MONASH University

Jean Hailes For Women's Health

Medicine, Nursing and Health Sciences

Psychosocial aspects of fertility and motherhood in women diagnosed with breast cancer during their reproductive years

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NHMRC APP1008543; Southern Health HREC # 11127A

Breast Cancer and Fertility 1

- Breast cancer: most frequently diagnosed cancer in women in Australia
- Many women diagnosed during reproductive years (AIHW & NBOCC, 2009)
  - Peak reproductive age, women in Australia: 25-40 (mean 31)
- Women of reproductive age diagnosed with breast cancer might be
  - Unpartnered but expect children
  - Partnered but not yet mothers
  - Mothers but not of the desired number of children

Breast Cancer and Fertility 2

- Breast cancer treatments → reduced fertility
- Strategies to protect ovarian function: not always effective
- No guaranteed way to preserve fertility
  - Harvesting and freezing ovarian tissue
  - Egg freezing
  - ART to create embryos for storage and later transfer
- ART drugs contraindicated with hormone-responsive cancers
- Attempt to preserve ovarian function
- Early menopause likely

Breast Cancer and Fertility 3

- Women confront existential questions
  - Prospect of death
  - Meaning of life without reproductive future

- Complex decisions for women wanting to maintain capacity to have children
  - Cancer treatments, fertility preservation

Breast Cancer and Fertility 4

- Limited knowledge of impact on women's wellbeing of cancer-related reduced fertility, impaired reproductive health
  - Cancer is psychologically challenging
  - Compromised fertility incurs additional psychological demands

(NBCC & NCCI, 2003; pp. 20-22)

Aims

- To inform and enhance immediate and long-term supportive care for women diagnosed with breast cancer during their reproductive years
- To generate new evidence about
  - Psychosocial needs
  - Enhancing short- and long-term supportive health care
- To address implications of breast cancer for fertility, sexual and reproductive health

Recruitment

Two population cohorts from the Australian Breast Cancer Family Study:

1. 10-year follow-up of women diagnosed with breast cancer 1994-1999 aged 18-40 = *Historical Cohort*
2. Women diagnosed 2009, aged 18-40 = *Contemporary Cohort*

Both cohorts originated from the Victorian Cancer Registry

Recruitment Process

	Historical Cohort	Contemporary Cohort
Invited by ABCFS	53/102 potentially eligible	48/48 eligible
Returned permission forms	31	27
Contacted by researchers	28 (3 unable to contact)	26 (1 unable to contact)
Agreed to participate	27 (1 declined: unwell)	23 (3 declined)
INTERVIEWED	**27** (50.94%)	**23** (47.92%)

Participant & Non-Participant Data

	Historic		Contemporary	
	Participant	Non-Part[t]	Participant	Non-Part[t]
Age @ diagnosis	34.4 (25-39)	35.7 (27-39)	36.7 (28-40)	36.6 (28-40)
Age @ invitation	49.7 (39-54)	50.8 (42-55)	40.3 (32-44)	40.2 (31-43)
Partnered on entry to ABCFR	20/27 (74%)	19/26 (73%)	19/23 (83%)	18/25 (72%)
Children @ diagnosis	19/27 (70%)	20/26 (77%)	17/23 (74%)	21/25 (84%)
Children since diagnosis	6/27	0/26	1/23	--
Mastectomy, affected	11	10	15	17
Mastectomy, non-affected	0	3	6	6

Interviews

- Offered telephone, in-person interviews
  - 45 telephone, 5 in-person)
  - Interviews October 2011 – June 2012
  - In-depth interviews
    - "Please tell me about your experience of being diagnosed with breast cancer"
    - Fertility, children, partners, sexual relationships, health, advice
  - Audio-recorded, transcribed; de-identified, pseudonyms
  - Length of interviews:
    - Historical: 43.2 mins (21-65); Contemporary: 42.5 mins (27-82)
- Interpretative qualitative analysis
  - Explanation, meaning

Examples: Historical Cohort

- **Carmel**:
  - Aged 32 at diagnosis, 48 at interview
  - 2 daughters: 2, $4^{1/2}$ at diagnosis, 17, 19 at interview
  - No fertility preservation
- **Gabriela**:
  - Aged 35 at diagnosis, 54 at interview
  - No children
  - No fertility preservation

Examples: Contemporary Cohort

- **Antonia**:
  - Aged 39 at diagnosis, 42 at interview
  - No children; IVF (male factor) ended at diagnosis
  - No fertility preservation; oophorectomy
- **Natasha**:
  - Aged 36 at diagnosis, 39 at interview
  - No children by choice
  - No fertility preservation by choice

Summary Results: Fertility & Breast Cancer

- Diverse needs, desires, expectations, experiences
- Fertility matters
  - Retain options
- Limited evidence of fertility preservation
- Fertility discussed with Contemporary Cohort, not Historical
- Clinicians' perspective unknown
  - Few discuss fertility: Urgency of treatment (Forman et al., 2007)
  - More likely to discuss with male patients than female (Armuand et al. 2012)

Acknowledgements

- Participants
- National Health and Medical Research Council (APP1008543)
- Investigators and staff of the ABCFS