

Are the Needs of Fertility Patients' Met by Information Found Online?

Félicia Brochu^{1,2}, Stephanie Robins^{1,6}, Peter Chan^{2,3}, Kirk Lo⁴, Neal Mahutte⁵, Sophia Ouhilal⁵, Togas Tulandi^{1,2,3} & Phyllis Zelkowitz^{1,2,6}

¹Jewish General Hospital, Montreal, Quebec, Canada; ²McGill University, Montreal, Quebec, Canada; ³McGill University Health Centre, Montreal, Quebec, Canada; ⁴Mount Sinai Hospital, Toronto, Ontario, Canada; ⁵Montreal Fertility Centre, Montreal, Quebec, Canada; ⁶Lady Davis Institute, Montreal, Quebec, Canada

INTRODUCTION

- It is estimated that 70% of adults use the Internet as a primary source of health information, with higher rates among those with health problems
- Fertility patients are likely to search online for fertility information and support.
- Few studies have investigated the online search patterns of fertility patients and have evaluated the ability of the information to meet patients' needs.

Objectives

- To investigate whether online information about fertility met patients' needs.
- To characterize the demographic profiles and search patterns of patients whose needs were not met by online resources.

METHODS

- Patients were recruited in 4 clinics in **Montreal** and **Toronto**, Canada.
- A total of **254 male** and **313 female fertility patients** answered an anonymous online needs assessment survey.
- Questions about online searching included:
 - "Have you searched online for information about infertility?"
 - Yes No
 - "Did you look online for the following types of information?"
 - Medical information about fertility (causes, diagnostic tests, scientific literature, etc.), information about clinics and medical teams, treatment options for infertility, information on coverage and support from others.
 - "In general, did the information you found online meet your needs?"
 - Yes No
- Patients also reported:**
 - Demographic characteristics and fertility history
 - Perceived stress using the **Perceived Stress Scale 4 (PSS-4)**
 - Responses from 0 ("never") to 4 ("very often")
 - Total score between 0 and 16
 - Depressive symptomatology using the **Patient Health Questionnaire 2 (PHQ-2)**
 - Responses from 0 ("not at all") to 3 ("nearly every day")
 - Total score between 0 and 6
 - Cut-off of 2 warrants further clinical investigation for depression

RESULTS

Sample Characteristics (n = 567)

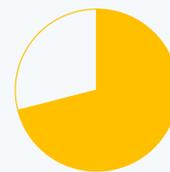
Age: mean of 36.54 years (SD = 5.5). Range 22-62
 Mean PSS-4 total score: 5.84 (SD = 2.90)
 Mean PHQ-2 total score: 1.31 (SD = 1.40)

Characteristics	n (%)
Sex	
Male	254 (44.8)
Female	313 (55.2)
Annual Household Income (CAD)	
Below \$80,000	260 (47.9)
Above \$80,000	283 (52.1)
Education (highest level achieved)	
High school	47 (8.6)
Technical college	99 (18.0)
University bachelor's degree	263 (47.8)
Post graduate degree	141 (25.6)
Cause of Infertility	
Male factor only	180 (31.7)
Female factor only	197 (34.7)
Male and female factor	48 (8.5)
Unexplained	99 (17.5)
No diagnostic testing	31 (5.5)
Time in Treatment	
0 – 6 months	220 (39.1)
6 months – 1 year	125 (22.2)
1 – 2 years	130 (23.1)
3 – 5 years	63 (11.2)
Over 5 years	24 (4.3)
Born in Canada	288 (52.2)



88% of patients searched online for information about fertility

Of those who searched online:



