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Title

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Permalink

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Journal

Journal of Cancer Survivorship, 11(1)

ISSN 1932-2259

Authors

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Publication Date

2017-02-01

DOI

10.1007/s11764-016-0572-1

Peer reviewed



HHS Public Access

Author manuscript *J Cancer Surviv*. Author manuscript; available in PMC 2018 February 01.

Published in final edited form as:

J Cancer Surviv. 2017 February ; 11(1): 149–157. doi:10.1007/s11764-016-0572-1.

Adoption consideration and concerns among young adult female cancer survivors

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Abstract

Purpose—We compared adoption consideration between female young adult cancer survivors and women of the same age in the general U.S. population, hypothesizing that cancer survivors who desired children would report greater interest in adoption than an age-adjusted general population sample who desired children.

Methods—After age-standardizing the cancer survivor cohort to match the age distribution of the 2006–2010 National Survey for Family Growth (NSFG), we estimated adoption consideration among women age 18–35 years who wanted a (another) child in the two cohorts overall and within age groups. We assessed characteristics and concerns related to adoption consideration among cancer survivors.

Results—Among cancer survivors, 81.6% (95% CI 75.7 – 87.6) reported that they would consider adoption compared to 40.3% (95% CI 40.3 – 40.3) of women in the general population. While over 80% of the cancer survivor sample reported that they would consider adoption, only 15% of cancer survivors reported no concerns about adoption. The most common concerns were

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Compliance with Ethical Standards

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all individual participants included in the study.

The authors have not conflicts of interest to disclose.

desire for a biological child (48%), expense (48%), adoption agency candidacy (41%), and needing more information (39%).

Conclusion—We observed a two-fold higher interest in adoption when comparing the cancer survivor with the general population, suggesting that adoption is a consideration for many young women who have survived cancer.

Implications for cancer survivors—Adoption is an important family building option for those who want to have a child, but are unable to or choose not to have a biological child. However, young adult survivors may need more support to understand and navigate this process.

Keywords

cancer; adoption; young adult; survivor; parenthood

INTRODUCTION

Most female cancer patients will be exposed to gonadotoxic treatment, resulting in a higher risk of infertility, early declines in ovarian function, and fewer parenthood options in survivorship [1–6]. As a result, young women with a history of cancer often need to confront complex decisions about future parenthood earlier in life than their peers without cancer. For those who are unable or not interested in having biological children, adoption may be an important consideration. While adoption is often part of a broader discussion about family building after cancer, there is limited research on young female survivors' interest in and concerns about adoption.

There is some evidence that many young adult cancer survivors want to learn more about adoption. In one survey, 44% of survivors expressed a need for information about adoption services [7]. Another study reported that over 60% of female cancer survivors would adopt if they were unable to have biological children [8]. Among reproductive-aged women in the general population, 25–40% say that they have ever considered adoption [9, 10], although only about 20% of them take steps to adopt [10]. There is also some evidence regarding barriers to adoption for cancer survivors. In a pilot survey of seven adoption specialists, six international adoption agencies, and 11 cancer organizations, all of the adoption agencies reported that many countries view a history of cancer as a contraindication to adoption. Furthermore, all of the adoption specialists reported that many birth parents would be afraid to place their child with a cancer survivor [11]. A more recent qualitative study involving nurse interviews of adoption agencies about the adoption process for cancer survivors identified several potential barriers, including high cost, requirements for physician letters attesting to the health of the adopting parent, and significant wait times. The study also reported that a candidate's medical history may or may not be shared with birth mothers, and that this history could influence her decisions in selecting adoptive parents in either a positive or negative way [12]. Finally, health care providers may not have the information needed to proficiently discuss adoption as a family building option with their cancer survivor patients, particularly the challenges and complexities of this process [11, 12]. Adoption is briefly mentioned in the American Society of Clinical Oncology guidelines on fertility

preservation for patients with cancer, but no specific recommendations or details on discussions about adoption are provided [13].

