

INPLASY

Living alone is associated with an increased risk of all-cause death among cancer patients: a systematic review and meta-analysis of cohort studies

INPLASY2024100051

doi: 10.37766/inplasy2024.10.0051

Received: 11 October 2024

Published: 11 October 2024

Liu, FW; Du, LH; Xiao, LP; Huang, JR; Wu, DL.

Corresponding author:

fuwei liu

gzliufuwei@163.com

Author Affiliation:

Ganzhou People's Hospital.

ADMINISTRATIVE INFORMATION

Support - No.

Review Stage at time of this submission - Completed but not published.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY2024100051

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 11 October 2024 and was last updated on 11 October 2024.

INTRODUCTION

Review question / Objective The growing prevalence of living alone as a societal trend may heighten disease susceptibility and negatively impact the prognosis of individuals with established conditions. While several studies have explored the link between living alone and the risk of mortality in cancer patients, the findings remain inconclusive.

Rationale Search electronic databases such as PubMed, Embase, Cochrane Library, and Ovid Medline through the system. The search network words and their free words are respectively ("living alone" or "social isolation" or "living conditions" or "living arrangements") and ("tumor" or "tumors", "malignant tumor" and "cancer"), and literature analysis is conducted through literature screening, literature evaluation, and statistical analysis methods.

Condition being studied The growing prevalence of living alone as a societal trend may heighten disease susceptibility and negatively impact the prognosis of individuals with established conditions. While several studies have explored the link between living alone and the risk of mortality in cancer patients, the findings remain inconclusive.

METHODS

Search strategy A comprehensive search was conducted in electronic databases including PubMed, Embase, Cochrane Library, and Ovid Medline. The Mesh terms of the search and their free terms were ('living alone' OR 'social isolation' OR 'living situation' OR 'living arrangement') and ('tumor' OR 'neoplasms' OR 'malignancy' OR 'cancer'). Language restrictions were not imposed during the literature search. Additionally, the bibliographies of the retrieved studies were examined to identify any additional reports and ensure the thoroughness of the literature search.

Participant or population Participants included in the studies were patients with cancer. The exposure and comparator variables were Living alone and non-living alone, respectively.

Intervention Living alone.

Comparator non-living alone.

Study designs to be included Cohort studies.

Eligibility criteria (1) Participants included in the studies were patients with cancer. (2) The exposure and comparator variables were Living alone and non-living alone, respectively. (3) The outcome of interest was death. (4) The included studies were observational in nature and published as full-length articles. (5) The effect estimates included adjusted hazard ratios (HRs) and 95% confidence intervals (CIs).

Information sources PubMed, Embase, Cochrane Library, and Ovid Medline.

Main outcome(s) All-cause death.

Data management Microsoft Excel 2019 and Review Manager 5.3 software.

Quality assessment / Risk of bias analysis The Newcastle–Ottawa Scale (NOS) instrument.

Strategy of data synthesis Review Manager 5.3 software was used to carry out all statistical analyses for this study. The two most often utilized statistical techniques to measure heterogeneity were the Cochrane Q test and the I² statistic, with P 50%, respectively, indicating significant heterogeneity. An inverse variance random effects model was then used to pool the natural logarithms of the HRs and standard errors of the included studies. Review Manager 5.3 software.

Subgroup analysis Gender Differences.

Sensitivity analysis Review Manager 5.3 software.

Language restriction English.

Country(ies) involved China.

Other relevant information None

Keywords living alone; cancer; mortality; cohort studies; systematic review; meta-analysis.

Dissemination plans Exploring and disseminating new insights through literature publication.

Contributions of each author

Author 1 - fuwei liu - Author 1 drafted the manuscript.

Email: gzliufuwei@163.com

Author 2 - Lihui Du - The author provided statistical expertise.

Email: 15007077217@163.com

Author 3 - Liping Xiao - The author contributed to the development of the selection criteria, and the risk of bias assessment strategy.

Email: 55453381@qq.com

Author 4 - Jinrong Huang - The author read, provided feedback and approved the final manuscript.

Email: huang18870889767@163.com

Author 5 - Daolin Wu - The author writes the manuscript.

Email: 920891138@qq.com