

# Educating oncology health care providers (HCPs) on fertility preservation options for male cancer patients

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## INTRODUCTION

- As **cancer survivors** live longer, **fertility** becomes an **important health concern**. Existing and emerging technologies such as sperm freezing may prevent the risk of infertility, but lack of a trained workforce knowledgeable about the impact of oncological treatments on reproductive health is a barrier to timely care.
- In 2013, the American Society of Clinical Oncology (ASCO) published updated clinical practice **guidelines on fertility preservation**<sup>1</sup>. The guidelines state that:
  - clinicians should **discuss** the potential impact of cancer treatments on future fertility with all cancer patients of reproductive age.
  - clinicians should be prepared to **refer** patients to a reproductive specialist, if appropriate.
- Research shows that adequate pre-treatment fertility counselling is provided to only a fraction of newly diagnosed cancer patients<sup>2</sup>.
- Unaddressed fertility preservation needs may **negatively impact patients' quality of life** (e.g. feelings of despair, regret<sup>3-4</sup>). Therefore, there is an urgent need in our oncology community to **strengthen the management of patient's reproductive function** following the cancer diagnosis and preceding the start of the oncologic treatment.

## OBJECTIVE

The objective of this project was to bring awareness and knowledge to oncology health care providers (HCPs) about the potential fertility risks and fertility preservation options available to male patients with cancer.

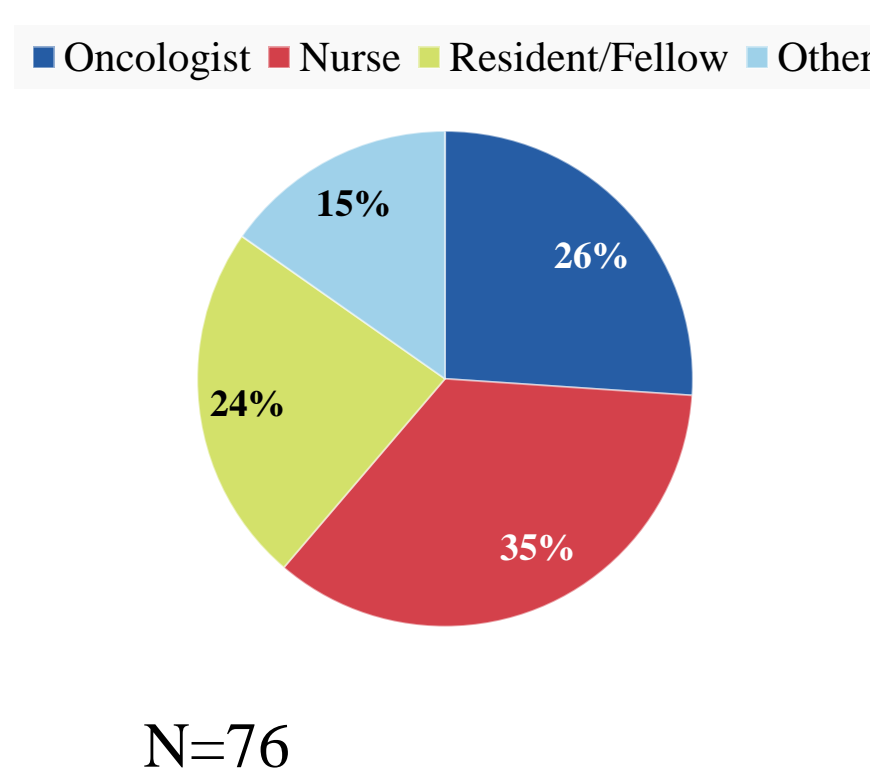
## METHODS / INTERVENTIONS

- Educational sessions** were given to oncology health care providers at three RCN sites (i.e. Jewish General Hospital, McGill University Health Centre and St. Mary's hospital centre)
- Surveys** were conducted at the beginning and the end of each educational session to **assess HCPs' knowledge of fertility preservation guidelines and practices**.
- Participants' pre-scores were compared to the post-scores and difference were examined for statistical significance using the **chi-squared test**.