Research conducted to date has not clarified concerns about adoption from the perspective of women with a history of cancer nor directly compared their level of interest in adoption to similarly aged women in the general population. The first objective of this study was to compare rates of adoption consideration between female young adult cancer survivors and women of the same age in the general U.S. population. We hypothesized that female young cancer survivors who desire future children would report greater interest in adoption than those in the general population who also desire future children. Secondarily, using data from only the female young adult cancer survivor population, we examined characteristics associated with adoption consideration. Finally, we described survivors' self-reported concerns about adoption after cancer.

MATERIALS AND METHODS

Study population

Cancer survivor sample—The Fertility and Pregnancy After Cancer (FAPAC) study used a nationwide web-based survey to determine the reproductive health outcomes and concerns of female young adult cancer survivors, age 18–35 years. Eligible participants were at least one year post cancer diagnosis, not currently pregnant, and English-speaking. Potential participants completed a web-based screening form and, if eligible, were provided electronic informed consent and then linked to the web-based survey. Eighty-six percent of those eligible completed the survey. Participants completed a single 20-minute online survey between March and September 2012. The FAPAC study enrolled 204 female cancer survivors, primarily through distributing recruitment materials via social media and local community outreach [14]. The sample for the present study included 163 participants who had not already adopted a child, wanted or probably wanted a (another) child someday, and responded to questions on adoption consideration. The University of California San Diego institutional review board approved the study.

General population sample—The National Survey for Family Growth (NSFG) is a nationally representative study of women ages 15–44 years researching family related issues, including pregnancy, infertility, general and reproductive health among the non-institutionalized population of the United States. We compared adoption consideration among cancer survivors in the FAPAC cohort with those reported by the NSFG. The 2006–2010 cycle of the NSFG includes data from in-person interviews of a sample of 12,279 women (78% response rate), with 7,490 between the ages of 18 and 35 [15, 16]. Questions asked of participants in the NSFG included interest in having children and consideration of adoption. To be comparable with the sample of cancer survivors, the present study used data from 5,643 NSFG participants between the ages of 18 and 35 who reported that they wanted or probably wanted to have a (another) child someday. To compare adoption consideration between the general population and cancer survivors, we determined the proportions of both populations that would consider adoption. First, we estimated the proportion for the general population by taking the responses of the NSFG respondents and adjusting for different

sampling, response and coverage rates utilizing the sampling weights provided with the 2006–2010 NSFG user's guide [16]. We then age-standardized the FAPAC population to match the general population and determined the proportion for cancer survivors.

Measurement

The FAPAC survey included demographic, cancer history, parenthood desires, adoption, reproductive history, and quality-of life assessments [14, 17]. Questions about reproductive history and parenthood desires were derived from the National Survey for Family Growth (NSFG) [18]. For inclusion in the current study, cancer survivors from the FAPAC study and the general population sample from the NSFG were required to respond "yes" or "probably yes" to the following question, "Do you, yourself, want to have a (another) baby at some time?"

Consideration of adoption—Cancer survivor participants were asked, "Did you ever consider adoption after your cancer diagnosis?"

General population survey participants were asked, "Have you ever considered adopting (a/ another) child?"

Concerns about adoption—From the cancer survivor sample only, we assessed self-reported concerns about adoption as a cancer survivor with the question, "What are your concerns about adoption?" Participants were provided a variety of response options, including "Too expensive", "Prefer a biological child", "I don't have any concerns", as well as an "Other" option where they could write in a concern that was not provided on the list. The list of options was derived from our earlier qualitative study on the fertility and parenthood concerns of AYA-aged cancer survivors [19].

Adoption concerns were not assessed in the NSFG general population survey.

