Inclusion of Chinese databases in meta-analyses on herbal medicine for rhinosinusitis*

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We read with great interest the systematic review by Choulakis et al. titled "Traditional herbal medicine in the treatment of acute and chronic rhinosinusitis" [(1)]. This comprehensive analysis provides valuable insights into evidence-supported herbal interventions for rhinosinusitis, particularly highlighting preparations like BNO-1016 for acute rhinosinusitis (ARS) and Xiangju for chronic rhinosinusitis (CRS). The rigorous methodology, including risk-of-bias assessments, strengthens the review's credibility.

However, we wish to raise a critical methodological concern: the exclusion of Chinese-language databases (notably China National Knowledge Infrastructure [CNKI] and SinoMed) likely omitted substantial evidence on Traditional Chinese Medicine (TCM) and herbal formulations. This oversight may significantly impact the robustness of the conclusions for three reasons:

1. TCM constitutes a major evidence source for herbal interventions

   Most of the world's clinical trials of herbal medicine come from China. China National Knowledge Infrastructure (CNKI) has included over 163 traditional Chinese medicine journals. Using "herbal medicine" and "traditional Chinese medicine" as keywords, more than 100,000 biomedical records have been retrieved from the China Biomedical Information Network. Many high-quality randomized controlled studies and meta-analyses of Chinese herbal medicines have not been included in European and American databases [(2)].

   The review identifies Xiangju—a TCM formulation—as potentially effective for CRS yet fails to capture relevant studies indexed exclusively in Chinese databases (e.g., larger-sample trials on Xiangju synergy with conventional therapies).

2. Database exclusion risks sampling bias and incomplete evidence synthesis

   PRISMA guidelines emphasize exhaustive database searches to minimize selection bias [(3)]. Limiting searches to PubMed, EMBASE, and Cochrane excludes region-specific evidence, particularly for interventions like TCM that are researched predominantly in East Asia.

   For example, Xi et al. [(4)] CNKI-inclusive meta-analysis identified 29 additional RCTs for Xiangju, revealing significantly enhanced efficacy when combined with conventional care - a nuance absent from the current review.

3. Impact on clinical applicability and generalizability

   Meta-analyses that exclude non-English/non-Western databases may overrepresent homogenized populations, compromising external validity. CNKI/SinoMed inclusion would incorporate ethnogeographic diversity, especially relevant given genetic and phenotypic variations in CRS [(5)]. Safety profiles of herbal formulations (e.g., herb-drug interactions) also exhibit population-specific patterns, warranting broader data inclusion [(6)].

Choulakis et al. provide a timely evaluation of herbal interventions for rhinosinusitis. However, the omission of Chinese databases (CNKI/SinoMed) risks underrepresenting pivotal TCM evidence, particularly for preparations like Xiangju. As TCM constitutes the largest volume of herbal medicine research, excluding these sources may compromise the comprehensiveness and generalizability of meta-analytical conclusions. We urge future reviews to adopt inclusive search strategies encompassing region-specific databases to mitigate selection bias and enhance clinical applicability. Such rigor will strengthen evidence synthesis in global herbal pharmacotherapy.

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L.K. Zhong and Long Chen: conception and design, W.Y. Zhu: Drafting articles and translating references.

Conflict of interest

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