## RESULTS

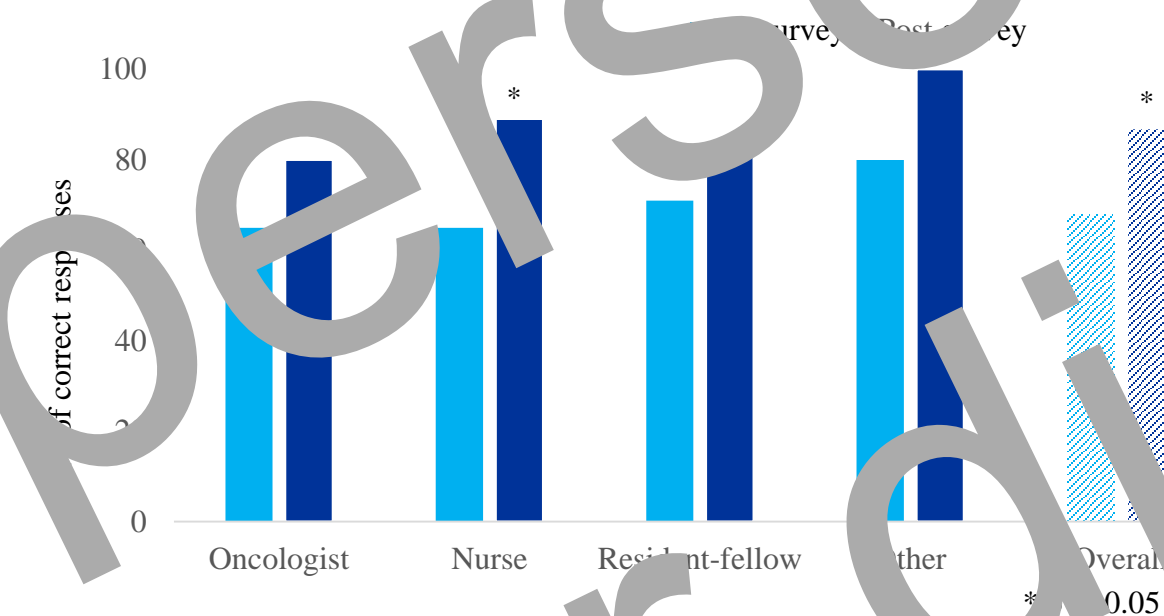
### HCPs role distribution in educational sessions