Reproductive Concerns After Cancer—For the cancer survivor sample only, the webbased survey included the 18-item Reproductive Concerns After Cancer (RCAC) scale, which measures feelings about having biological children now or in the future [20]. It includes the following six subscales, each of which has been shown to have high internal consistency (as reflected by Cronbach's α): Fertility potential ($\alpha = 0.86$) (e.g., "I am afraid I won't be able to have any (more) children"); Partner disclosure of fertility status ($\alpha = 0.88$) (e.g., "I worry about telling my (potential) spouse/partner that I may be unable to have children"); Child's health ($\alpha = 0.88$) (e.g.," I am worried about passing on a genetic risk for cancer to my children someday"); Acceptance of possibly not having children ($\alpha =$ 0.82) (e.g., "I can accept it if I'm unable to have (more) children"); and Becoming pregnant ($\alpha = 0.78$) (e.g., "I worry that getting pregnant (again) would take too much time and effort").The response scale uses a five-point Likert scale ranging from 1="Strongly disagree" to 5="Strongly agree".

Reproductive concerns were not assessed in the NSFG general population survey.

Statistical analysis

In order to compare adoption consideration among cancer survivors and the general population while accounting for differences in the age distribution between the two populations, age-standardized proportions and 95% confidence intervals were estimated for the cancer survivor sample and general population sample data using sampling weights (SAS PROC SURVEYFREQ). Age group-specific proportions were estimated for women 18 - 24, 25 - 29, and 30 - 35 years using weights for age-standardization of the cancer survivor sample to account for differences in the age distribution within age groups. NSFG sampling weights were applied to account for the sampling scheme (e.g., oversampling of some racial/ethnic groups).

To further characterize the cancer survivor sample, we conducted bivariate analyses (chi square and Fisher's exact test as appropriate) to compare adoption consideration across demographics, reproductive history, and cancer characteristics. We then calculated the proportion of the cancer survivor sample that identified each adoption concern. Those who identified "other concerns" that matched one of the listed concerns were recoded accordingly. We used bivariate analyses to compare these concerns across adoption consideration group. Finally, we calculated the raw mean scores for the overall Reproductive Concerns After Cancer (RCAC) score and each of the six RCAC subscale scores and used ANOVA to compare scores across adoption consideration. Analyses were performed using R statistical package and R studio [21] and SAS version 9.4 [22].

RESULTS

Descriptive characteristics available for both cancer survivors and the national sample are presented in Table 1. Following age-standardization of the FAPAC population to match the NSFG, the proportion of cancer survivors who would consider adoption was 81.6% (95% CI 75.7 - 87.6), compared to 40.3% (95% CI 40.3 - 40.3) of women in the general population. There were no notable differences in consideration of adoption across age groups among either cancer survivors or the national sample (Table 2). Similar to results of unadjusted models (data not shown), in regression models comparing risk between the two populations with sampling weights and adjusting for age group and race, cancer survivors were twice as likely (RR 2.00 95% CI 1.83 - 2.19) to consider adoption than women in the general population.

The average age of the 163 cancer survivor participants was 28.5 ± 5.3 (SD) years. Most participants were white (non-Hispanic) (80.4%), married or in a committed relationship (57.1%), and college educated (73.1%). About ten percent reported Hispanic ethnicity. Over half were within the first four years of cancer survivorship (n = 94, 57%) and 90% had been diagnosed with cancer as young adults between the ages of 20 and 35 years. Only 16% of participants had a biological child (Table 3).

In the cancer survivor sample, there were no significant demographic differences between those who said that they would or would not consider adoption. However, a larger proportion of participants who did not have biological children at the time of the survey said that they would consider adoption compared to those who did have biological children (85% vs. 62%,

p < 0.01). Additionally, a larger proportion of participants who reported receiving chemotherapy as part of their cancer treatment would consider adoption as compared to those who did not receive chemotherapy (86% vs. 68%, p < 0.01). There were no other significant differences across cancer characteristics or treatment (Table 3).

Adoption concerns among female cancer survivors

Only 15% of the cancer survivor sample (n = 24) reported no concerns about adopting a child after cancer. The most commonly reported concerns were personal preference for a biological child (n = 78, 48%), expense (n = 73, 45%), not being perceived as a good candidate by an adoption agency (n = 67, 41%), and needing more information about the process (n = 64, 39%). Ten participants reported other concerns that were not included in the pre-determined list provided in the survey. These included a desire to physically experience a pregnancy, not being ready to think about adoption yet, and not being emotionally stable enough for parenthood.

