

SUBJECTIVE FINANCIAL TOXICITY AND HEALTH-RELATED QUALITY OF LIFE IN PATIENTS WITH CANCER AND SURVIVORS:

A SYSTEMATIC REVIEW AND META-ANALYSIS

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OBJECTIVES

We aimed to perform a systematic review and meta-analysis on studies investigating the relationship between health-related quality of life (HRQOL) and subjective financial toxicity measured with the Comprehensive Score for Financial Toxicity (COST) instrument in patients with cancer and survivors.

METHODS

Systematic literature search was performed in PubMed, Web of Science, CINAHL, and PsycInfo for articles published until April 2022 (Figure 1). Methodological quality was assessed using Appraisal Tool for Cross-Sectional Studies and Critical Appraisal Skills Programme Cohort Study Checklist. Where applicable, outcomes were pooled using random-effects meta-analysis.

RESULTS

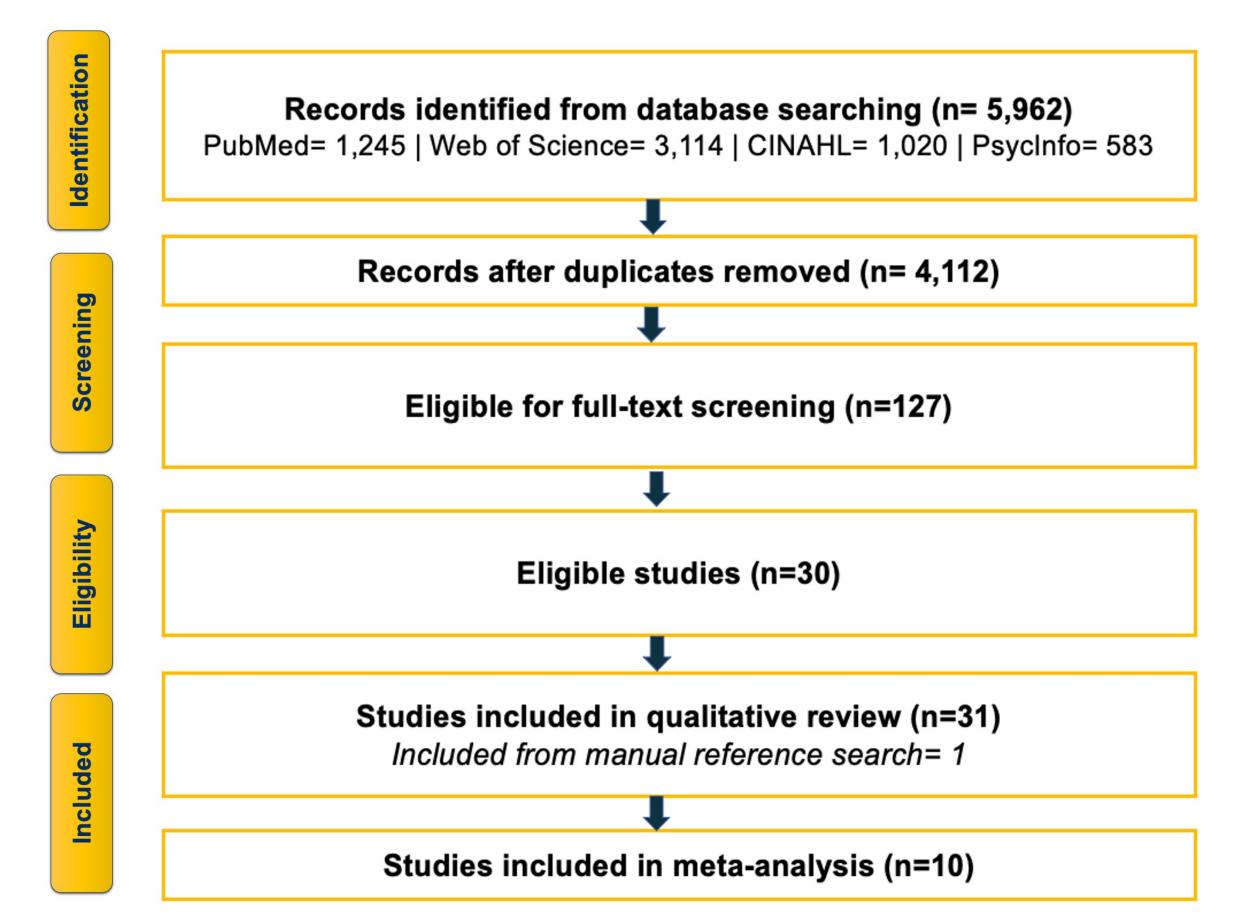


Figure 1. Flow of study inclusion

Mental health Daily Sleep functioning Cognitive Social health functioning **Financial** toxicity Physical Fatigue health Physical Pain functioning Global health