Q1: The following best describes my role in the care of cancer patients

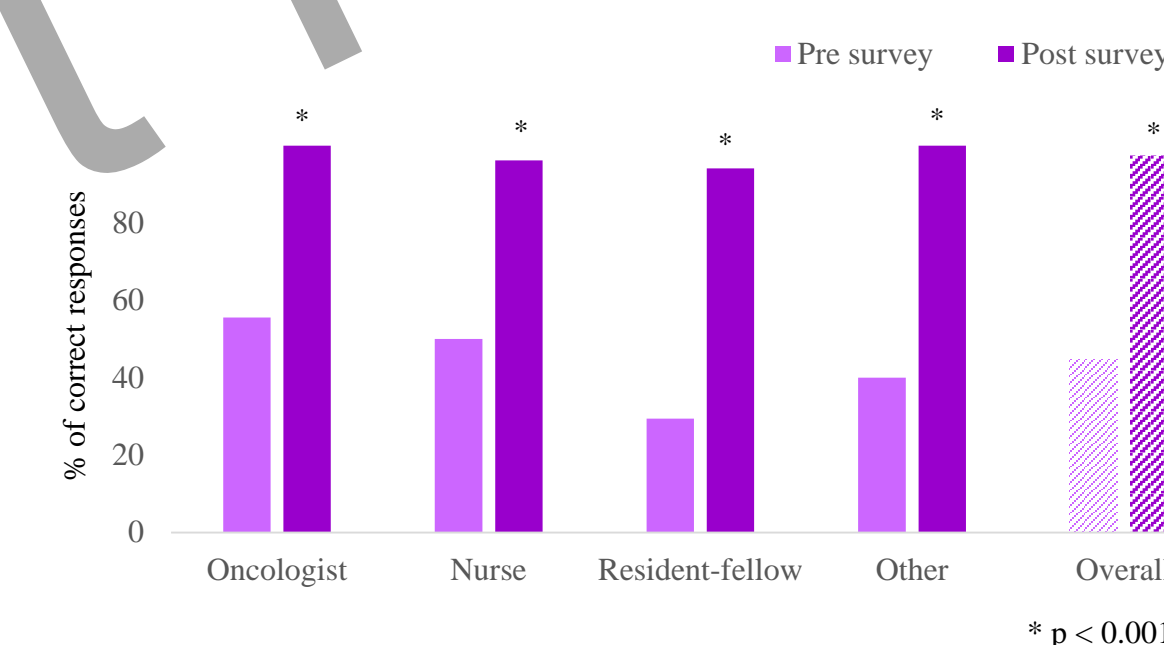


### Comprehensive knowledge of fertility preservation : % correct responses by profession

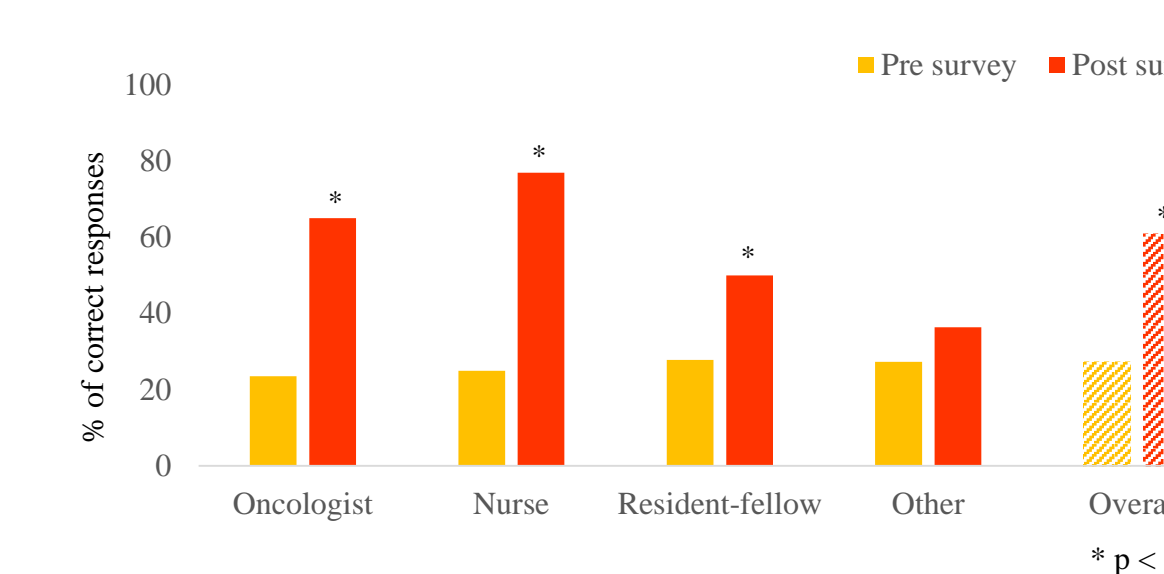
Q3: Currently there are clinical guidelines for health care providers about fertility preservation for adults with cancer.



Q5: Currently the out-of-pocket cost of initiating male fertility preservation service at the MUHC for male cancer patients is free.