Comparing adoption concerns across adoption consideration groups, a lower proportion of cancer survivors who would consider adoption reported a preference for biological children (44%) compared to those who would not consider adoption (67%) (p < 0.05). A higher proportion of participants who would consider adoption reported concerns about adoption agency perceptions of their candidacy (47% vs. 17%; p < 0.01), concerns about expense (50% vs. 23%; p < 0.01), a need for information (44% vs. 17%; p < 0.01), and concerns about their personal health interfering with their ability to raise a child (29% vs. 10%; p < 0.05) as compared to those who would not consider adopting a child (Table 4).

We also explored mean reproductive concerns (RCAC) scores across adoption consideration groups in the cancer survivor cohort. This included the overall RCAC score and six subscales measuring concerns about fertility potential, partner disclosure of fertility status, child's health, personal health, becoming pregnant, and acceptance of possibly not having children. Those who would consider adoption had lower concerns about their personal health than those who reported that they would not consider adoption (mean 3.15 vs. 3.58, p < 0.05). There were no other significant differences in reproductive concerns (overall or in the other five subscales) between groups (data not presented).

DISCUSSION

While adoption is an alternative family building option for reproductive-aged cancer survivors, very little is known about the interest and concerns of those who would consider this option. The results of this study suggest that adoption is a consideration for many young women who have survived cancer and want to have a child someday. As hypothesized, a statistically significantly greater proportion of cancer survivors expressed interest in adoption as compared to similarly aged women in the general population who also reported a desire for children. However, cancer survivors also expressed a number of concerns about adoption, including expense, not being perceived as a good candidate by adoption agencies, uncertainty about the adoption process, and concerns about their own health. Along with recent findings about the potential barriers to adoption from the perspectives of adoption agencies and cancer organizations, including possible cancer-related health concerns of

We observed a two-fold higher interest in adoption when comparing the cancer survivor with the general population samples. In the general population sample, about 40% of women reported that they would consider adoption, which is similar to the proportion found in a recent survey of Midwestern women [10]. Interestingly, while 78.9% of cancer survivors reported that they would consider adoption after cancer, only 44.2% of the same sample reported that they would have considered adoption before their cancer diagnosis. While adoption consideration prior to cancer is limited by recall in this population, the proportion is also consistent with the general population data and suggests a change in willingness to consider adoption after cancer. We did not collect information on adoption behavior, but prior studies indicate that only 8% of women in the general population take steps to adopt [10], and that only about 1% have ever adopted [23]. Adoption is a rare event, with multiple influencing factors and challenges, which may even be more complicated for those with a cancer diagnosis.

One of these complications relates to cancer survivors' concerns about their own health. We found that concerns about personal health were related to consideration of adoption among cancer survivors. When asked about adoption-related concerns, those who would consider adoption were more likely to be concerned about how their personal health could impact their ability to raise a child, compared to survivors who would not consider adoption. This finding indicates that long-term personal health is important to young survivors who are considering adoption. Interestingly, survivors who would consider adoption were less concerned about the impact of their personal health on their ability to raise a biological child, compared to survivors who would not consider adoption. Conversely, survivors who would not consider adoption were more concerned about the impact of their personal health with regard to raising a biological child. We speculate that these young women are more likely to have goals of having biological children, which may raise significant concerns about pregnancy-related recurrence, mortality, and potential negative impact of a mother's poor health on her child's well-being [19, 24]. This preliminary finding suggests that views about long-term personal health may be different for those considering biological children compared to those considering adoption. However, these are preliminary results and further research is needed to confirm and interpret this finding.

We also found that a higher proportion of those who had received chemotherapy as part of their cancer treatment would consider adoption as compared to those who did not have chemotherapy. A possible explanation is that women who had chemotherapy may know that their fertility could have been compromised by their cancer treatment, so they are more prepared to consider adoption. Many reproductive-aged cancer survivors may consider adoption a more viable option than biological parenthood for a number of reasons, including the potential impact of pregnancy and hormones on their personal health, infertility as a result of their cancer treatment, and concerns about the health of biological children born after cancer and cancer treatment [8, 19, 24].

