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Changes in couples' sexuality during the first two years after breast cancer surgery: A longitudinal descriptive study

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21 **Changes in couples' sexuality during the first two years after**
22 **breast cancer surgery: A longitudinal descriptive study**
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CHANGES IN COUPLES' SEXUALITY AFTER BREAST CANCER

Abstract

This study aimed to describe couples' changes in sexuality after non-metastatic breast cancer from a longitudinal perspective. Forty heterosexual couples participated in a semi-structured interview at 3 months and 2 years after surgery. A specific question on sexuality was thematically coded and themes were qualitatively and quantitatively described. Results showed that couples follow multiple trajectories in terms of sexuality after the onset of oncological treatment. Most couples experienced temporary or more lasting changes, mainly associated with altered body image and pain. Some stopped having sexual activities at the beginning of treatment but resumed sexuality 2 years later; others were unable to restore sexuality. However, some couples managed to stay sexually active all along the cancer journey, showing that cessation of any sexual activity is not inevitable. Health professionals should be more aware of the need to screen early for sexual changes, while reevaluating the couple's situation regularly during care.

Keywords: psycho-oncology, breast cancer, sexuality, couples, body image, pain, qualitative and quantitative descriptive study, longitudinal design

Introduction

Breast cancer (BC) ranks first in incidence and prevalence among all women's cancers (Globocan, 2020), with an annual estimated incidence of 1.67 million new cases worldwide (Ferlay et al., 2015). In terms of mortality (17.7%), BC is the leading cause of death among cancers in women (Globocan, 2020). At the same time, it has one of the best 5-year relative survival rates among cancers: about 80% of women in high-income countries will survive as a result of intense efforts in screening campaigns and advances in medical treatment (Allemani et al., 2018; Duggan et al., 2021; Maajani et al., 2019; World Health Organization, 2021). This implies that a growing number of women live with the aftermath of the disease and its treatment, thus increasing the need to investigate the quality of life of survivors in the medium to long term (Gilbert et al., 2011).

The illness and the secondary effects of oncological treatment may have a massive impact on women's physical and psychological well-being (Drageset et al., 2020; Harrington et al., 2010; Wu and Harden, 2015). One dimension that may be particularly affected is sexuality (Baumgart et al., 2013; Klaeson et al., 2011; Panjari et al., 2011; Robinson et al., 2014; Sadovsky et al., 2010; Safarinejad et al., 2013; Schover et al., 2014; Shaw et al., 2015). At a physical level, surgery (i.e., lumpectomy or mastectomy; axillary lymph node dissection) can interfere directly with the physical ability to have sexual activity because of pain and discomfort. The pain, often located in the axilla, shoulder, arm, or chest wall, develops shortly after surgery or up to several months afterward; in some cases, it can persist for years (Dunne and Keenan, 2016; Harris, 2018; Langford et al., 2014; Lovelace et al., 2019; Tait et al., 2018; Vilholm et al., 2008; Waltho and Rockwell, 2016). In addition, during mastectomy, there is a high risk for injury of the sensory innervation of the breast and nipple areola complex, which may lead to loss of the protective and erogenous sensation in the operated area (Knackstedt et al., 2019; Langford et al., 2014; Shridharani et al., 2010). Beyond surgery, chemotherapy may

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3 induce ovarian failure, leading to premature menopause, vaginal atrophy, vaginal dryness, and
4
5 decreased libido, which may in turn be the origin of painful and unpleasant sexual activities
6
7 (DeSimone et al., 2014; Rogers and Kristjanson, 2002). Hormonal therapy also decreases
8
9 women's libido, arousal, and vaginal lubrication, leading to vaginal dryness and dyspareunia
10
11 (Cebeci et al., 2010; Gopie et al., 2014; Panjari et al., 2011; Robinson et al., 2014). The entire
12
13 sexual response cycle of the woman may thus be affected by treatment, including sexual
14
15 desire, arousal, and orgasm (Ljungman et al., 2018). These difficulties lead to a decrease in
16
17 sexual frequency and satisfaction (Panjari et al., 2011; Rottmann et al., 2017; Safarinejad et
18
19 al., 2013; Ussher et al., 2012; Vieira et al., 2014).

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23
24 Oncological treatment also exposes women to marked changes in their physical
25
26 appearance (Przedziecki et al., 2013) that may result in body image alteration (i.e.,
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28 dissatisfaction with appearance, loss of a sense of femininity and attractiveness, and shame)
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30 (Falk Dahl et al., 2010; Fobair et al., 2006; Maass et al., 2015; Sebri et al., 2021; Sherman et
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32 al., 2018). The loss or disfiguration of one or both breasts, considered an important part of
33
34 feminine identity, may be particularly distressing and is associated with psychological distress
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36 and altered body image (Cairo Notari et al., 2017; Carroll et al., 2016; Fobair et al., 2006;
37
38 Karabulut and Behice Erci, 2009). Chemotherapy-induced alopecia is also considered by
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40 patients to be particularly distressing with respect to their image (Cairo Notari et al., 2017;
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42 Lemieux et al., 2008; McGarvey et al., 2001). Weight gain (Avis et al., 2004; Helms et al.,
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44 2008; Makari-Judson et al., 2007; Rosenberg et al., 2013), tissue damage caused by
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46 radiotherapy (Härtl et al., 2003; Hopwood et al., 2001; Schnur et al., 2011), loss of (or the fear
47
48 of losing) fertility, and more general functional impairment and sensory changes (Fingeret et
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50 al., 2014; Rosenberg et al., 2013; Woertman and van den Brink, 2012) have also been found
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52 to affect women's self-perception and appreciation. Studies have shown that the alteration of
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3 body image is strongly linked to sexual functioning (Begovic-Juhant et al., 2012; Gilbert et
4 al., 2010; Pelusi, 2006; Speer et al., 2005; Takahashi and Kai, 2005).

