Fertility-related distress and health-related quality of life among female and male cancer survivors

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“The information, that the possibility to have children could be affected by the treatment, made me think very much. Some moments it was more difficult than the disease itself. Being able to freeze fertilized eggs felt amazingly good.”

Woman, 36 years
Introduction

Treatment impact on fertility
  → Reduced follicle reserve
  → Impaired sperm production
  → Shortened time frame for childbearing
  → Scar tissues in uterus and around ovaries

The size of the impact
  → Men: 25% lower than control group
  → Women: 27% lower than control group
  → Large variation between diagnoses
Introduction

Quality of life (QoL)
- Infertility $\rightarrow$ ↓QoL
- Cancer $\rightarrow$ ↓QoL
- Infertile survivors have lower QoL compared to fertile survivors

Fertility distress
- Worry about future ability to have children
Introduction

Fertility preservation

→ Cryopreservation of
  ■ Sperms
  ■ Embryos
  ■ Oocytes
  ■ Ovarian tissue

→ Radiation shielding
→ Ovarian transposition
→ Ovarian suppression
→ Conservative surgery
Introduction

Fertility-related information and fertility preservation

Sex differences

Aims

To investigate cancer survivors’ level of fertility distress and its relationship to received fertility-related information, use of fertility preservation and socio-demographic factors.

To investigate the relationship between fertility distress and QoL.
Sample and procedure

- Population based sample
- Aged 18-45 at diagnosis
- Diagnosed during 2003-2007 with
  - Lymphoma
  - Acute leukemia
  - Testicular cancer
  - Ovarian cancer
  - Breast cancer treated with chemotherapy
- 810 cancer survivors identified
- Postal questionnaire 2010
Method

- Fertility distress
  - Defined as "a person’s level of stress regarding the future ability to have children"
  - VAS
  - Converted into multinomial scale
Method

- Quality of life
  - SF36 Mental Health Component Score (MCS)

- Information about risk for infertility
  - No information/Low risk/High risk

- Use of fertility preservation
  - Yes/No

- Sociodemographic and clinical data
Results

- 484 cancer survivors
  - 328 women and 156 men

- 60% response rate

- Sex differences in sociodemographics
  - Men younger at diagnosis
  - Men more frequently non parents at diagnosis
Results

Fertility distress in the total sample (n=484)

→ Differences between women and men
Results

Correlation between fertility distress and SF36 MCS

- Spearman r -0.38
  - Divided by gender:
    - Women: r -0.29
    - Men: r -0.41
## Results

Multinomial logistic regression to identify predictors for fertility distress

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<td>7.7</td>
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<td>3.4</td>
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<td>4.4</td>
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<td>5.1</td>
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Conclusion

- Many survivors report high level of fertility distress
- Desire to have children is the most important predictor
- Gender no predictor for fertility distress
- Gender difference in predictors for fertility distress
Thank you!