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For cancer survivors, there may also be significant quality of life implications of whether and how parenthood is achieved. In a study of long-term female cancer survivors who wanted a child at the time of their diagnosis, those who remained childless were most distressed about infertility and had more infertility-related traumatic symptoms than those who had biological children. Those with non-biological children (i.e., those not genetically related to the mother) were less distressed than those without children, but more distressed than those with biological children [25]. Similarly, Armuand and colleagues also found that survivors who desired and successfully had children after cancer treatment reported better mental health than those without any biological children [26]. Women who report reproductive concerns in cancer survivorship also experience more depressive symptoms [17, 27]. Parenthood decisions may be made voluntarily, such as by pursuing adoption even though not biologically infertile, or involuntary, such as remaining childless because of cancer-related infertility. Understanding and identifying the factors that contribute to cancer survivors' parenthood decisions, whether voluntary or involuntary, and the potential physical, social and psychological implications of their decisions could improve our ability to support survivors through these experiences as well improve their quality of life.

There may be differences between the cancer survivors participating in the FAPAC study and the sample used for the NSFG that impact comparability of the populations. To try to address these differences we performed analysis only among those expressing interest in having (more) children, and used a combination of age-standardization and age group stratification to address age differences between the two groups. In addition, we performed multivariable modeling of prevalence ratios adjusting for race/ethnicity in order to address possible race-effects, and results were nearly identical to those not adjusted for race (data not shown). Nevertheless, residual confounding cannot be eliminated as a potential contributor to the observed difference between the groups, but is unlikely to account for the large difference we observed.

This study provides unique insight into the adoption consideration of female cancer survivors as compared to the general population of women who want to have children. A strength is that both the cancer survivor and general population samples represent women of the same age range (18–35 years) who reported wanting to have a child. However, this study evaluated self-reported adoption consideration, rather than adoption behavior. It is expected that a much smaller percentage of participants would actually adopt a child. Furthermore, the sample size of cancer survivors is small and reduced our ability to detect statistical significance. Also, cancer survivor participants were not racially and ethnically diverse and we could not explore potential cultural considerations [28]. Because we recruited cancer survivors who voluntarily completed a web-based survey on fertility and parenthood, our sample may be biased toward survivors interested in having children, and our results may not be generalizable to the wider population of female cancer survivors. The cross-sectional design of the study also limits our ability to determine changes in attitude about adoption before and after cancer and may be biased by participant recall, so we did not focus on change over time. The NSFG does not ask about concerns about adoption or reproductive concerns, so we could not compare the samples across these variables. Finally, the NSFG does not ask about cancer status, so there may be misclassification of cancer survivors in the NSFG population, which would bias our results toward the null.

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Our study results provide evidence that adoption is a consideration for many young women who have survived cancer, significantly more so than in the general population. Adoption is an important family building option for those who want to have a child, but are unable to or choose not to have a biological child. Survivors interested in this option could benefit from more information regarding the process of adoption in order to make informed decisions, including how adoption agencies may use health and medical history to determine candidacy. Furthermore, adoption agencies themselves may benefit from staff training and clear policies to ensure that they are avoiding discriminatory practices and not introducing additional system-level barriers to cancer survivors who are interested in adoption. Because of significant geographic differences in the adoption process, regulations and resources, there is a need for oncology and reproductive healthcare teams, including physicians, nurses, social workers, and other allied health professionals, to be able to access resources relevant for their cancer survivor population. The American Society of Reproductive Medicine has patient materials on adoption considerations [29]. Healthcare teams may also seek local adoption agencies for resources. However, there remains a need for curated resources for cancer survivors. In addition, while adoption may be offered as an option for all cancer survivors interested in parenthood, it is not highlighted in clinical guidelines on fertility preservation and research is needed to understand when, how, and with whom this option is discussed. Young cancer survivors and their partners would benefit from future research to further understand the challenges faced when making these decisions and to determine the ideal timing, content, setting, and delivery of needed information and support.