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7 BC not only affects the woman diagnosed with it, but may be understood to be a shared
8 stressor in couples (Kayser et al., 2007; Meier et al., 2019). Shared stressors affect couples as
9 a system rather than as individuals (Hagedoorn et al., 2008) and this is also true for sexuality.
10 As affected by BC, the sexual behavior of the woman (e.g., refusal or avoidance of sexual
11 contact, hiding her body during sexual activities, a more passive and uninvolved role) (Cebeci
12 et al., 2010; Klaeson et al., 2011; Ussher et al., 2012) and the sexual behavior of her partner
13 (e.g., fear of initiating sexual activities, being afraid to hurt, embarrassment or disgust in
14 touching the operated breast, sexual avoidance) (Loaring et al., 2015; Marshall and Kiemle,
15 2005; Nasiri et al., 2012; Zahlis and Lewis, 2010) both contribute to the couple's sexual
16 dynamics, including its practices, its frequency, and the satisfaction of each partner. In
17 addition, the quality of the general couple relationship is one of the most important predictors
18 of sexual functioning in women facing BC (Brédart et al., 2011; Ganz et al., 1998; Gilbert et
19 al., 2011; Speer et al., 2005). Studies have shown that BC can fragilize the couple
20 relationship, inducing tensions, conflicts, communication problems, and lack of social support
21 (Holmberg et al., 2001; Moreira et al., 2010; Shands et al., 2006), whereas it is known, for
22 example, that women who feel well supported by their partner report less sexual dysfunction
23 (Kinsinger et al., 2011). The relational dynamic can therefore influence the sexual one and its
24 evolution: hence the importance of investigating the perspective of both partners.
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49 According to the literature, sexuality may be significantly affected during the treatment
50 phase. However, many of the sexual difficulties persist over time, after treatment ends.
51 Longitudinal quantitative studies have shown that even when the overall quality of life of
52 women improved, their sexuality remained problematic and thus represents a significant long-
53 term issue for these women and their partners (Biglia et al., 2010; Bloom et al., 2004, 2012;
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3 Ganz et al., 2002; Kornblith et al., 2003; Mols et al., 2005; Neyt and Albrecht, 2006; Stein et
4
5 al., 2008). Qualitative studies, through their focus on individual experiences, have
6
7 nevertheless highlighted that sexuality is not affected by BC and its treatment in the same way
8
9 for everyone, suggesting that there could be multiple trajectories (e.g., Fouladi et al., 2018;
10
11 Maleki et al., 2021). Unfortunately, existing qualitative studies are generally cross-sectional.
12
13 This constitutes a possible limitation of the literature because a single point of measurement
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15 does not allow evaluation of whether the reported difficulties are temporary or established, or
16
17 if they were already present before BC and thus not related to the disease.
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21 The aim of this study was to fill this gap in the literature by describing the couples'
22
23 experience of changes in sexuality after BC, taking into consideration the different trajectories
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25 that they can follow over time. To achieve this goal, we **have adopted a longitudinal**
26
27 **qualitative and quantitative design**. The qualitative **facet** allowed us to investigate the issue of
28
29 a decrease in sexual frequency, which constitutes one of the most prevalent sexual changes
30
31 after BC, and to explore how this change was experienced by couples and the reasons they
32
33 evoked to explain it. **The themes we created from the couples' accounts were also quantified**
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35 **in terms of frequency; whereas this strategy is unusual in a qualitative study, it has been**
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37 **integrated to ensure that the descriptive analysis did not become skewed toward one type of**
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39 **trajectory to the detriment of another**. The longitudinal design allowed us to conduct this
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41 analysis from a temporal perspective and to observe the evolution of changes over a 2-year
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43 period.
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51 **Materials and Methods**

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53 This study is part of a larger longitudinal research project on heterosexual couples'
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55 adjustment to BC that uses mixed methodology to collect data (self-reported questionnaires,
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57 semi-structured interviews, and direct observation) (*[reference omitted for double-blind*
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3 *reviewing*]). The original study consists of four measurement time points over a 2-year
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5 postsurgical period. In the present study, we focused on the second and last time points,
6
7 namely, 3 months after surgery (T1 in the present study) and 2 years after surgery (T2). This
8
9 allowed us to analyze two moments that were distant in time and clearly distinct in terms of
10
11 the cancer care journey: T1 corresponds to the active treatment phase, while T2 corresponds
12
13 to the rehabilitation phase, when most treatments have ended, except for hormonal therapy.
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15 Since our purpose was to describe the experiences of changes **in the frequency of sexual**
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17 **activities** and the perceived reasons for them, the data presented are from the **analyses** of the
18
19 semi-structured interviews exclusively.
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23

24 *Participants*

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26 Women and their romantic male partners were recruited from the Breast Center of the
27
28 University Hospital of [*details omitted for double-blind reviewing*]. Eligibility criteria for
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30 women were as follows: diagnosis of non-metastatic BC, breast surgery required (mastectomy
31
32 or lumpectomy), age ≥ 18 years, and ability to speak and read [*details omitted for double-*
33
34 *blind reviewing*]. Eligible partners were men aged ≥ 18 years able to speak and read [*details*
35
36 *omitted for double-blind reviewing*], who were identified by women as their boyfriend,
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38 husband, or romantic partner. Engagement or marriage was not required, nor was living
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40 together.
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45 This was a convenience sample. The original study was proposed to 127 women: 97
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47 (76.4%) agreed to participate and to ask their male partner to participate. Sixty-one partners
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49 (62.9%) agreed to enter the study. For the present study, the data of women with participating
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51 partners recruited during the predefined time were used. Because of dropouts during the 2
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53 years of follow-up and missing data (for one or both partners at one or both time points), the
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55 final sample size for this study was 40 heterosexual couples.
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As shown in Table 1, the participants' mean age was 53.23 years (SD = 10.88) for women and 56.34 years (SD = 12.29) for partners. The sample's socioeconomic status was mainly (92.5%) middle to upper class (Hollingshead Index of Social Position; Hollingshead, 1971). Most of the couples were in a long-term relationship (M = 27.28 years, SD = 15.94), cohabiting (n = 37, 92.5%), and married (n = 30, 75.0%). Regarding cancer diagnosis, most women (n = 35, 87.5%) were diagnosed with invasive (vs in situ) BC: 37.5% (n = 15) were at stage I, 32.5% (n = 13) at stage II, and 17.5% (n = 7) at stage III. Slightly more than half (n = 23, 57.5%) underwent mastectomy (vs lumpectomy). Concerning adjuvant treatment, at T1, 10.0% (n = 4) were receiving chemotherapy, 15.0% (n = 6) radiotherapy, 7.5% (n = 3) trastuzumab therapy, and 55.0% (n = 22) hormonal therapy. At T2, 33 women (82.5%) were still being treated with hormonal therapy.

- Insert Table 1 near here -

Procedure

Recruitment took place between September 2011 and December 2013. During pre-hospital consultation (1-2 weeks before surgery), the referent nurse of the Breast Center systematically proposed taking part in the research to all women who met the inclusion criteria. Women and their male partners received documentation on the research and signed an informed consent form. Couples were asked to jointly participate in semi-structured interviews and to individually fill out a sociodemographic questionnaire at each time point. The study was approved by the Ethics Committee of the [details omitted for double-blind reviewing] in July 2011 (protocol number [details omitted for double-blind reviewing]).

