FERTILITY PRESERVATION IN PEDIATRIC CANCER PATIENTS: ASSESSING THE READABILITY, QUALITY, AND ACCESSIBILITY OF ONLINE HEALTH INFORMATION - A PILOT STUDY

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Background

- While improvements in cancer treatment have led to increased long term survival among pediatric patients, a substantial portion of survivors face infertility because of gonadotoxic therapy .[1,2]
- Families and caregivers frequently turn to the internet for educational resources regarding fertility preservation.[3]
- Well established web sources regarding oncofertility information have readability levels above that of the general population and lack quality and accessibility.[4]
- Published resources should provide clear, accessible information for both caregivers and children.

Objective

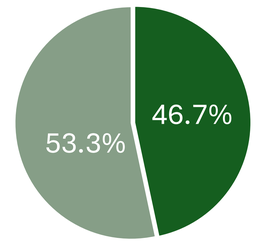
To perform an initial evaluation of the readability, quality, and accessibility of patient-facing web sources of information on pediatric oncofertility preservation.

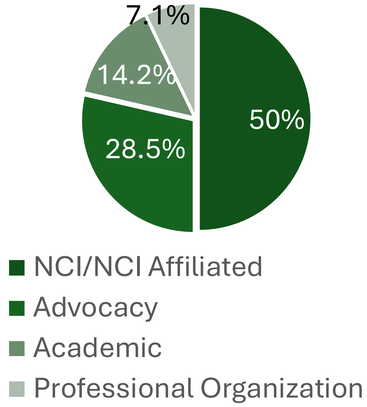
Materials and Methods

- Google search engine was used with the following keywords: *"fertility preservation cancer children," "fertility pediatric cancer patients,"* and *"fertility preservation for children"*
- All first page results were collected, Duplicate websites were removed.
  - Websites categorized into patient-facing (designed for direct interaction with patients) vs. non-patient-facing (academic or provider sources)
- 14 patient-facing websites were analyzed with the following metrics reviewed:
  - Readability: assessed with Gunning Fog, Coleman Liau, Flesch-Kincaid, and SMOG indices
  - Quality: assessed with DISCERN and JAMA instruments
  - Accessibility: availability of additional language or video/audio resource
- Collection period Sept - Oct 2025

Results

Website Characteristics





	Accessibility	
	Additional language	Video/Audio Resource
Percentage of Websites	21%	36%

	Readability Index				Quality Assessment	
	Gunning Fog	Coleman Liau	Flesch-Kincaid	SMOG	DISCERN	JAMA
Mean ± Standard deviation	14.8 ± 2.2	13.5 ± 1.9	13.2 ± 2.4	14.1 ± 1.7	59.5 ± 12.0 Range (34-80)	1.1± 1.5

Conclusions

- Preliminary searches for online information about fertility preservation for pediatric oncology patients yields results that are not conducive to patient or caregiver education
- Less than half of websites reviewed were patient facing and the average reading complexity was higher than the recommended 7th to 8th grade reading level
- Websites vary widely in the quality/reliability of information provided and few websites provide the option to view the content in other languages.
- A third of sites include multimedia sources to supplement written content, which may be a method to cater to a wider audience.

Future Directions

- Perform broader sampling to power study to compare differences in readability amongst the types of organizations
- Compare results of pediatric sources with adult sources
- Investigate and compare specific topics covered by individual websites

References