

Impact of Psychosocial Interventions on Cancer Survival: An Updated Meta-Analysis

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Introduction

- ❖ Psychosocial interventions are known to improve emotional well-being and quality of life in patients with cancer, however, their effects on overall survival (OS) remain unclear.
- ❖ An updated meta-analysis of randomized controlled trials (RCTs) is performed.

Methods

- ❖ A systematic literature search from database inception until October 2023 in MEDLINE, EMBASE and Cochrane CENTRAL.
- ❖ RCTs comparing the OS of patients receiving a psychosocial intervention versus a control group were included.
- ❖ If HRs were not provided, they were derived from the Kaplan-Meier curves.
- ❖ A meta-analysis of HR was performed for OS using a random effect model.

Results

- ❖ Of 14725 studies identified, 24 RCTs involving 4232 patients met inclusion criteria.
- ❖ Majority of interventions (n= 18, 75.0%) were conducted in groups. Half (n=12, 50.0%) of the studies involved patients treated in a palliative setting, and nearly half (n=11, 45.8%) included patients with breast cancer.
- ❖ Patients treated with psychosocial interventions had better OS than those in the control groups (summary hazard ratio [SHR] 0.87, 95% CI 0.76-0.98; I²=52.7%) (Figure 2).
- ❖ Subgroup analyses identified that patients treated with group-based therapies (SHR 0.84, 95% CI: 0.71-0.97; I²=46.3%), patients treated with a curative intent (SHR 0.77, CI: 0.65-0.92; I²=51.1%) and patients with hepatobiliary primary cancers (SHR 0.72, 95% CI 0.61-0.85; I²=0%) had OS benefits from psychosocial interventions.