Questionnaires

Sociodemographic data (i.e., age, socioeconomic status, marital status, length of the relationship, and cohabiting status) were collected with an ad hoc questionnaire, whereas medical data (i.e., tumor stage, surgical and adjuvant treatments) were obtained from medical

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3 records. Sociodemographic and medical data were used exclusively to describe participants'
4
5 main characteristics.

6 7 *Semi-structured interviews*

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10 The interviews with couples (i.e., both partners interviewed concurrently) were
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12 conducted by the referent nurse at the hospital during the nursing consultation. Each interview
13
14 lasted about 45 minutes and was filmed in its entirety. The interviews were filmed and not
15
16 simply audio-recorded in order to collect observational data to be used in the larger project,
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18 but only audio data were analyzed in the present study. Before the interview, the referent
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20 nurse explained to participants that the aim was to speak about their experience of the illness
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22 since the time of diagnosis. She also explained that the interview was organized around a
23
24 series of questions about the impact of BC on multiple aspects of the couple's life and that
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26 these questions served as a starting point for deeper discussion.
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31 In this study, we exclusively focused on a question from a larger interview guide that
32
33 was specifically related to the impact of the BC on sexuality. The question was as follows:
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35 “*Did you experience any significant changes in your sexual life and intimacy after breast*
36
37 *cancer?*” The nurse was instructed to ask participants to develop their answers through
38
39 follow-up questions (e.g., *What makes you say there has been a change/no change? What*
40
41 *kind of change have you experienced? Why do you think there has been this change?*). This
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43 allowed collection of nuanced answers that were closer to individual experiences and thus
44
45 richer than a mere “yes/no” answer. Nevertheless, the mean length of this part of the interview
46
47 was relatively short: 2.41 minutes (SD = 2.50) at T1 and 2.40 minutes (SD = 2.19) at T2. This
48
49 was because the original project and the interview guide were not designed for an exclusive
50
51 focus on sexuality, and there was not enough time to further develop each question of the
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53 interview guide. No other parts of the interview informed the analysis or interpretation of the
54
55 data concerning sexual life and intimacy. Couples' answers to this question were transcribed
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CHANGES IN COUPLES' SEXUALITY AFTER BREAST CANCER

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3 verbatim by a master's student in psychology, under the supervision of [*details omitted for*
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5
6 *double-blind reviewing*].

7
8 *Interview analysis*

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10 Because the study focused on BC-induced *changes* in sexuality, the first step of the
11
12 analysis was to identify and select, among the 40 couples, those who reported changes during
13
14 their interviews. We focused on changes in sexual frequency, which were the issues most
15
16 often reported in the literature and which had the advantage of being clearly disclosed by
17
18 couples and thus easier to identify and code. Three coding categories were created for this
19
20 purpose: *decrease* (i.e., decrease of sexual frequency, including stoppage of any sexual
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22 activities, compared with before BC); *resume* (i.e., sexual improvement at T2 compared with
23
24 T1; this included resumption of sexual activities following complete cessation or increased
25
26 frequency of sexual activities following reduction), and *no change* (i.e., no significant change
27
28 in sexual activities following BC). For each couple, we coded whether there was a decrease in
29
30 sexual frequency, a resumption, or a lack of change at both T1 and T2. To achieve greater
31
32 accuracy for descriptive purposes, we introduced an additional distinction between couples
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34 who were already sexually inactive before BC and couples who were sexually active before
35
36 the disease. This information was also extracted from the participants' answers to the
37
38 interview question. By combining the assigned codes at both time points, we were able to
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40 group couples into different patterns of change.
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47 Given our research aim, only the data of couples who reported changes in their sexuality
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49 were analyzed in order to describe how changes were experienced and the reasons evoked to
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51 explain the changes over time. Concerning couples who reported no changes, we mention
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54 only their number and percentage in the Results section without describing or discussing these
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58 specific patterns in more detail.
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3 The transcripts were analyzed by the second author ([*details omitted for double-blind*
4 *reviewing*]), a researcher who had training in qualitative research methodology, by using
5 NVivo software (NVivo 12.6.1). To extract and organize the information in the transcripts,
6 the coder followed the guidelines of the reflexive thematic analysis for coding and
7 development of themes (Braun and Clarke, 2006, 2021a). This method was conceived to
8 identify and organize patterns of meaning in a data set. The first step consisted in immersion
9 in the data to become familiar with the content of interviews through repeated readings of the
10 transcripts. After this careful reading, the second step consisted in the coding of the data,
11 working through the text in order to identify meaning units, and labeling them with a code
12 that captures the meaning identified. The coder tried not to let the coding be driven by ideas,
13 categories, and definitions from previous research to allow for a more inductive, data-driven
14 approach. The codes were thus “grounded in the data” (Braun & Clarke, 2021b, p. 331); no
15 predefined codes based on existent studies or a specific theoretical framework were used. In a
16 third step, the coder reviewed all the codes, looking for connections between them and paying
17 attention to any patterns in the data. This allowed grouping of codes into a smaller number of
18 higher-level codes referred to as categories. Categories were subsequently regrouped to create
19 overarching themes, which are defined as “patterns of shared meaning, united by a central
20 concept or idea” (Braun & Clarke 2021a, p. 341).
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45 To answer our research question (i.e., how is the BC-induced change in sexual
46 frequency experienced by couples and what are the reasons evoked to explain this kind of
47 change over time?), for the generated themes, we used both a qualitative and a quantitative
48 descriptive approach (i.e., frequency of occurrence of themes). The authors are aware that
49 reporting frequencies depart from the reflexive thematic approach adopted to analyze data, but
50 this was a deliberated choice. There was indeed clear heterogeneity in the interviews. As we
51 were particularly interested in the different trajectories and experiences of couples, we were
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3 keen to make sure the descriptive analysis did not become skewed toward one type of
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5 experience to the detriment of another. Giving an indication of frequency allowed us to
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7 relativize some issues and point out the existence of alternative experiences.
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10 To offer the most accurate description possible, we simultaneously considered the
11
12 following aspects in the presentation of results: the couples' different patterns of change, the
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14 two measurement time points (allowing a temporal perspective), the discourse of couples
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16 (summarized in themes and illustrated by verbatim quotes), and the themes' frequency of
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18 occurrence.
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20

