristy	24, Serious	27, Serious	Spencer	<i>PGM</i> *-B; <i>A</i> -B
Rylan	29, Single	31, Casual	Byron	<i>M</i> *-B; <i>A</i> *-B
Maelie	27, Serious	31, Married	Bradley	<i>S</i> *-B
Serena	21, Single	28, Single		<i>M</i> -O; <i>MGM</i> *-B; <i>A</i> -B
Trina	33, Casual (divorced)	36, Single (divorced)		<i>M</i> *-O

Note. "Name": All names listed here and in text are pseudonyms. ??:this participant chose to classify her couple relationship as somewhere "between casual and serious." *Relationship status*: Participants classified their nonmarital relationships as either serious or casual; however, these are broad categories and variation exists within each. "Serious" relationships were all exclusive and generally of considerable length, included cohabiting and non-cohabiting partnerships. "Casual" relationships were also exclusive but generally shorter, and were all non-cohabiting. "Single" participants include those who were dating/seeking partners, as well as those who were not actively dating. *Family cancer history*: *Family Members*: A = aunt, C = cousin, GA = great aunt, M = mother, MGM = maternal grandmother, PGM = paternal grandmother, S = sister. *Cancer experiences*: B = breast cancer, O = ovarian cancer

* cancer death.

Table 2**Model of Process of Disclosure**

Phase of Disclosure	Theme	Description
Throughout	Disclosure as a gradual process	Participants help partners come to a reasonable understanding over time
Preparation	Risk perception	Significant variation
		Relevance of family cancer experience
	Anticipation of disclosure	Fear/anxiety
		Worry about altering partners' perceptions
		Concern about partners' reactions
		Hope that disclosure could be positive
During	Timing of disclosure	Conversations should occur in context
		When relationships are appropriately intense
	Method of disclosure	Partners attend appointments
		Temporally-related, separate processes
	New relationships since disclosure	
	Partners' reactions	Generally supportive
		Partners felt included
		Variation in partner responsiveness
		Instrumental support
	Negative reactions	
	Relationship bonding	Brought partners closer together
Segues to other important conversations		
Testing potential for relationship longevity		
After	Living beyond disclosure	Ongoing management of anxiety
		Shared advocacy
		Considering the future, realistic worries