Major depressive disorder with suicidal ideation or behaviour in Chinese population: protocol for a scoping review

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Review question / Objective: In the planned scoping review, the study objective will be to answer, “what are the research status, the epidemiology, disease burden, patient characteristics, evaluation, diagnosis, management, and prognosis of major depressive disorder (MDD) with suicidal ideation or behaviour in Chinese patients”. And to identify research gaps to aid planning and commissioning of future research.

Condition being studied: The scoping review will focus on all outcomes related suicidal ideation or behaviour in patients diagnosed with major depressive disorder.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 30 March 2022 and was last updated on 30 March 2022 (registration number INPLASY202230172).

INTRODUCTION

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METHODS

Participant or population: Chinese patients diagnosed with MDD according to any of
the standardized diagnostic criteria, no restrictions will be placed on the sex, age, or comorbidities of study population. Review authors will exclude studies which involve mixed population and cannot extract results for Chinese population or MDD patients separately.

**Intervention:** Not applicable.

**Comparator:** Not applicable.

**Study designs to be included:** This scoping review will consider all evidence-based published studies except relevant secondary sources (i.e., reviews, editorials, commentaries, news report, reply and letter) and case-report. Master/doctoral theses, and non-journal articles will be excluded. For studies identified from Chinese databases, only those published in journals from the list of Peking University Core Journals of China will be included.

**Eligibility criteria:** The eligibility criteria for identified studies will be based on the Population, Concept, Context (PCC) strategy. Population: Patients diagnosed with MDD according to any of the standardized diagnostic criteria, no restrictions will be placed on the sex, age, or comorbidities of study population.

**Concept:** Suicide was defined and evaluated with different tools for patients with MDD in previous studies. In this scoping review, suicidal ideation or behaviour was used to describe suicidal risk. The study will consider a broad search to include studies measuring outcomes related to suicidal ideation or behaviour in Chinese patients with MDD.

**Context:** This scoping review will consider studies conducted in mainland China, Hong Kong, Macao, Taiwan, or the Chinese population in foreign countries. The time frame for inclusion will be set from Jan 1st, 2011, to Feb 28th, 2022.

**Information sources:** Electronic databases include PubMed, Embase, Medline, CNKI, WANFANG, VIP.

**Main outcome(s):** The main outcomes will include but not limited to the following:

- Study characteristics (e.g., author, year, region, study design, study duration, study population, sample size, study site including hospital grade, department, inpatient/outpatient).
- Patient characteristics, include demographic characteristics (e.g., age, gender, education, employment status, marital status), clinical characteristics (e.g., Personal history, family history, age of onset, disease course, symptoms, severity of symptoms, comorbidity, treatment history).
- Epidemiological measures including prevalence, incidence, mortality, years of life lost, years of life lost due to disability, disability-adjusted life years.
- Disease burden, including patient's quality of life, social function impairment, economic burden, healthcare resource utilization.
- Risk factors associated with suicidal ideation or behaviour identified in studies.
- Clinical evaluation and diagnosis, including methods (e.g., rating scales, questionnaires, interview), criteria.
- Disease treatment/management including, pharmacological treatment, neuro-stimulation treatments, psychological treatment, Complementary treatments (e.g., exercise, light therapy); treatment outcome (definition, results).

**Quality assessment / Risk of bias analysis:** For evidence selection, study screening will be conducted by two independent reviewers through two phases: title and abstract screening and full-text review. Any disagreement will be resolved by discussion between reviewers. If consensus cannot be reached, a third reviewer will be involved in the final decision. Titles and abstracts will be screened before full-text review by two independent reviewers. Each study will be classified as: ‘included’ or ‘excluded’. All studies marked as ‘included’ will be passed to full-text review. For excluded studies, the reason of exclusion will be documented. All available full text will be screened for final inclusion by two independent reviewers. Reasons for excluding studies that do not meet the inclusion criteria will be recorded. For data extraction, double entry will be conducted.
by two reviewers during data extraction to ensure the accuracy. Any disagreements will be resolved through discussion or adjudication by a third reviewer if required. The scoping review aiming to identify and describe the currently existing evidence, the quality of individual study will not be assessed specifically.

**Strategy of data synthesis:** A PRISMA flow diagram will be created to illustrate the progress of studies through the selection process and screening (indicating the results from the search, removal of duplicate citations, and so on). An overall description of the included studies will be conducted. Charting results will be summarized and/or presented in detail. The facts and gaps in knowledge identified from the results of the review will be identified to provide clear and specific suggestions for future research. Descriptive statistics will be used to summarize data extracted from included studies as following: Study characteristics including year of publication, published journal, region, study sites, study design, study population will be described, charted and summarized by counts and proportion. The mean (SD) and median (IQR) of sample size data extracted from included studies will be presented. Patient characteristics including but not limited to age, gender, treatment history and comorbidities will be described and charted. The range of mean (SD) / median (IQR) of age reported by included studies, the range and median of frequency/proportion of gender, treatment history and comorbidities will be calculated. The measurements of epidemiology and disease burden such as prevalence, incidence, patient's quality of life, social function impairment, economic burden, healthcare resource utilization will be charted and calculated by range, and subgroups analysis stratified by gender, age group, education, region or employment status or other factors will be conducted if available. Risk factors associated with suicide ideation or behaviours and the corresponding measurement of association magnitude among patients with MDD will be charted and narratively reported. The frequency/proportion of risk factors being studied will be calculated. For proportion calculation, the numerator will be the frequency of studies reporting specific risk factor and the denominator will be the total number of included studies relevant to risk factors associated with suicide ideation or behaviour. The frequency and proportion of different rating scales/questionnaires utilized in the studies reporting clinical evaluation and diagnosis on MDD patients with suicide ideation or behaviours will be calculated. Details regarding the results from those scales/questionnaires will be charted. The frequency and proportion of treatment/management, and the scale, questionnaire, instrument or device used for efficacy/safety assessment reported in the studies will be calculated. Results regarding the corresponding short-term and long-term efficacy/safety for those treatment/management will be charted and narratively reported if available.

**Subgroup analysis:** Not applicable.

**Sensitivity analysis:** Not applicable.

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

**Keywords:** Scoping review, Major depressive disorder, Suicidal ideation, Suicide behaviour, Chinese.

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