21 22 23 24 **Results**

25 26 *Four patterns of change in sexuality*

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28 The patterns we created were as follows (see Table 2): (1) *long-term-decrease* couples
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30 (i.e., couples reporting having decreased or stopped sexual activities at both T1 and T2,
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32 compared with the pretreatment period; n = 9, 22.5%), (2) *temporary-decrease* couples (i.e.,
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34 couples who reduced or stopped sexual activities at T1, but reported an improvement at T2; n
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36 = 16, 40.0%), (3) *active-stable* couples (i.e., sexually active couples who reported no
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38 significant changes at both T1 and T2; n = 5, 12.5%), (4) *inactive-before-BC* couples (i.e.,
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40 couples who were already sexually inactive before BC and who reported no significant
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42 changes at both T1 and T2; n = 10, 25.0%).
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47 The most frequent pattern in the sample was that of couples who had temporarily
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49 decreased their sexual activity at 3 months after surgery, but who reported having resumed it
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51 within 2 years. The second most frequent pattern was that of couples who were already
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3 sexually inactive before BC, showing that not all couples were sexually inactive because of
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7 the illness or its treatment.
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10 Of the 30 couples who were sexually active before BC, 25 (83.3%) reported a decrease
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12 in sexual frequency or a stoppage in sexual activity at T1 (*long-term-decrease* and *temporary-*
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14 *decrease* patterns) and 9 (30.0%) at T2 (*long-term-decrease* pattern). Only five couples
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16
17 (16.7%, *active-stable* pattern) reported being as sexually active as before BC at both time
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20 points. Concerning couples assigned to a *long-term-decrease* pattern, four of nine (44.4%)
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22
23 completely stopped having sexual activities at T1, while five (55.6%) experienced a decreased
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25
26 frequency. At T2, five couples reported a stoppage (one more than at T1) and four still
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29 experienced a decreased frequency compared with before BC. Concerning the *temporary-*
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32 *decrease* pattern, 5 couples of 16 (31.3%) had completely stopped sexual activity at T1, while
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34
35 11 (68.8%) experienced a decreased frequency. All 16 couples of this pattern reported an
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38 improvement in their sexuality in terms of frequency at T2 (i.e., resumption of sexual
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41 activities for couples who had previously stopped, or increased frequency for the others).
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43
44 Globally, 9 couples of 25 (36.0%) had completely stopped having sexual activities at T1, and
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46
47 less than half of them (n = 4, 44.4%) managed to resume sexuality within T2. Improvement
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50 was more prevalent among couples who had simply decreased frequency: 11 couples of 16
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53 (68.8%) reported improved sexual frequency at T2.
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56 - Insert Table 2 near here -
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59 *Experiences and perceived reasons for change*
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4 Through the analysis of the 25 couples reporting a sexual change after BC, we
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6
7 generated seven themes, namely: (1) sexuality was not a priority, (2) painful sexual contact,
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10 (3) altered body image, (4) relationship implications in decreasing or stopping sexuality, (5)
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13 resuming but not resetting, (6) acceptance of the “new” body, (7) relationship implications in
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16 resuming sexuality (see Table 3 for a summary of themes). These themes have been integrated
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19 in the two sections that follow (*Couple's experiences of stopping or decreasing sexuality* and
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22
23 *Couples' experiences of resuming sexuality after decreasing or stopping*) to describe the
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26 experience of couples reporting changes in sexuality in terms of stopping, decreasing, or
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28
29 resuming sexuality over time.
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33 - Insert Table 3 near here -
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36
37 *Couples' experiences of stopping or decreasing sexuality*
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40 In this section, we report the results of the analysis concerning all couples reporting a
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43 decrease or stoppage at T1 (i.e., couples belonging to both the *long-term-decrease* and the
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45
46 *temporary-decrease* patterns) and couples who continued to experience a decrease or stoppage
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49 at T2 (*long-term-decrease* pattern).
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53 *Sexuality was not a priority*
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4 Three months after surgery, many couples (n = 11, 44.0%) who experienced a change in
5
6 sexual frequency (i.e., a decrease or stoppage) stated that their only priority at that moment
7
8 was the fight against cancer. As one woman explained: "On the sexual level, no, everything
9
10 stopped since the diagnosis announcement was made. We had the impression that... well, it
11
12 was really secondary... it was really secondary" (W6, T1). Referring to the treatment period,
13
14 another woman disclosed: "I wasn't often well, was I? So, it's not fun, you can't think about,
15
16 er... having hanky-panky" (W1, T1). Sexuality was thus not a main concern. At this time,
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18 partners were described by the women (or they described themselves) as sensitive and
19
20 understanding (n = 17, 68.0%). Partners were focused on the woman's survival and on how to
21
22 best support her. They did not complain about the regression of their sexual lives and rarely
23
24 asked for sexual intercourse: "Sex... It's... it's not vital. The main thing is to have someone
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26 who is fit next to you" (P1, T1). **BC, and its possible life-or-death implications, took the main
27
28 place, making sexuality a secondary activity.**

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41 Couples who still reported a decrease or stoppage in sexuality 2 years later (n = 9, *long-*
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43 *term-decrease* pattern) no longer mentioned that sexuality was not a priority in explaining
44
45 their situation. This suggests that the importance or the place of sexuality in the couple had
46
47 presumably changed again and that the origins of decreased or stopped sexuality were to be
48
49 searched for elsewhere.

51 *Painful sexual contact*

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54 Pain, more specifically pain from touching the operated breast and/or pain during
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56 penetration (because of vaginal dryness), was evoked by some couples as a reason to decrease
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58 or stop sexuality at T1 (n = 8, 32.0%). A few partners (n = 6, 24.0%) were reluctant to touch
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CHANGES IN COUPLES' SEXUALITY AFTER BREAST CANCER

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3 the woman's breast because they feared hurting her or because they knew that she feared
4 being touched. As one partner explained: "I mean... I try to surround my wife as best as I can
5 and then uh... avoid certain areas that are still very, very sensitive, that's for sure, yeah, yeah"
6 (P7, T1). It was the same with sexual intercourse with penetration: "We won't be able to force
7 it and then it will hurt her..." (P1, T1). Another partner talked about a "retreat phenomenon"
8 from sexuality to avoid pain (P3, T1). Fear of pain can lead to a sense of constraint and loss of
9 freedom, which can seem in contradiction with an ideal of free, spontaneous, and instinctual
10 sexuality: "And then, uh... for me, it's not ideal... because you can't... you're not free. I don't
11 think we're free to do what we can" (W10, T1).

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14 Quite surprisingly, at T2, only two couples of nine (22.2%) still reported painful
15 intercourse due to hormone therapy-induced vaginal dryness; for these couples, the woman's
16 dyspareunia was the origin of low sexual frequency. No couples still mentioned the partner's
17 fear of touching the woman's breast, probably because the postoperative pain was mostly
18 gone.