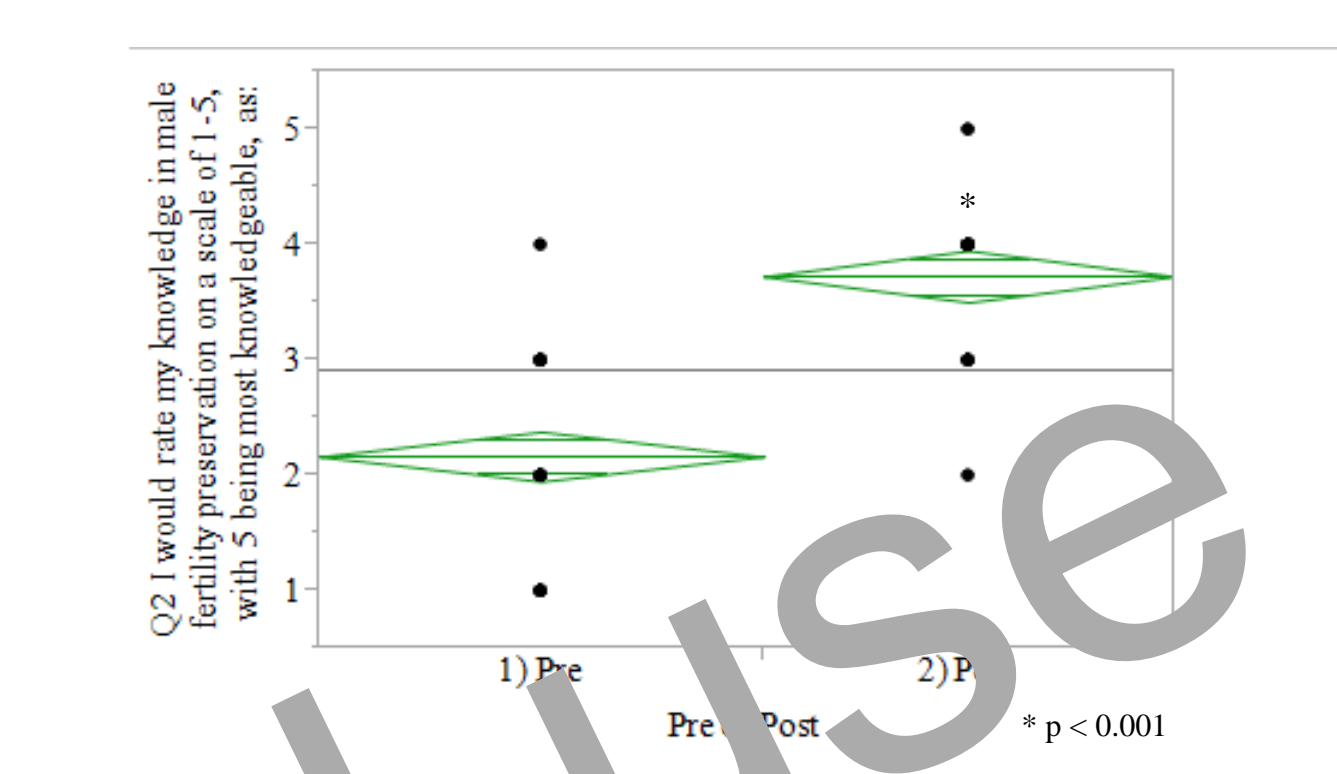
Q9: Male fertility preservation can be routinely offered to male patients in post adolescence.



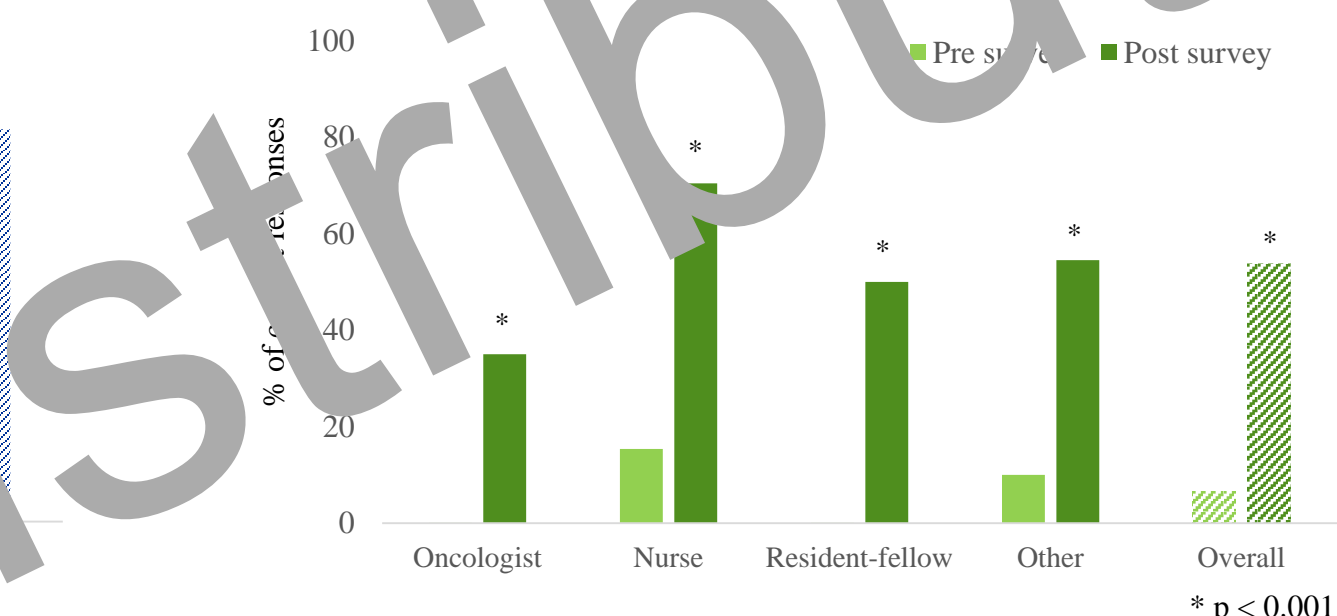
- In general, after attending education sessions, HCPs' knowledge of fertility preservation guidelines and practices increased (as measured by post – test scores).
- HCPs knowledge specifically improved on topics related to male fertility preservation wait times, cost, eligibility criteria, and parenthood outcome.