Acknowledgments

This study was initiated and conducted with the support of the American Cancer Society grants #120500-PFT-11-008-01-CPPB and #ACS IRG 70-002. This study was funded (in part) by the National Cancer Institute, Comprehensive Partnerships to Reduce Cancer Health Disparities Program, grants #U54CA132384 and #U54CA132379, and National Institutes of Health (National Institute of Child Health and Development) grant # HD080952-03.

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Table 1

Descriptive characteristics of female young adult cancer survivors and women in the general U.S. population who reporting wanting to have children

	Cancer survivors (n=163)	General population (n=27,125,113)
	N (%)	N (%) ^a
Age at survey		
18–24	37 (22.7)	13,054,803 (48.1)
25–29	57 (35.0)	7,763,161 (28.6)
30–35	69 (42.3)	6,307,149 (23.3)
Race		
White	131 (80.4)	20,073,463 (74.0)
Black	7 (4.3)	4,065,891 (15.0)
Other	25 (15.3)	2,985,759 (11.0)
Hispanic ethnicity	16 (9.9)	4,573,657 (16.8)
Surgical or clinical infertility b	11 (6.8)	2,213,135 (8.2)
Would consider adoption	133 (81.6)	10,777,618 (40.3)

^aDerived using the sampling weights to reflect the NSFG sampling scheme.

^bDefined as having either a history of clinical infertility (one year or more of trying to conceive without success) and/or surgical infertility (hysterectomy or bilateral oophorectomy).

Table 2

Proportion^{*a*} (95% CI) of women that would consider adoption overall and by age group among cancer survivors^{*b*} and the general population

	Cancer survivors (n=163)	General population (n=27,125,113)	
	Proportion (95% CI)	Proportion (95% CI)	
Overall	81.6 (75.7 – 87.6)	40.3 (40.3 - 40.3)	
Age at survey			
18-24	80.4 (72.4 - 88.4)	37.3 (37.2 - 37.3)	
25-29	87.9 (77.8 – 97.9)	41.9 (41.9 – 41.9)	
30–35	76.8 (61.0 - 92.7)	44.7 (44.7 – 44.8)	

^aProportions estimated using SAS PROC SURVEYFREQ for age standardization of cancer survivors, and using sampling weights for the National Survey for Family Growth 2006–2010 cycle

 b The cancer survivor cohort was age-standardized to match the NSFG age distribution.

Table 3

Descriptive characteristics of female young adult cancer survivors by adoption consideration (N=163)

	Would not consider adoption (n= 30)	Would consider adoption (n=133)	
	No. (%)	No. (%)	Р
Demographics			
Age at survey			0.28
18–24	7 (18.9)	30 (81.1)	
25–29	7 (12.3)	50 (87.7)	
30–35	16 (23.2)	53 (76.8)	
White	25 (19.1)	106 (80.9)	0.65
Hispanic	3 (18.8)	13 (81.3)	1.00
Married or in committed relationship	18 (19.4)	75 (80.7)	0.42
College graduate/ post-graduate degree	22 (18.5)	97 (81.5)	0.96
Employed full or part time	21 (18.4)	93 (81.6)	0.99
Children and reproductive history			
Has biological child(ren)	10 (38.5)	16 (61.5)	0.004
History of clinical infertility ^a	2 (18.2)	9 (81.8)	1.00
Surgical infertility b	1 (8.3)	11 (91.7)	0.70
Normal menstrual periods ^C	21 (20.8)	80 (79.2)	0.27
Cancer characteristics and treatment			
Life stage at diagnosis			0.86
Childhood <= 14	3 (14.3)	18 (85.7)	
Adolescence 15-19	3 (13.6)	19 (86.4)	
Young adult 20-35	24 (20.0)	96 (80.0)	
5 or more years post-diagnosis	7 (13.2)	46 (86.8)	0.23
Cancer type			0.95
Brain	3 (27.3)	8 (72.7)	
Breast	6 (20.7)	23 (79.3)	
Hodgkin Lymphoma	5 (19.2)	21 (80.8)	
Non-Hodgkin Lymphoma	2 (14.3)	12 (85.7)	
Leukemia	2 (9.5)	19 (90.5)	
Soft Tissue	1 (12.5)	7 (87.5)	
Thyroid	3 (18.7)	13 (81.3)	
Other	8 (21.1)	30 (78.9)	
Cancer stage or risk group			0.26
Ι	9 (33.3)	18 (66.7)	
II	10 (21.7)	36 (78.3)	
III or IV	5 (11.4)	39 (88.6)	
Low or standard	0 (0)	5 (100.0)	
High	2 (25.0)	6 (75.0)	
Unknown	4 (12.1)	29 (87.9)	