Altered body image

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21 Beyond pain, one factor that appeared to play a central role in couples' sexual changes
22 and difficulties at both T1 and T2 was altered body image. Among the many possible bodily
23 changes, breast loss or disfigurement due to surgery, as well as chemotherapy-induced
24 alopecia, seem to be of particular importance in affecting the women's sense of femininity
25 and attractiveness in our sample. Concerning hair loss, one woman stated: "I've been well...
26 scalped, eh!" (W1, T1). This harsh term was used sarcastically by the woman as if to mask the
27 distress that alopecia has caused her. Another woman stated: "It's... it's weird though, isn't it,
28 to be a woman... uh without uh... breast" (W2, T2). The loss of breast has led some women to
29 question the true essence of being a woman and the role of breast as a symbol (of femininity,
30 sexuality, maternity). The changes experienced were such that some women no longer
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3 recognized themselves in their changed body, leading to a loss of self-confidence: "There
4 was... a... a loss of self-confidence... that is, my image has changed, I'm not the same person
5 in the same body" (W3, T2).
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10 Like pain, body image difficulties were more frequently reported at T1 (n = 13, 52.0%).
11 At that time point, treatments were still ongoing, and changes were recent and still shocking,
12 requiring time to be integrated or accepted. One woman reported, for example, that she could
13 no longer even look at or touch her operated breast: "It's, it's incredible. I never thought that
14 one day I would be afraid of my body of... of not wanting to touch it [...]. But I can't. Even I
15 can't touch myself" (W4, T1). **Some women may have felt the need to take some distance
16 from their own body, to avoid it on multiple sensory levels (touch, sight) to protect
17 themselves from too difficult a confrontation.**
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28 The discomfort that the women felt toward their body had repercussions for how to have
29 intimate and sexual contact with their partner. Some women (n = 4, 16.0%) refused to show
30 themselves naked, or even to be touched. One woman disclosed: "When he tries to touch me,
31 I... he usually touches me on my belly and everything, I... I can't do it. I can't do it..." (W4,
32 T1). **The questioning of one's femininity and attractiveness has led some women to feel guilty
33 toward their partners, as if they were "forcing" them to touch and look at this new altered
34 version of themselves.** One partner reported about his wife: "She would get undressed and
35 then say to me 'I'm sorry...I don't feel like a woman anymore' [...]. She had the feeling that
36 she no longer knew how to give what a woman could or should give" (P2, T1).
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49 Unfortunately, the woman's anxiety about her appearance was in a few cases
50 unintentionally strengthened by her partner avoiding touching the operated area (n = 4,
51 16.0%). **Not being touched, over time, can lead the woman to feel that her partner is no longer
52 sexually attracted to her or even disgusted by her altered body. A vicious cycle can ensue and
53 inhibit the rise of sexual desire.** However, **the male partner's discomfort or disgust has been**
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CHANGES IN COUPLES' SEXUALITY AFTER BREAST CANCER

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3 only rarely explicitly disclosed (n = 2, 8.0%). Some partners described their avoidance
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5 behavior as spontaneous and unpremeditated, and they could not say what drove them. As one
6
7 partner explained: "I didn't know why, if it was because I was embarrassed, if it was because I
8
9 didn't dare touch her, if it was because I was afraid of hurting her, if I was afraid of my
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11 reaction" (P3, T1). This partner mentioned fear of how he might react (i.e., what he might feel
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13 and/or how his body might act). The doubt he seems to express about his ability to eroticize
14
15 the woman's altered body led him to avoid physical contact.
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20 Two years later, four of the nine couples who still experienced a stoppage or decrease in
21
22 sexuality (44.4%) continued to perceive body image as a barrier to improving their sexual life.
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24 The women in these couples still felt disfigured and mutilated, or, as one woman said, like
25
26 they were "a half portion" (W5, T2), meaning that BC and its treatments had deprived her of a
27
28 significant part of herself. In these cases, intimate and sexual contact with the partner may
29
30 therefore be limited or completely avoided.
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Relationship implications in decreasing or stopping sexuality

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35 It is important to highlight that most couples who reported a stoppage of sexual activity
36
37 or a decrease in sexual frequency at T1 and/or T2 did not experience a deterioration in their
38
39 relationship. On the contrary, many of them (n = 14 of 25, 56.0%) reported that their bond
40
41 had even strengthened at T1. As one partner said: "I would say for the... the physical side uh,
42
43 the mechanical side... is fading uh... plays less of a role... while the relationship taken as a
44
45 whole is growing in intensity" (P9, T1). This was also true for five couples of nine (55.6%)
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47 who still experienced a stoppage or decrease at T2. In these couples, stopping or decreasing
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49 sexuality seemed to be their strategy for adapting their sexuality according to their current
50
51 situation and needs. Putting aside the more physical and genital dimension of their
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53 relationship was thus not perceived as a threat to their intimacy, which was instead "nurtured"
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55 and enriched by other aspects (tenderness, cuddling, mutual support, etc.). A few couples (n =
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3 6, 24.0%) searched for temporary “alternatives” to sexuality, especially by replacing it with
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5 hugs and increased tenderness and affection: “We always kept our cuddle time, our time
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7 together. So that [sexuality], I mean uh... it's because I wasn't well that I didn't need it and he
8
9 didn't either... But these [cuddle times], we kept” (W6, T1). These couples seemed to have
10
11 good communication skills, which allowed them to share their feelings and make choices that
12
13 respected each other's needs. In these couples, the partners were generally described as very
14
15 sensitive and understanding by the women (n = 7, 28.0% at T1): “I find that... he's very
16
17 respectful... of... of all that. So, it's kind of... I didn't have to say it, I'm a princess” (W3, T1).
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19 Under these conditions, the couple relationship was preserved. In a few couples (n = 6 of 25,
20
21 24.0%), however, changes in sexuality were accompanied at T1 by a fragilization of the bond,
22
23 making it more difficult to communicate constructively to find sustainable and respectful
24
25 solutions. At T2, three couples of nine who continued to report a stoppage or decrease
26
27 (33.3%) still complained about relationship difficulties: “I think that there is also perhaps,
28
29 um... that on my side there is a kind of fatigue from... from not reinvesting in our relationship”
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31 (P4, T2). The fatigue this partner mentioned suggests a certain passivity and fatalism that
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33 leads each partner to maintain the status quo even if it leads to an unsatisfying relationship.
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40 *Couples' experiences of resuming sexuality after decreasing or stopping*

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43 In this section, we report the results of the analysis concerning the 16 *temporary-*
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45 *decrease* couples at T2 (i.e., the time point when they reported experiencing improved
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sexuality).

