

FERTILITY PRESERVATION OPTIONS FOR PATIENTS WITH CANCER

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Cancer incidences have an increasing trend worldwide, causing a global burden. Intense chemotherapy or radiotherapy has increased the cancer survival rate but with the expense of gonadal function in many cases. Therefore, oncofertility is becoming an essential aspect of supportive cancer care. Fertility preservation (FP) can impose a social, economic, ethical, and psychological impact on society. This review aimed to fill the information gap and provide an update of oncofertility care to the Sri Lankan scientific community and increase the awareness related to FP options and Clinical Practice Guidelines (CPG) for cancer patients. A Literature search under "oncofertility" and "fertility preservation" was performed in the PubMed and Google scholar databases. Ten original research articles, 20 review articles, and seven CPG were used to update oncofertility care. Different FP alternatives and strategies are available for both male and female patients. Embryo cryopreservation is considered the best option for married people. Cryopreservation of oocytes (mature or immature) is possible for married and unmarried women. Ovarian tissues cryopreservation is the only option available for prepubertal girls and unmarried women with cultural backgrounds. Sperm cryopreservation is recommended for postpubertal males while preserving testicular tissue might be the only option for prepubertal boys though it is still experimental. These techniques use either slow freezing methods or vitrification. According to the recommendations, oncologic health care providers should discuss infertility as a potential risk of therapy as soon as the cancer diagnosis is made and formulate a treatment plan. However, Sri Lanka has not joined such a society or practised FP methods for cancer patients yet. It is time to bring oncologists, gynaecologists, urologists, radiologists, paediatricians, surgeons, and psychologists to one table, discuss, share the knowledge, and make the mindset to advise eligible cancer patients on fertility issues and take actions.

Keywords: Cryopreservation, Embryo, Oocytes, Ovarian tissue, Sperm