Figure 1. Number of RCT's for identified psychosocial interventions

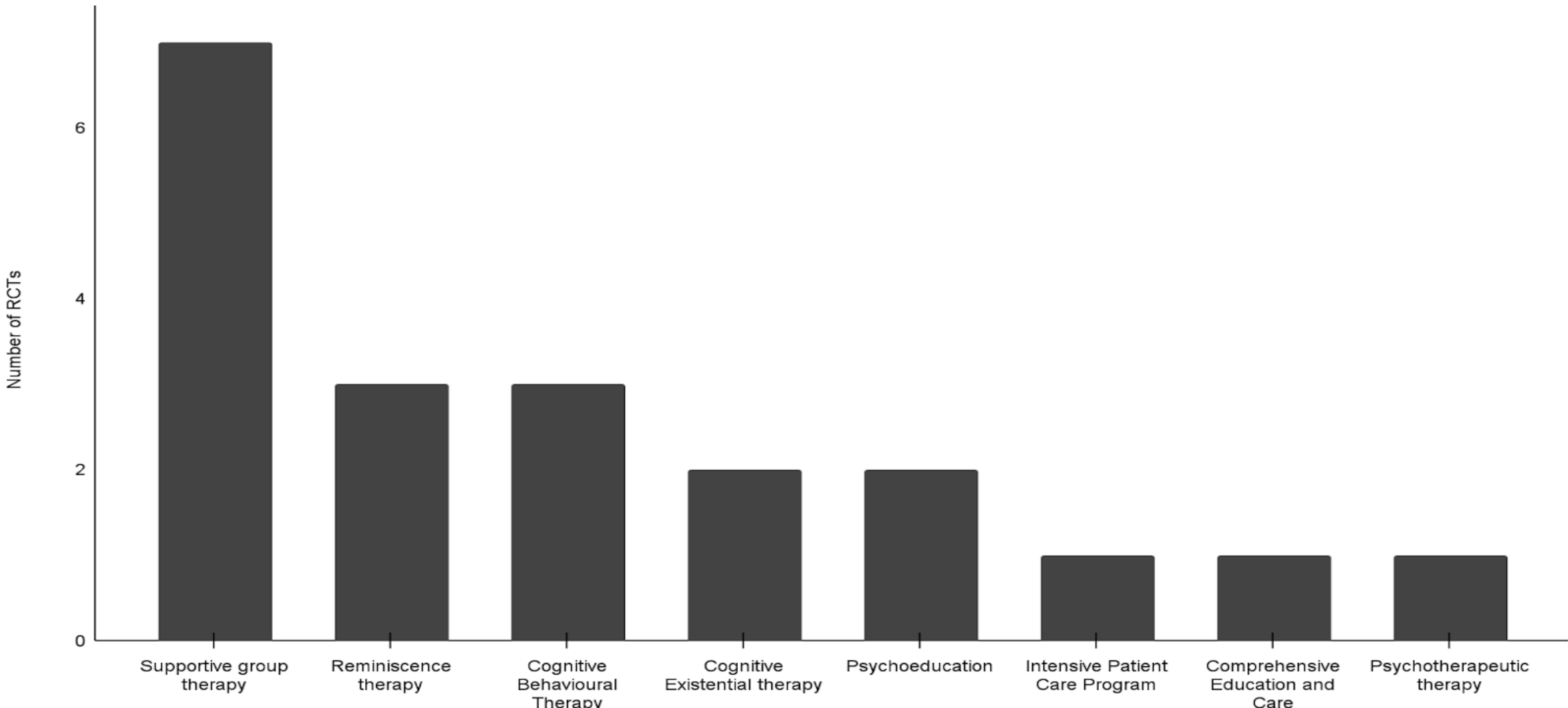
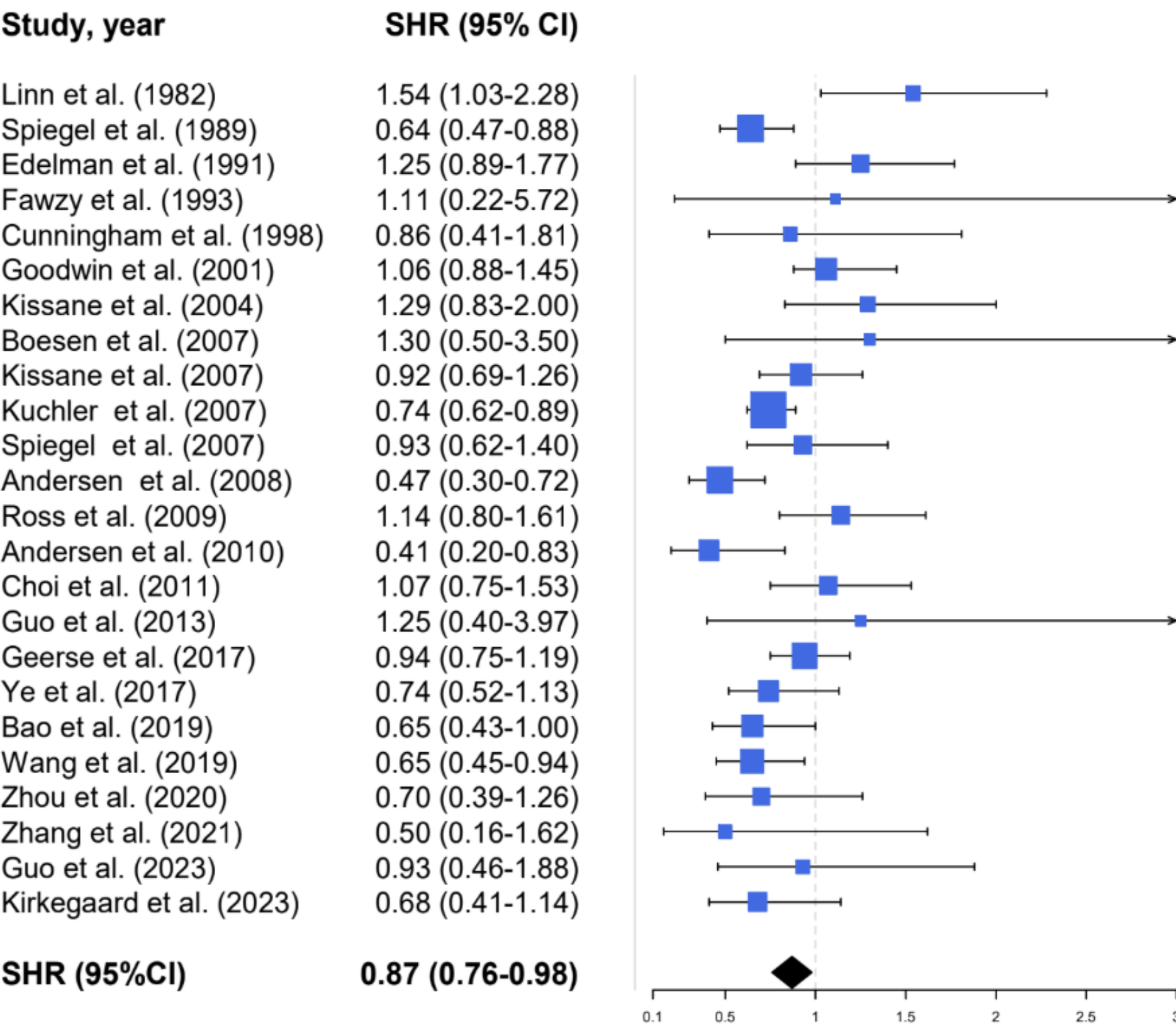


Figure 2. Hazard ratio's from included RCTs



Conclusions

- ❖ Patients with cancer who were offered psychosocial interventions may have improved OS.
- ❖ Given the significant heterogeneity in our analysis, an individual patient-level meta-analysis may help identify characteristics of patients who benefit from these interventions.