54 *Resuming but not resetting*

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4 Although most couples managed to resume sexuality within 2 years after surgery (n =
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7 16 of 25 couples, 64.0%), this was often not as it was before the disease. As one partner
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10 explained: "It's true that I probably don't see her the same way anymore and she... [looking at
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12
13 his wife] maybe you don't behave the same way anymore, so, uh... so, necessarily, the... the
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16 relationship changes and uh... and uh... the approach... in the context of a sexual relationship,
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19 also changes..." (P8, T2). The experience of cancer can change the way both partners behave
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22 as well as their respective roles in the couple: due to the illness, their roles were defined as the
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25 "ill" women (the fragile victim) and the partner "carer" (protector). This shift in roles can
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28 persist over time, altering how partners perceive each other and how they interact, including
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31 in the sexual sphere. Despite an improvement compared with T1, half of these couples (n = 8)
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34 reported that their sexual activities continued to be less frequent than before BC. Changes thus
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37 persisted, as did certain difficulties, requiring both partners to adjust: "Afterwards, we start
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40 again... But we start again differently, that's for sure. [...] we adapt ourselves. Yeah, we adapt.
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43 Yeah, we adapt" (W7, T2). Six couples of 16 (37.5%) described sexual intercourse as still
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45
46 painful for the woman due to hormonal therapy-induced vaginal dryness, which made
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49 sexuality less enjoyable and thus less frequent than before BC: "So, little by little, yeah, we're
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52 starting to get back to, uh... the intimate life we had before. Yeah. But well, there are always
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55 the consequences..." (W6, T2). The changes were not exclusively about frequency, however;
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58 some couples also reported having "adapted the practices" (P8, T2) and found new ways to
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3 live and enjoy their sexuality together (n = 3, 12.0%). These changes were perceived as
4
5 positive because they allowed couples to regain intimacy and improve their sexuality.
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8 *Acceptance of the “new” body*

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10 At T2, most women (n = 12, 75.0%) no longer evoked breast ablation or other physical
11
12 alterations as having a main role in their sexual lives. This might suggest that they had
13
14 somehow managed to adapt to their bodily changes and accepted living with them. Some
15
16 explicitly reported that they were comfortable again (n = 5, 31.3%): “I feel comfortable like
17
18 this. Even though my body is not like before” (W8, T2). At the same time, the fact that this
19
20 issue was not evoked at T2 could mean that women simply no longer spontaneously talked
21
22 about it with their partners (or maybe did not dare to). Partners may in some cases wonder
23
24 whether there has really been an acceptance: “Sometimes, I wonder if she doesn't have
25
26 difficulties to accept her body... But uh... that's another debate...” (P9, T2). The four women
27
28 who still explicitly evoked body image-related difficulties said that these difficulties had been
29
30 mitigated over time, becoming less debilitating for their sexual life. **Nevertheless, these
31
32 difficulties remain present and important enough to be mentioned.**
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38 *Relationship implications in resuming sexuality*

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40 Almost half of the partners (n = 7, 43.8%) continued to be described as sensitive
41
42 regarding the woman's health and well-being. Nevertheless, some misunderstandings could
43
44 arise. As the treatment side effects such as vaginal dryness or decreased sexual desire were
45
46 mostly invisible, it would sometimes be difficult for the partner to understand why the woman
47
48 did not want to have sex as often as they did before BC. Discouraged, a few (n = 2, 12.5%)
49
50 reported stopping any attempt to initiate sexual intercourse, believing it to be useless: “I say to
51
52 her ‘yeah, but uh... every other time you say “no, I'm not too good and all that,” so we say
53
54 well, never mind, uh...” (P1, T2). Another partner reported: “It was more like uh... yeah, fear
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56 of disturbing, fear of choosing... the wrong time...” (P9, T2). In these cases, men waited for
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CHANGES IN COUPLES' SEXUALITY AFTER BREAST CANCER

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3 the woman to take the initiative, thus avoiding being rejected. This avoidance of initiative on
4 the part of a partner who was previously initiator, could lead the women to believe that he no
5 longer desires her and to feel rejected.
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10 At T2, a quarter of the partners (n = 4) seemed to focus again on their own sexual
11 needs (which had been partially or totally repressed until that moment) and asked the woman
12 (more or less subtly) to resume sexuality. For some partners, sexuality seemed thus to be no
13 longer secondary and had regained an important place in their life. Depending on the couple,
14 the request to resume sexuality was received differently by the women. When couples were
15 able to openly communicate about this topic, they managed to find compromises and mutually
16 acceptable solutions. The topic could even be discussed with humor in some cases: “We don't
17 ask ourselves which was better... Christmas or making love? Well, I'm thinking a bit, and...
18 Meh, Christmas because it's more frequent” (P5, T2). Even if the solution was not always
19 ideal for both partners (e.g., too low frequency), this allowed them to regain an intimate and
20 sexual contact that was sometimes avoided or feared for a long time.
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35 In some couples, however, women were not yet ready, but felt pressure to respond
36 positively to their partner's request because of feelings of guilt. Three women of 16 (18.8%)
37 admitted having forced themselves to have sexual intercourse to satisfy their partner. As one
38 woman explained, “if my partner wants to have sex, I'm not going to refuse... because I know
39 it's a need...” (W9, T2). The fact that men had to give up these needs for a long time “because
40 of them” leads some women to prioritize their partners' sexual well-being, even if this means
41 enduring painful and/or pleasureless sexual intercourse: “I think that she's not ready... for...
42 for sex. But let's face it, she has made an effort from time to time” (P6, T2). As much as this
43 "effort" may be appreciated by the partner, the risk is for the woman to reinforce a vicious
44 circle where sexual activities are not motivated by sexual desire and where sexuality is lived
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3 as a painful experience. This may in the long run reduce sexual satisfaction within the couple
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5 and lead to a subsequent decrease or avoidance of sexual activities.
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10 Discussion

