

## The Conflict Status of Fertility Preservation Decision-Making and Their Impacts on Decision Results in Childbearing-Age Female Patients with Cancer: A Cross-Sectional Study

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### **Abstract:**

**Introduction:** Female cancer patients have conflicting decisions on fertility preservation. However, clinical discussions or relevant studies conducted in this area are few in mainland China and Hong Kong.

**Aims:** To explore the current conflict status of fertility preservation decision-making and their impacts on decision results in childbearing-age female patients with cancer.

**Methods:** A cross-sectional study was conducted involving 200 reproductive-age female patients with cancer from regional hospitals in Hong Kong. The participants were asked to complete a demographic and clinical information sheet, Decision Conflict Scale (DCS), Comprehensive Score for financial Toxicity –Functional Assessment of Chronic Illness Therapy (COST-FACIT), The Preparation

for decision-making scale (Prep-DM), The Scale for Patient Satisfaction with Medical Decision Making (PSMDM), and European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire Core 30 (EORTCQLQ-C30). Data were analysed using univariate analyses, multiple regression, and moderation analysis.

**Results:** The mean total DCS score was  $41.3 \pm 25.5$ , indicating a considerably high level of decisional conflict in the study population. Participants with higher education levels reported significantly lower decisional conflict ( $P=.021$ ). Multiple regression analyses indicated that decisional conflict was negatively associated with decision quality (regression coefficient =  $-0.24$ , 95%CI  $-0.40$  to  $-0.08$ ,  $P=.003$ ). Moderation analysis showed that while decision support significantly impacted decision quality, it might not moderate the impact of decision conflict on this outcome.

**Conclusions:** The findings of this study build the foundation for further programmes promoting fertility preservation. The programme should put more effort into supporting the decision-making process for women with lower education levels. Moreover, to improve decision quality, the programmes should not only address decisional conflict but also focus on enhancing decision support.

#### **Keywords:**

Cancer; fertility preservation; childbearing age; decisional conflict; decision quality.