	Would not consider adoption (n= 30)	Would consider adoption (n=133)	
	No. (%)	No. (%)	Р
Chemotherapy d	17 (13.8)	106 (86.2)	0.008
Radiation d	16 (21.9)	57 (78.1)	0.30
Bone marrow or stem cell transplant d	0 (0)	14 (100.0)	0.07

Note: P value determined by Chi Square or Fisher's Exact Test.

 $^a\!\mathrm{History}$ of clinical infertility defined as one year or more of trying to conceive without success.

 $^b \mathrm{Surgical}$ infertility defined as hysterectomy or bilateral oophorectomy.

^cNormal menstrual periods is defined as 10–12 in the past year; compared to 0–9 periods in the past year.

^dTreatment for first cancer diagnosis.

Table 4

Concerns about adoption overall and by adoption consideration among female young adult cancer survivors

	Overall (N=163) No. (%)	Would not consider adoption (n=30)	Would consider adoption (n=133)	<u>.</u>
		No. (%)	No. (%)	Р
I don't have any concerns				0.04
Yes	24 (14.7)	8 (26.7)	16 (12.0)	
No	139 (85.3)	22 (73.3)	117 (88.0)	
Prefer a biological child				0.02
Yes	78 (47.9)	20 (66.7)	58 (43.6)	
No	85 (52.1)	10 (33.3)	75 (56.4)	
May not be perceived as a good candidate by adoption agency				0.003
Yes	67 (41.1)	5 (16.7)	62 (46.6)	
No	96 (58.9)	25 (83.3)	71 (53.4)	
Spouse/partner is not interested in adoption				0.56
Yes	22 (13.5)	5 (16.7)	17 (12.8)	
No	141 (86.5)	25 (83.3)	116 (87.2)	
Too expensive				0.009
Yes	73 (44.8)	7 (23.3)	66 (49.6)	
No	90 (55.2)	23 (76.7)	67 (50.4)	
Too much time and effort				0.79
Yes	26 (16.0)	4 (13.3)	22 (16.5)	
No	137 (84.0)	26 (86.7)	111 (83.5)	
Health of the adopted child				0.45
Yes	32 (19.6)	4 (13.3)	28 (21.1)	
No	131 (80.4)	26 (86.7)	105 (78.9)	
Possible legal problems				0.14
Yes	33 (20.3)	3 (10.0)	30 (22.6)	
No	130 (79.8)	27 (90.0)	103 (77.4)	
Need more information and/or unsure about process				
Yes	64 (39.3)	5 (16.7)	59 (44.4)	0.005
No	99 (60.7)	25 (83.3)	74 (55.6)	
Personal health impacting ability to raise a child				0.04
Yes	41 (25.2)	3 (10.0)	38 (28.6)	
No	122 (74.8)	27 (90.0)	95 (71.4)	
Other concerns				0.21
Yes	10 (6.1)	0 (0)	10 (7.5)	

	Overall (N=163)	Would not consider adoption (n=30)	Would consider adoption (n=133)	
	No. (%)	No. (%)	No. (%)	Р
No	153 (93.9)	30 (100.0)	123 (92.5)	

Note: P value determined by chi square or Fisher's exact test.

J Cancer Surviv. Author manuscript; available in PMC 2018 February 01.

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