

Psychosocial programs to alleviate fertility distress for cancer patients : A mixed-methods systematic review

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INTRODUCTION

- Cancer patients experience significant distress related to fertility issues.
- However, there is still a lack of studies for psychological interventions to alleviate fertility distress.

OBJECTIVE

- To identify the components of intervention for addressing the psychological issues in cancer patients.
- To integrate findings from both quantitative and qualitative studies on the outcomes of intervention.

METHODS

- **Design:** Mixed-methods systematic review (Sequential explanatory design)
- **Data Sources:** PubMed, EMBASE, MEDLINE, CINAHL, PsycINFO, Web of Science and Cochrane Review Library (January 2012 – July 2022)
- **Methodological quality:** Mixed Methods Appraisal Tool & Cochrane Risk of Bias Tool

RESULTS

- Of the seven included studies. (Qualitative (n = 2) & Quantitative (n = 5))
- The quantitative studies found the direct intervention effects such as knowledge improvement and psychological outcomes changes.
- In qualitative findings, 'normalization' related to the peer support while participating in interventions, and 'empowerment' related to health literacy and confidence in fertility-related issues after interventions were identified in-depth.
- Some of the quantitative results were statistically significant and some were not significant for changes in psychosocial outcomes. In qualitative findings, it can be confirmed that ambivalence related to fertility problems was reported for interventions.
- Only the qualitative findings identified the unmet needs regarding psychological support about fertility-related issues after cancer treatment or the interventions.

CONCLUSIONS

- For the development and implementation of a successful psychosocial program, careful attentions and efforts are required from the title to the contents of the intervention since the intervention itself can make the cancer patients feel negative emotions have an impact on their long-term self management of fertility related issues.

Table 1. The main results of the quantitative and qualitative studies

Categories	Subcategories	Author (Year)	Main Results (Quantitative)	Author (Year)	Main Results (Qualitative)
Fertility-related knowledge		Allison (2022)	Oncofertility knowledge increased ($p = 0.002$).	Ussher (2021)	Increased knowledge about impacts of treatment, options for fertility preservation and etc.
	Fertility-related emotion	Allison (2022)	MLB+HCP discussion group reported being more nervous and fearful after the intervention.	Allison (2022)	Oncofertility information presented in intervention is valued and reassuring.
		Ussher (2021)	Post intervention, feeling nervous and fearful had decreased.	Micaux (2020)	Information is both comforting and upsetting.
Psychosocial outcomes	Normalization			Gottvall (2022)	Affinity with peers in the discussion forum.
				Ussher (2021)	Facilitated the normalization of fertility concerns associated with cancer.
	General psychosocial outcomes	Barjasteh (2022)	There was a significant decrease in DASS-21 in the intervention groups ($p < 0.001$). No significant differences were observed after the two- and three-months.		
		Ussher (2021)	There was a statistically significant difference in quality of life ($p = 0.035$). No significant changes in general distress.		
Cognitive behavioral outcomes	Fertility related concern	Barjasteh (2022)	The intervention group showed a significant reduction in RCAC.		
		Irene (2019)	Significant improvements in the fertility-related concerns were in the intervention.		
	Empowerment	Micaux (2022)	Fertility self-efficacy was no significant differences.	Micaux (2020)	Choosing how to deal or not to deal with the problem.
		Allison (2022)	Functional health literacy increased ($p = 0.006$).	Ussher (2021)	Increased confidence in communicating about fertility.
Unmet needs				Micaux (2020)	Not for me, beginning to understand.
				Gottvall (2022)	Feeling abandoned by healthcare

