Review question / Objective: The current systematic review aims to summarize the progress of the application of micro-expression in psychiatry research and raise corresponding suggestions for future research in this field.

Eligibility criteria: Study criteria was made based on the PICOS acronym. Participants: patients diagnosed with any types of psychiatric disorders according to any standardized diagnostic tools; Intervention: not applicable; Control: not applicable; Outcomes: using micro-expression recognition approach to study any types of psychiatric problems; Study: observational and interventional studies published on Chinese- or English-language journals.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 27 December 2021 and was last updated on 27 December 2021 (registration number INPLASY2021120122).

INPLASY PROTOCOL

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Conflicts of interest: None declared.

INTRODUCTION

Review question / Objective: The current systematic review aims to summarize the progress of the application of micro-expression in psychiatry research and raise corresponding suggestions for future research in this field.

Condition being studied: The micro-expression recognition technique has been widely used in the field of forensic sciences and pedagogy. Some psychiatric research has tried to apply this technique the diagnosis assessment and illness monitoring. However, the applicability and
feasibility of this kind of application remain under discussion.

**METHODS**

**Search strategy:** Search terms included: microexpression, micro expression. Searched databases included: CNKI, Wanfang, PubMed, EMBASE, PsycINFO, and Web of Science.

**Participant or population:** Patients diagnosed with any types of psychiatric disorders according to standardized diagnostic tools.

**Intervention:** Not applicable.

**Comparator:** Not applicable.

**Study designs to be included:** Both observational and interventional research.

**Eligibility criteria:** Study criteria was made based on the PICOS acronym. Participants: patients diagnosed with any types of psychiatric disorders according to any standardized diagnostic tools; Intervention: not applicable; Control: not applicable; Outcomes: using micro-expression recognition approach to study any types of psychiatric problems; Study: observational and interventional studies published on Chinese- or English-language journals.

**Information sources:** Only peer-reviewed published papers will be included. Searched databases included: CNKI, Wanfang, PubMed, EMBASE, PsycINFO, and Web of Science.

**Main outcome(s):** Using micro-expression recognition approach to study any types of psychiatric problems.

**Quality assessment / Risk of bias analysis:** Appropriate Newcastle-Ottawa Scale (NOS) will be used for study quality assessment.

**Strategy of data synthesis:** Due to the limited numbers of publications assumed to be included and large heterogeneous research types and outcomes, the quantitative research would be unable to conduct. Therefore, this review will qualitatively summarize the included studies.

**Subgroup analysis:** Due to the limited numbers of publications assumed to be included and large heterogeneous research types and outcomes, the quantitative research would be unable to conduct. Therefore, this review will qualitatively summarize the included studies.

**Sensitivity analysis:** Due to the limited numbers of publications assumed to be included and large heterogeneous research types and outcomes, the quantitative research would be unable to conduct. Therefore, this review will qualitatively summarize the included studies.

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

**Keywords:** Micro-expression; psychiatry; systematic review.

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