

# INPLASY PROTOCOL

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**Support:** None.

**Review Stage at time of this submission:** Data analysis.

## Conflicts of interest:

None declared.

## Risk factors of cognitive frailty in older adults: a Meta-analysis

Qu, X<sup>1</sup>.

**Review question / Objective:** To identify the risk factors for cognitive frailty in older adults by systematic literature review and meta-analysis, providing warning for prevention of cognitive frailty in older adults.

**Condition being studied:** Cognitive frailty is a condition recently defined by operationalized criteria describing coexisting physical frailty and cognitive impairment and this condition increases the risk for negative health-related events.

**Information sources:** We searched databases including The Cochrane Library, PubMed, Web of Science, Embase, CNKI, Wanfang Data, VIP and CBM from inception to November 2020, to collect studies on risk factors for cognitive frailty in older adults.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 25 August 2021 and was last updated on 25 August 2021 (registration number INPLASY202180097).

## INTRODUCTION

**Review question / Objective:** To identify the risk factors for cognitive frailty in older adults by systematic literature review and meta-analysis, providing warning for

prevention of cognitive frailty in older adults.

**Condition being studied:** Cognitive frailty is a condition recently defined by operationalized criteria describing coexisting physical frailty and cognitive

impairment and this condition increases the risk for negative health-related events.

## METHODS

**Search strategy:** (“cognition” OR “Cognitions ”OR “Cognitive Function” OR “Cognitive Functions” OR “Function, Cognitive” OR “Functions, Cognitive”) AND (“Asthenia” OR “frailty” OR “Frailties” OR “Frailness” OR “Frailty Syndrome” OR “Debility” OR “Debilities” OR “Fatigue”) AND (“aged ”OR “elderly” OR “the aged” OR “seniors” OR “old people” OR “older people” OR “old patients” OR “older adults”.

**Participant or population:** Elderly.

**Intervention:** Risk factors associated with cognitive frailty in the elderly.

**Comparator:** Non-cognitive frailty old people.

**Study designs to be included:** Cohort study; cross-section study; Case-control study.

**Eligibility criteria:** Diagnostic criteria revised by International Institute of Nutrition and Aging (I.A.N.A) and International Association of Geriatrics and Geriatrics (I.A.G.G) [3], age  $\geq 60$  years old; ② The research content is the risk factors or influencing factors of cognitive decline in the elderly; ③ The research type is cohort study or case-control study (why there is no current study), and the publication time is from the establishment of the database to November 2020.

**Information sources:** We searched databases including The Cochrane Library, PubMed, Web of Science, Embase, CNKI, Wanfang Data, VIP and CBM from inception to November 2020, to collect studies on risk factors for cognitive frailty in older adults.

**Main outcome(s):** Risk factors of cognitive frailty of investigated studies.

**Additional outcome(s):** None.

**Quality assessment / Risk of bias analysis:** Two researchers independently evaluated the quality of the literature. The cohort study and case-control study used NOS (Newcastle Ottawa Scale) scale to evaluate the quality of the literature. The NOS scale specifically included: the choice of research population, including 4 items, comparability, including 1 item, and outcome evaluation, including 3 items. The total score of the scale was 9 points, 0 ~ 3 points were low-quality research, 4 ~ 6 points were medium-quality research, 7 In case of disagreement, solve it through discussion or seeking assistance from a third party.

**Strategy of data synthesis:** Data relating to characteristics and main findings of the studies will be extracted. Text and tables will be used to provide a descriptive summary and explanation of study characteristics and findings.

**Subgroup analysis:** If necessary, perform subgroup analysis, or only descriptive analysis.

**Sensitivity analysis:** If necessary, perform sensitivity analysis, or only descriptive analysis.

**Country(ies) involved:** China.

**Keywords:** cognitive frailty; elderly; risk factors; systematic review; Meta-analysis.

**Contributions of each author:**

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