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12 This longitudinal descriptive study provides a better understanding of how heterosexual
13 couples' sexuality changes 3 months and 2 years after starting BC treatments.
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17 A major objective of this study was to understand the reasons behind the decrease or
18 cessation of sexual activities 3 months after surgery. At this point in the treatment process,
19 sexuality did not represent a priority for the couples. They were fighting cancer and appeared
20 to be too preoccupied about the progression of the disease (e.g., fear that the woman would
21 die). Most partners preferred putting their sexual needs aside. Some couples maintained a
22 sexual life by adapting their sexual practices (e.g., sex without penetration). Others did not
23 engage in any sexual activity, replacing it with tenderness and affection. The reduction or
24 cessation of sexual activities thus represents an adaptive process widely used by couples.
25
26 Moreover, body image alteration was the reason most reported by couples for this decrease. It
27 is important to remember that this is the postoperative period, when body changes are recent.
28 In our sample, most women developed avoidance behaviors during intimate moments (e.g.,
29 not showing themselves naked, or refusing to let their partner touch the operated breast),
30 illustrating a discomfort with their own bodies. Our findings support previous studies (Falk
31 Dahl et al., 2010; Fobair et al., 2006; Maass et al., 2015; Sebri et al., 2021; Sherman et al.,
32 2018) that highlighted the deleterious impact of BC and its treatments on body image (e.g.,
33 dissatisfaction with appearance, loss of a sense of femininity and attractiveness, and feelings
34 of shame). In addition, couples reported that the reason that they had fewer sexual activities or
35 stopped all forms of sexuality was that they experienced pain during sex (e.g., in the chest,
36 during vaginal penetration). Indeed, BC treatments are known to increase vaginal dryness and
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CHANGES IN COUPLES' SEXUALITY AFTER BREAST CANCER

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3 to decrease sexual desire, making sexual activities less enjoyable or even painful (Cebeci et
4 al., 2010; DeSimone et al., 2014; Gopie et al., 2014; Panjari et al., 2011; Robinson et al.,
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6 2014; Rogers and Kristjanson, 2002). It is therefore advisable to offer medical (e.g., lubricants
7
8 and moisturizers) and psychological help if needed (Clayton and Juarez, 2019) so that
9
10 sexuality can remain as pleasurable as possible for each partner. The results indicated that the
11
12 alteration of body image and the presence of pain seemed to create a vicious circle in which
13
14 sexuality gradually became synonymous with pain and was increasingly avoided. In fact,
15
16 sexuality was often experienced in a context of unpleasant emotions (e.g., guilt, fear of having
17
18 sex or of doing harm) in which avoidance behaviors toward sexual activities progressively
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20 increased in both women (e.g., fear of pain, lack of desire, guilt) and men (e.g., no longer
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22 feels desired, avoids penetration). For example, when the partner avoided touching the
23
24 woman's body, she may have experienced this as rejection and confirmation that her body is
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26 no longer attractive, thereby reinforcing the vicious cycle.
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34 Another objective of this study was to observe the evolution of the couples' sexuality at
35
36 2 years after surgery. The majority of women seemed to be more accepting of their body
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38 changes induced by treatment. In fact, they no longer reported alterations in their own body
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40 image. Many couples also reported that BC brought them closer and improved their marital
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42 life. Intimacy is built on two components: self-disclosure and appropriate partner response
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44 (Laurenceau et al., 2005). It is possible, therefore, that the BC experience promoted, in some
45
46 couples, better communication about their intimate and sexual needs, leading to feeling a
47
48 sense of closeness and support from their partner.
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53 However, although most couples increased the frequency of sexual activities by 2 years
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55 after surgery (*temporary-decrease* pattern), some difficulties remained. Previous research
56
57 suggests that BC treatments decrease couples' sexual frequency and satisfaction (Panjari et al.,
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59 2011; Rottmann et al., 2017; Safarinejad et al., 2013; Ussher et al., 2012; Vieira et al., 2014).
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3 Women experience the side effects of hormone therapy (decreased sexual desire and arousal,
4 as well as vaginal dryness) that are often invisible (e.g., fatigue, loss of desire) and sometimes
5
6 difficult to understand for the partner. Although sexuality appeared to be, once again, a
7
8 priority for the couples in our study, the resumption of sexual activities emerged at the request
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10 of the partner who felt that he put his sexual needs aside for a long time. Many women had
11
12 little motivation to resume sexuality, and a third still reported pain during sexual activity. Our
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14 study confirms previous research that reports women may feel guilt and pressure for not
15
16 meeting their partner's sexual expectations and will sometimes force themselves to have
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18 painful, non-pleasurable sex (Hirsch, 2005; Holmberg et al., 2001; Shaw et al., 2016; Ussher et
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20 al., 2012). According to Gilbert and colleagues (2011), sexual problems can become one of
21
22 the most problematic aspects of survivors' lives. Our study indicates that sexual pain plays an
23
24 important role in the reduction or cessation of sexual activities at the beginning of treatment
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26 and can also interfere with couples' sexuality over the long term. Moreover, sexual pain is the
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28 sexual dysfunction that most impairs couples' sexuality after BC. It should therefore be
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30 assessed and managed at the beginning of the treatment process.
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39 Couples who stopped all forms of sexuality completely at treatment onset (*long-term-*
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41 *decrease* pattern) did not follow the same trajectory. Their chances of remaining sexually
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43 inactive after 2 years was more than one in two. This can be explained by the fact that half of
44
45 the women still had an altered body image, and intimacy and sexual relations were still
46
47 avoided. According to Tay and colleagues (2017), when sexuality stops, other forms of
48
49 intimacy and affection (e.g., touching and physical contact) may gradually diminish or
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51 disappear altogether and contribute to a failure in resuming sexuality. Health care
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53 professionals should therefore consider couples that stop all forms of sexuality early in
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55 treatment as a group at risk of not being able to resume sexuality in the long term.
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CHANGES IN COUPLES' SEXUALITY AFTER BREAST CANCER

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3 Our longitudinal study offers some clinical insights into how and when to address
4 couples' sexuality after BC. According to Del Pup et al. (2019), sexual dysfunction is widely
5 recognized as a side effect of BC treatments but remains rarely assessed and treated. Health
6 professionals and patients are reluctant to address sexuality as a result of embarrassment, lack
7 of time, respect of privacy, and lack of knowledge about human sexual functioning (Bober et
8 al., 2016; Carter et al., 2018). The results of the current study suggest that primary prevention
9 techniques should be applied from the onset of BC treatments. This includes offering an open
10 dialogue with patients about sexual health and sexual dysfunction resulting from cancer and
11 its treatment, as recommended by the American Society of Clinical Oncology guidelines
12 (Carter et al., 2018). This prevention phase would allow couples to realize that sexuality is not
13 taboo and that they can talk openly about it or seek professional help if needed. It also allows
14 professionals to assess sexual dysfunction and identify couples who stop all forms of sexuality
15 at the beginning of treatment. It would be ideal to assess couples' sexual functioning through
16 routine examination (Del Pup et al., 2019). After 2 years, couples presented a greater desire to
17 return to a satisfying sex life. Professionals can more easily offer sexological interventions if
18 sexual difficulties persist. Our study highlights the importance of assessing the sexuality of
19 both partners after BC and confirms Carroll and colleagues' (2016) literature review results.
20 According to these authors, the most effective intervention for sexual dysfunction after BC
21 integrates several elements: couple sex therapy (e.g., pain management), partner support and
22 communication skills, and body image. Addressing only one of these elements will not
23 improve sexual functioning.

