

# PROSPECTS AND POTENTIAL FOR EXPANDING WOMEN'S ONCOFERTILITY OPTIONS



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## BACKGROUND

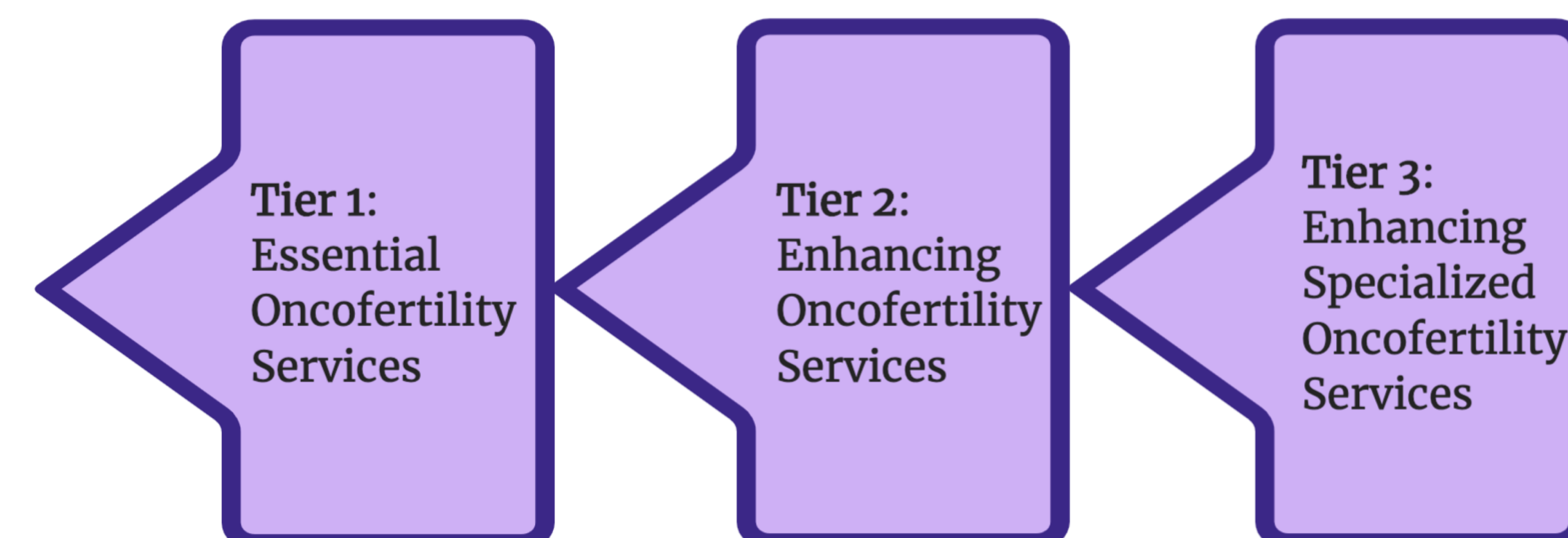
- Increasing cancer burden worldwide
- Among females, cancer is the 2<sup>nd</sup> most common cause of mortality globally<sup>5</sup>
- Increased risk of infertility from cancer treatments: chemotherapy, surgery, radiation<sup>3</sup>
- Oncofertility** connects reproductive endocrinology and oncology to assess the efficacy of reproduction in cancer patients
- Fertility Interventions: shielding, cryopreservation, donor eggs
- Hindrances for oncofertility interventions:
  - Financial burdens
  - Cultural and religious norms
  - Lack of education

## AIMS

- Improve awareness of medical care and fertility options for female cancer patients before treatments administered
- Enhance future fertility prospects

## METHODS

- Analyze electronic surveys sent to LMICs and HICs about barriers to oncofertility intervention implementation in medical practices<sup>2</sup>
- Analyze online questionnaires sent to 12 HICs and 4 LMICs about the roles health care professions should play, age-appropriate care, oncofertility training, psychosocial care<sup>1</sup>
- Discuss Three-Tiered Model<sup>1</sup>



## RESULTS

Table 1. Barriers to Care in Countries Included in Study as Indicated by Respondent Organizations

Continent and Country	BARRIER									
	Lack of Insurance	Financial Burden to Patient	Issues With Referrals	Lack of Providers	Cultural or Religious Barriers	Dissemination	Inability to Secure Funding for Research/Clinic	Lack of Donated Tissue	Legal Restrictions	Lack of Institutional Support
<b>AFRICA</b>										
Egypt	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Tunisia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>ASIA</b>										
China	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
India	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Iran (Islamic Republi)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Japan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Korea (Republic of)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Turkey	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>EUROPE</b>										
Austria	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Belgium <sup>a</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Denmark	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
France	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Germany	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Poland <sup>b</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Portugal	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Netherlands	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Russian Federation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spain	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
United Kingdom of	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>NORTH AMERICA</b>										
Canada	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mexico	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Panama	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
United States	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>OCEANIA</b>										
Australia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>SOUTH AMERICA</b>										
Argentina	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Brazil <sup>c</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Chile	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Peru	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

<sup>a</sup>Fear of unmarried women to lose their virginity after transvaginal procedures, such as oocyte pickup.  
<sup>b</sup>Especially ovarian and testicular tissue samples from the pediatric population.  
<sup>c</sup>Especially more psychologists and nurses are needed.  
<sup>d</sup>Small patient population for research.  
<sup>e</sup>Little awareness among both physicians and patients of specialized fertility preservation methods.  
<sup>f</sup>Lack of protocols for ovarian and testicular tissue cryopreservation in prepubertal children, lack of funding for a clinical oncofertility coordinator, and time burden on clinicians.  
<sup>g</sup>Oncologist resistance.  
<sup>h</sup>Cultural barriers to sperm donation and laws that do not permit donor payment.  
<sup>i</sup>Lack of testicular tissue donation.  
<sup>j</sup>Ovarian tissue cryopreservation is currently only offered in a couple of centers, and only a couple of preservations have been performed thus far, whereas oocyte and embryo cryopreservation are routinely offered.

- OCGPN (Oncofertility Consortium Global Partners Network)
  - Allows global partners to develop their own fertility preservation networks (ex. Latin American Oncofertility Network and Peruvian Oncofertility Network)
- 82.7%: oncofertility interventions should be a standard practice
- 92.9%: all patients should be provided age-appropriate care
- 97%: health care professionals should disclose potential risks and provide decision aids for cancer patients
- 88.5%: oncofertility training should be provided to health care professionals
- Oncofertility decision aids (websites and printable handouts) available to the public in Canada, Netherlands, Switzerland, Germany, United States, and United Kingdom<sup>4</sup>
- Patient Navigators specialized in reproductive endocrinology established at Northwestern



## CONCLUSIONS

- Oncofertility options are becoming more prominent
- Improvements in cancer options and treatments equates growing awareness
- Growing international organizations are improving global networks for oncofertility ambassadors

## FUTURE DIRECTIONS

Implement decision aids, patient navigators, and three-tiered model in healthcare practices

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