Figure 2. HRQOL domains correlated with financial toxicity

The included 31 studies had a combined sample of 13,481 patients and survivors with more than 25 types of cancer. The studies originated from nine countries, with the US (n=18), China (n=4), and Australia (n=3) being the most common.

Nineteen different validated HRQOL measures were used in these studies: generic (n=9), cancer-specific (n=3), and condition-specific (n=7). The most frequently used scales were FACT-G (n=9), EORTC QLQ-C30 (n=5), and EQ-5D (n=5).

Thirty studies concluded that higher financial toxicity was significantly related to worse HRQOL. Nine studies reported financial toxicity as a significant predictor of HRQOL using multiple regression models after adjusting for socio-demographic and clinical factors. Ten HRQOL domains were correlated with financial toxicity (Figure 2).

The meta-analysis was performed for overall HRQOL scores. Ten studies involving 2,139 patients measured the association between financial toxicity and overall HRQOL. The random-effects meta-analysis indicated a moderate correlation between COST and overall HRQOL measured with FACT instruments (r=0.49, 95%CI: 0.44-0.54) (**Figure 3**).

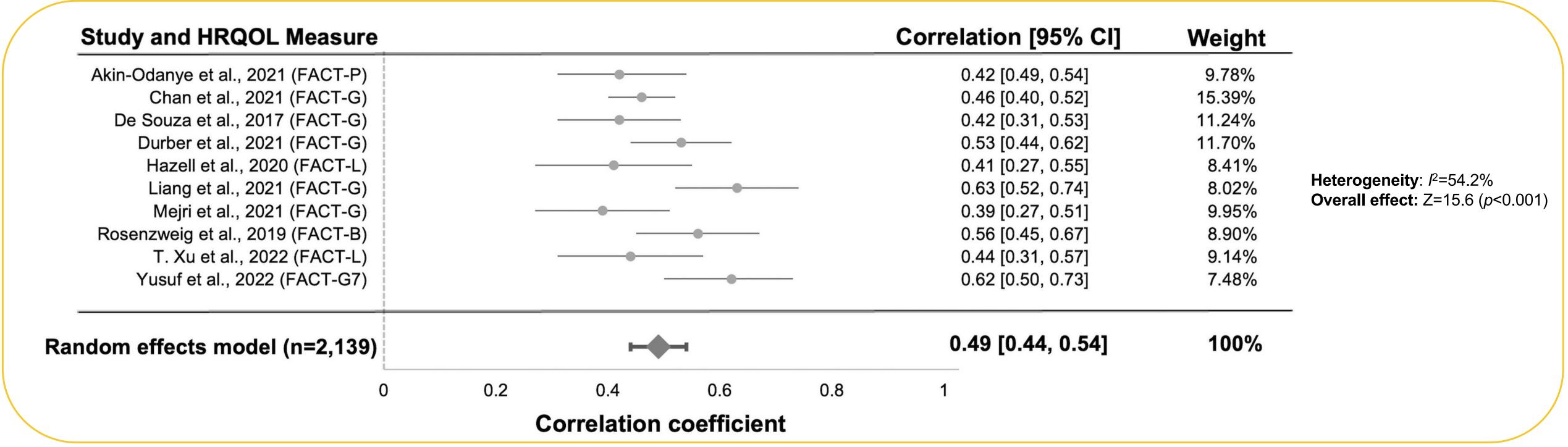


Figure 3. Meta-analysis on the correlations between COST and HRQOL scores

CONCLUSION

This is the first systematic review and meta-analysis to summarise the literature on the relationship between subjective financial toxicity and HRQOL in patients with cancer and survivors. We confirm financial toxicity to be a relevant outcome of oncology care that is related to the decline of HRQOL in patients.