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52 To the best of our knowledge, this is the first longitudinal qualitative study to describe
53 couples' sexuality changes after BC. Strengths of our study include the qualitative description
54 of sexuality at two distinct points in the care pathway (i.e., active treatment phase and
55 rehabilitation phase) and the inclusion of 40 couples (women and their partners), which
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3 allowed us to identify different change patterns in the sexuality of couples facing BC. At the
4
5 same time, the study has some methodological limitations, in particular the fact that changes
6
7 in sexuality were assessed as sexual frequency. Asking couples whether they are having sex
8
9 does not seem sufficient, because the presence of sexual activity does not guarantee that it is
10
11 experienced in a pleasurable way. It would have been interesting to evaluate patients'
12
13 sexuality in its entirety and to integrate other dimensions into the interviews (e.g., desire,
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15 pleasure, pain, sexual satisfaction, sexual communication). This limitation is strictly related to
16
17 the fact that this study is part of a larger project on couples' psychological adjustment and that
18
19 the data collection strategy was not originally developed to assess sexual functioning solely
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21 and in depth. Further longitudinal studies should be conducted to assess couples' sexuality
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23 more specifically and thoroughly in order to deepen knowledge on their multiple trajectories
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25 after BC. Other limitations include the absence of specific data on pre-diagnostic sexual
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27 functioning and the composition of the sample, including that it consisted exclusively of
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29 heterosexual couples who were mostly married and had long-standing relationships.
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36 We recommend that sexuality be discussed with couples as early as possible during
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38 treatment. Couples should be offered the opportunity to talk about sexual practices throughout
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40 the course of treatment, as specific sexual difficulties may persist over time.
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Table 1. Descriptive statistics for sociodemographic and medical data

Characteristic	Full sample (n = 40)	Long-term-decrease (n = 9)	Temporary-decrease (n = 16)
	M (SD, range)	M (SD, range)	M (SD, range)
Age of women, years	53.23 (10.88, 37-75)	51.64 (8.00, 42-64)	49.69 (11.24, 37-70)
Age of partners, years	56.34 (12.29, 28-76)	52.89 (12.01, 41-74)	51.80 (12.06, 28-71)
Relationship duration, years	27.28 (15.94, 2-54)	24.00 (14.34, 3-46)	24.75 (15.94, 4-48)
	n (%)	n (%)	n (%)
Married (yes)	30 (75.0)	6 (15.0)	12 (30.0)
Cohabiting (yes)	37 (92.5)	9 (22.5)	15 (37.5)
Socioeconomic status ^a			
Upper	20 (50.0)	5 (12.5)	9 (22.5)
Middle-upper	9 (22.5)	0 (0.0)	4 (10.0)
Middle	8 (20.0)	3 (7.5)	2 (5.0)
Middle-lower	2 (5.0)	1 (2.5)	1 (2.5)
Lower	1 (2.5)	0 (0.0)	0 (0.0)
Tumor stage			
In situ	5 (12.5)	1 (2.5)	2 (5.0)
Stage I	15 (37.5)	2 (5.0)	4 (10.0)
Stage II	13 (32.5)	3 (7.5)	6 (15.0)
Stage III	7 (17.5)	4 (10.0)	4 (10.0)
Surgical treatment			
Mastectomy	23 (57.5)	5 (12.5)	11 (27.5)
Lumpectomy	17 (42.5)	4 (10.0)	5 (12.5)
Axillary lymph node dissection	14 (35.0)	4 (10.0)	8 (20.0)
Adjuvant treatment			
Chemotherapy at T1 (yes)	4 (10.0)	2 (5.0)	2 (5.0)
Chemotherapy at T2 (yes)	0 (0.0)	0 (0.0)	0 (0.0)
Radiotherapy at T1 (yes)	6 (15.0)	2 (5.0)	2 (5.0)
Radiotherapy at T2 (yes)	0 (0.0)	0 (0.0)	0 (0.0)
Herceptin at T1 (yes)	4 (7.5)	0 (0.0)	4 (10.0)
Herceptin at T2 (yes)	0 (0.0)	0 (0.0)	0 (0.0)
Hormonal therapy at T1 (yes)	22 (55.0)	3 (7.5)	8 (20.0)
Hormonal therapy at T2 (yes)	33 (82.5)	6 (15.0)	12 (30.0)

^a The socioeconomic status (SES) was measured with the weighted cross-product of the level of education (4 × 1 [university/higher education] to 7 [lower than mandatory education]) and profession (7 × 1 [executive/manager] to 7 [unqualified employee]) categorized into lower (greater than 59), lower-middle (50 to 59), middle (40 to 49), upper-middle (30 to 49), and upper SES (1 to 29) on the basis of the Hollingshead Index (Hollingshead, 1971).

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For Peer Review

Table 2. The four patterns of sexual behavior between T1 and T2 (n = 40 couples)

	T1	T2	n	%
1. Long-term-decrease	Decrease	Decrease	9	22.5
2. Temporary-decrease	Decrease	Resume	16	40.0
3. Active-stable	No change	No change	5	12.5
4. Inactive-before-BC	No change	No change	10	25.0

For Peer Review

Table 3. Summary of the seven themes and their frequency of occurrence (n = 30 couples)

	T1	T2
	n (%)	n (%)
<i>Themes that characterize couples' experiencing</i>		
<i>stopping or decreasing sexuality</i>		
1. Sexuality was not a priority	11/25 (44.0)	0/9 (0.0)
2. Painful sexual contact	8/25 (32.0)	2/9 (22.2)
3. Altered body image	13/25 (52.0)	4/9 (44.4)
4. Relationship implications in decreasing or stopping sexuality	14/25 (56.0)	5/9 (55.6)
<i>Themes that characterize couples' experiencing</i>		
<i>resuming sexuality after decreasing or stopping</i>		
5. Resuming but not resetting	/	8/16 (50.0)
6. Acceptance of the "new" body	/	12/16 (75.0)
7. Relationship implications in resuming sexuality	/	9/16 (56.25)