# SCIENCE FACT OR SCIENCE FICTION: DO MEN KNOW ENOUGH ABOUT THEIR OWN FERTILITY?

Many young men envision parenthood as part of their future<sup>1, 2</sup>. However, among young men, sexual health tends to be focused almost exclusively on preventing pregnancy and sexually transmitted infections, and rarely, if ever, on their fertifiliy. Few men anticipate they could have trouble conceiving once they're ready. Unlike women, who have been made acutely aware of their biological clocks, many men are not aware that there is a "best before" date on their fertility as well<sup>3</sup>. One in six Canadian couples will face fertility concerns<sup>4</sup>, and, in almost half of these cases, the primary or contributing cause will be the male partner<sup>5</sup>. Given the lack of awareness among men regarding the many factors that can influence their fertility—both within and outside of their control—<sup>6,7</sup>do Canadian men need a crash course in their own fertility?

## HOW MUCH DO MEN KNOW ABOUT FERTILITY?

One large-scale research survey aimed to uncover just how much men knew about their own fertility<sup>8</sup>. Led by researcher Phyllis Zelkowitz from the Jewish General Hospital and McGill University in Montreal, the survey included 700 Canadian men aged 18 to 50 years, from every province, and from diverse sociodemographic backgrounds. They were asked to identify factors associated with male infertility, and to rate their knowledge about male fertility. The researchers found that, while almost 90% of the men surveyed considered themselves at least "somewhat knowledgeable" about male reproduction and fertility, on average, they were able to identify only about 50% of the potential risks.

Most men were able to identify that steroid use, sexually transmitted infections, and pain or injury to the scrotum could negatively affect their fertility. But many risk factors within their control (modifiable risk factors), such as excessive heat from electronic devices, frequent cycling and frequent hot tub use, were far less known. Many men were unfamiliar with the fact that obesity, high blood pressure and diabetes are also associated with infertility.

### A CONVERSATION WORTH HAVING

"This gap shows how much we need universal public education about male fertility," says Zelkowitz. "Doctors should be talking about reproductive health with their male patients as much as with their female patients." The survey also revealed that age, education, income, sexual orientation or intention to have children did not influence how much knowledge men had about their fertility.

Social norms that equate masculinity with potency might be contributing to men's reluctance to talk about infertility<sup>9</sup>. "There is an important need to broaden the conversation about infertility and its physical, emotional, and social consequences, to include the experience of men," says Zelkowitz.

## **DID YOU KNOW?**

Overuse of electronic devices such as cellphones and computers is a risk factor associated with male infertility.



Only 26% of survey respondents correctly identified this as a risk.

Other contributing risk factors and health issues include stress, long-term use of steroids, wearing tight pants, high cholesterol, delayed puberty and frequent bicycling or horseback riding.

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### NOWHERE TO LEARN

About a third of the men surveyed reported fertility concerns and more than half expressed the desire to know more about their own fertility. "Unfortunately, we found that online resources tend to be inaccessible and overwhelming," says Zelkowitz. Her team reviewed the content of Canadian fertility clinic websites and North American websites related to fertility. The team also reviewed the top 20 Google results for the search "male fertility" and "male fertility preservation cancer" in Canada and worldwide. Most of the 85 websites reviewed did not meet readability, suitability and quality standards for accessibility and none complied with the recommended grade 8 reading level. Only 11% of websites used audiovisual material and only a third reported the year of their last update<sup>10</sup>.

Zelkowitz's next step is to develop a mobile health intervention to provide information and support to men with fertility concerns and to educate men in the general population about reproductive health. Her team is currently developing and testing digital applications to help men learn about fertility and navigate infertility diagnoses and treatments.

## CONCLUSION

Fertility challenges can be extremely stressful for both men and women. Infertility treatments can be costly and are frequently unsuccessful. A greater awareness of lifestyle factors associated with infertility may allow men to take action to safeguard their reproductive health and their overall well-being. Providing targeted reproductive health information about male fertility could reduce stigma, raise awareness and empower men to take charge of their own health.

## ABOUT THE RESEARCH

Dr. Zelkowitz is a clinical psychologist and Research Director in the Department of Psychiatry at the Jewish General Hospital, an Associate Professor in the Department of Psychiatry and an Associate Member of the Departments of Psychology and Obstetrics and Gynecology at McGill University. She is a Senior Investigator at the Lady Davis Institute of the Jewish General Hospital, and Head of its Psychosocial Axis.

Her current research, which is funded by the CIHR Institute of Gender and Health, aims to promote reproductive health in people facing fertility concerns, whether they are part of a couple seeking fertility treatment, or young adult male cancer survivors whose diagnosis and treatment may have compromised their fertility.

"There is an important need to broaden the conversation about infertility and its physical, emotional, and social consequences, to include the experience of men,"

- Dr. Zelkowitz

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