### Self-rated knowledge of fertility preservation among HCPs on pre and post surveys

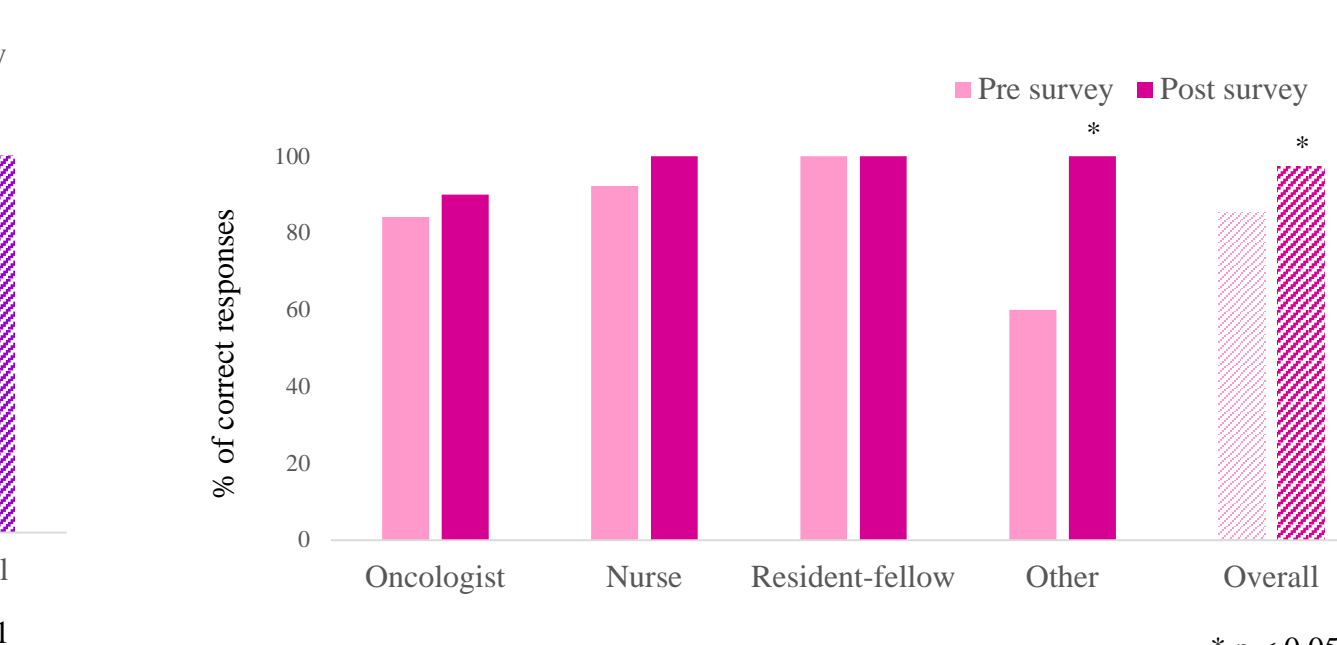
Q2: I would rate my knowledge in male fertility preservation on a scale of 1-5, with 5 being most knowledgeable, as:



