INPLASY PROTOCOL

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Corresponding author:
Hongchen Zhang

hczhang@lzu.edu.cn

Author Affiliation:
School of Nursing, Lanzhou University

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Conflicts of interest:
No conflict of interest.

The prevalence of fatigue in men with prostate cancer: a protocol for systemic review and meta analysis

Luo, Y[1]; Yang, Y[2]; Wu, C[3]; Wang, C[4]; LI, W[5].

Review question / Objective: **1.What is the prevalence of fatigue in prostate cancer? 2.Does prevalence of fatigue differ according to treatment received and fatigue assessment time?**
Condition being studied: **The side effects of prostate cancer treatment are very prominent, and recent clinical hotspots have focused on how to control or reduce treatment-related side effects. Cancer-related fatigue is the most common treatment-related side effect of prostate cancer. This is a distressing symptom that interferes with the function of daily life and seriously affects the quality of life of patients during and many years after treatment. However, compared with other types of cancer, such as breast cancer, little is known about the prevalence and severity of prostate cancer fatigue.**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 27 October 2020 and was last updated on 09 November 2020 (registration number INPLASY2020100106).

INTRODUCTION

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seriously affects the quality of life of patients during and many years after treatment. However, compared with other types of cancer, such as breast cancer, little is known about the prevalence and severity of prostate cancer fatigue.

METHODS

Participant or population: Investigated fatigue in men with prostate cancer.

Intervention: No.

Comparator: No.

Study designs to be included: 1. The study was designed as a longitudinal cohort study (retrospective or prospective).

Eligibility criteria: 1. Investigated fatigue in men with prostate cancer; 2. Measured the prevalence of prostate cancer-related fatigue using structured questionnaires with established psychometric properties; 3. Differentiated fatigue outcomes (prevalence) between treatment options or fatigue assessment time; 4. Other criteria: there are no limitations on language of publication, year of publication, publication status.

Information sources: PubMed, EMBASE.com, the Cochrane Central Register of Controlled Trials (CENTRAL), Chinese National Knowledge Infrastructure (CNKI), and Chinese Biological Medical Database (CBM), Web of Science will be searched.

Main outcome(s): Differentiated fatigue outcomes (prevalence) between treatment options or fatigue assessment time.

Quality assessment / Risk of bias analysis: The bias risk included in the study was assessed according to the Newcastle-Ottawa scale (NOS).

Strategy of data synthesis: We will use R-4.0.2 software to conduct our meta-analysis. Calculate the combined incidence and 95% confidence interval (95%CI) of CRF in patients with prostate cancer. The Q teat was used to explore the variation between studies. The I2 statistic reflected the proportion of the heterogeneous part in the total variation of the effect amount. If the heterogeneity test results were P>0.1 and I2<50%, the homogeneity of the included studies was considered to be good, and the fixed effect model was used; otherwise, the random effects model was used. Publication bias was assessed by the funnel plot and Egger's test.

Subgroup analysis: The subgroup analyze will be performed: (1) Effects of different treatments on the prevalence of fatigue in patients with prostate cancer(ADT, RT, RP, RT+ADT); (2) Effect of fatigue assessment time on the prevalence of fatigue in patients with prostate cancer (During the treatment period、≥ 12 months after treatment).

Sensibility analysis: All the studies will be included regardless of their risk of bias, but we will conduct a sensitivity analysis to determine the possible effect of excluding studies with higher risk.

Language: English.

Country(ies) involved: China.

Keywords: Prostate cancer, Fatigue, Prevalence, meta-analysis, Protocol.

Contributions of each author:
Author 1 - Yuhong Luo - The author planned the research.
Author 2 - Yanwei Yang - The author designed the research.
Author 3 - Changfu Wu - The author contributed to the development of the selection criteria, and the risk of bias assessment strategy.
Author 4 - Chao Wang - The author read, provided feedback and approved the final manuscript.
Author 5 - Wenjuan LI - The author tested the feasibility of the study.