71% indicated that their needs were **met** by online information



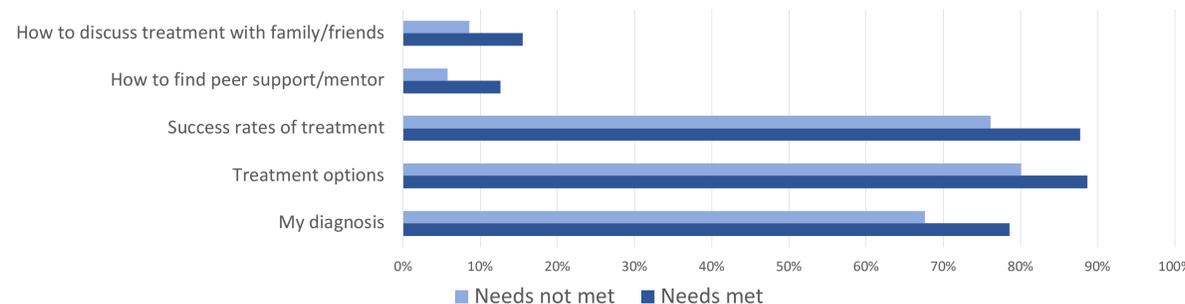
29% indicated that their needs were **not met** by online information



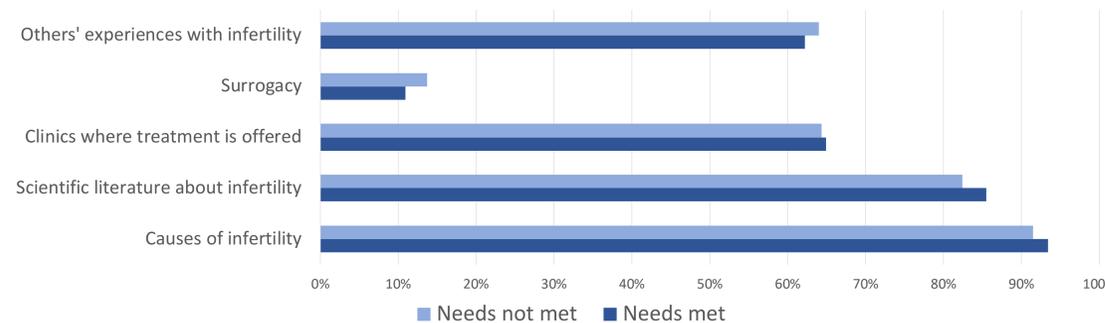
Types of information searched online

Patients whose needs were not met were less likely to have searched for certain types of information compared to patients whose needs were met.

Types of fertility information searched **less** by patients with unmet needs



Types of fertility information searched **equally** by patients with met and unmet needs



Characteristics of searchers



Gender: 94% of women searched compared to 80% of men.



Education: 77% patients with HS degree, 88% CEGEP and 89% University patients searched.



Time in treatment: 90% of experienced patients searched compared to 84% of new patients.



Mental health: Higher PSS and PHQ scores for patients who searched compared to those who did not.

Mental Health and having unmet needs for information



Group with unmet needs
 Mean PSS score: 6.51 (SD = 2.89)
 Mean PHQ score: 1.58 (SD = 1.53)



Group with met needs
 Mean PSS score: 5.72 (SD = 2.85)
 Mean PHQ score: 1.28 (SD = 1.35)



Independent t-test statistics revealed that patients whose needs for information were unmet by online searching showed **greater levels of perceived stress** ($t = 2.795$, $df = 485$, $p < .01$) and **depressive symptomatology** ($t = 2.175$, $df = 482$, $p < .05$).

CONCLUSION

- Fertility patients commonly refer to online resources to access information about fertility. However, these findings indicate that information and support resources available online did not meet the needs of almost 30% of patients.
- Patients with unmet needs searched less for: medical information about diagnosis and treatments and proactive social support resources. Fear of disclosure may discourage patients from seeking opportunities to discuss infertility with others.
- Importantly, patients who were stressed or depressed had unmet needs for information and support, suggesting that online resources may not be tailored to the needs of distressed patients. There is a need for more individualization of online resources to ensure that it is accessible, targeted and sensitive to patients' needs.



Hôpital général juif
Jewish General Hospital



CIHR IRSC
Canadian Institutes of Health Research
Instituts de recherche en santé du Canada



McGill infofertility

Helping you navigate the world of infertility



LADY DAVIS INSTITUTE FOR MEDICAL RESEARCH