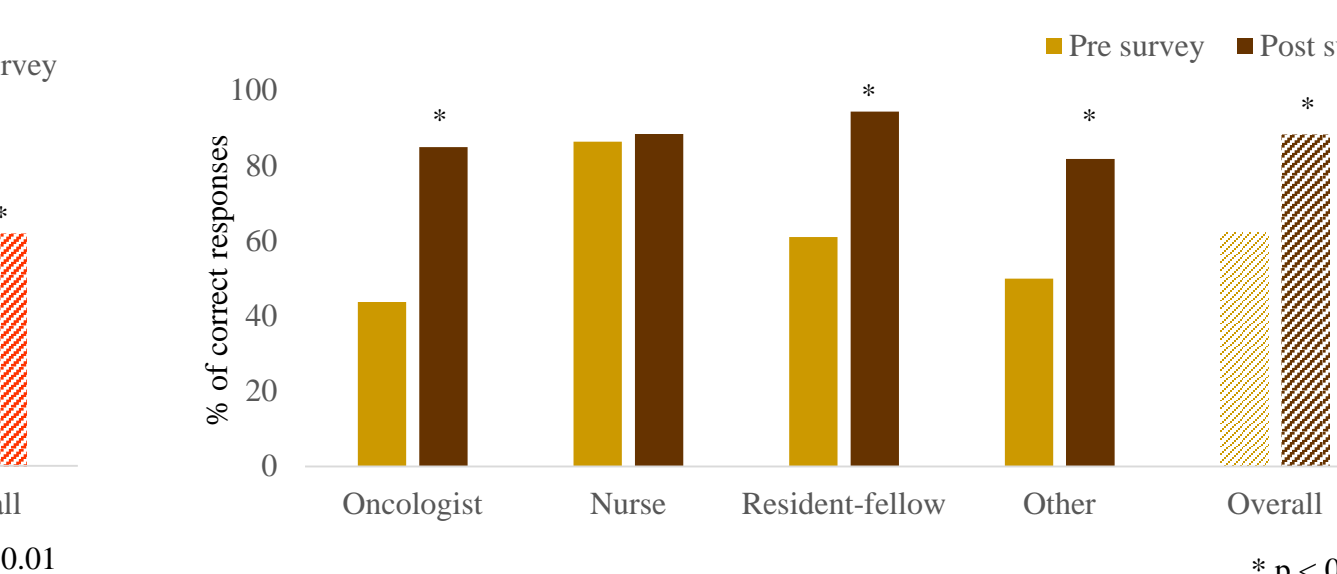
Q4: Within the RCN hospitals, most cases of male fertility preservation service for cancer patients are completed from the time of request within hours.



Q6: To arrange for male fertility preservation service, you should contact the MUHC Reproductive Centre.



Q11: Male cancer patients who use their frozen sperm has similar live birth outcomes than non-cancer infertile patients.



## PATIENT IMPACT

The evaluation of this quality improvement initiative is slated for January 2018. The key evaluation measures include:

- number of patients preserving their fertility prior to the start of their cancer treatment
- number of providers within different clinical specialties (e.g. medical oncologists, radiation oncologists, urologists, hematologists, nurses, allied HCPs etc.) referring patients for fertility preservation
- The review of preliminary data revealed an increase in the variety of cancer diagnosis of patients referred for fertility preservation at the MUHC Reproductive Centre. This suggests that the **educational sessions helped "spread the word"** among different specialties of oncology HCPs.

## CONCLUSION

The survey results indicate that the educational sessions offered to oncology health care providers at the MUHC, JGH and SMHC **significantly increased their knowledge of fertility preservation options and access** to this service.

It is our hope that the education sessions (along with the patient education material that we developed) will:

- reinforce the importance of fertility preservation to health care professionals**
- broaden the network of referring oncology health care providers**
- strengthen and standardize the referring patterns from oncology to fertility preservation services.**

## TRANSLATION ACROSS RCN

The MUHC Reproductive Centre is currently examining the possibility of offering network-wide educational sessions on the topic of fertility preservation options for female cancer patients.

## REFERENCES

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