



Dominant diseases of Traditional Chinese Medicine (TCM)

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1. Definitions of dominant diseases of traditional Chinese medicine

Traditional Chinese medicine (TCM) has a long history of preventing and treating diseases and it has made a great contribution to the life and health of the people, both in China and elsewhere. In 2001, a new concept – *dominant disease of TCM* was proposed to identify the diseases that can be effectively treated using TCM.¹ There are mainly two proposed definitions for *dominant diseases of TCM*. One is represented by the diseases with the largest number of inpatients in hospitals specializing in TCM.² The other refers to diseases that are better treatable by TCM than Western medicine.^{3,4} In recent years, screening and identification of *dominant diseases of TCM* has become highly valued by the State Administration of TCM.⁵ However, the identification methods for dominant diseases are heterogeneous.

2. Methods used for dominant diseases of TCM

2.1. Bibliometric analysis

Bibliometrics has been actively applied in the screening of *dominant diseases of TCM*, especially related to acupuncture and moxibustion. Diseases identified through bibliometric method reflect

the popularity and recognition of effectiveness of TCM in different fields of medicine, and this method can thus provide a good basis for the definition and research of dominant diseases.^{6,7} The dominant diseases identified by this method are usually from the fields of gastroenterology, gynecology, neurology, orthopedics, and respiratory medicine. However, the current clinical literature on TCM has some limitations, such as the lack of scientific methodology and research design, and small sample size, which greatly reduce the credibility of the literature. These limitations will inevitably affect the accuracy and unambiguousness of the identification of dominant diseases.

2.2. Clinical cases analysis

The studies using clinical cases analysis on different indicators include prescription frequency of TCM therapies, numbers of cases, and number of discharges from hospital. Respiratory diseases are the most common type of diseases investigated in the studies using this method. The identification of dominant diseases defined by clinical case analysis is based on a retrospective summary of case data from medical institutions, and the dominant diseases can thus be directly identified by ranking the number of cases of inpatient diseases. The data source of this method is reliable and objective, the sample size is large, the screening process is comparatively brief and feasible, and the statistical results can be easily presented visually. However, this approach is also susceptible to a number of practical factors, including hospitals' support policies for the development of novel technologies for TCM, expansion of the hospitals, and construction and development of key disciplines and key specialties with TCM characteristics, etc.

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2.3. Expert investigation

Studies using expert investigation define dominant diseases on the frequency of being mentioned by the respondents. The dominant diseases are diverse across several fields of medicine: internal medicine, surgery, gynecology and pediatrics. Most experts in TCM and integrative medicine determine the *dominant diseases of TCM* through their own clinical experience. Expert investigation method can be seen as a form of peer review or expert consensus. This method, in which competent experts provide their professional experience and judgment, ensures that the findings are widely recognized and have a high reliability.⁸ However, the survey sample size in some expert investigations is relatively small. The number of experts conducting the survey affects the accuracy of the results. Therefore, it is necessary to apply strict criteria for the selection of experts to assure a broad representativeness across geographical regions, professions, level of experience, gender, and other relevant factors.

2.4. Administrative investigation

Few studies use administrative investigation to identify dominant diseases. Administrative investigations conducted in China usually involve national or local healthcare authorities and their TCM departments, and TCM related professional societies, associations and organizations. The inclusion of such authoritative bodies can further ensure the comprehensiveness of the survey. The reliability of the data is higher and the execution of the survey is more efficient than in expert investigations.⁹ However, the administrative investigation method also has certain limitations. Since the survey targets are medical institutions, they often tend to develop some specialties with larger service markets into key specialties and dominant diseases to seek their development. While some of the dominant diseases with smaller service volume are easily marginalized or even ignored by medical institutions.¹⁰

2.5. Other

Other methods include clinical trials and meta-analyses. Conditions covered by these studies include diseases in the fields of dermatology, neurology and otorhinolaryngology.

3. Commentary

There is currently no standardized method for determining the *dominant diseases of TCM*. The amount of literature on dominant disease identification is increasing, with bibliometrics, clinical cases analysis and expert investigation being the most commonly used methods. The characteristics and distribution of dominant diseases largely reflect the distribution of the medical service resources.¹⁰ Although the number of identified dominant diseases is high, they are focused on a few specific fields, such as digestive, neurological and respiratory diseases. This reflects well the profile of diseases most commonly treated with TCM and integrative medicine. The reasons may be due to the dominant disciplines of TCM, the construction of the medicine disciplines and specialties of medicine, and the role of the authorities and supporting policies for TCM by the hospitals.^{11,12} In the future, the research on the *dominant diseases of TCM* needs to be expanded. The research should particularly focus on the advantages of TCM, with the aim to (1) encourage the diversified collaboration between the researchers and clinicians focusing on different dominant diseases,

(2) further optimize the diagnosis and treatment of these diseases, (3) refine the treatment plans, and (4) constantly improve the level of service of TCM and integrative medicine.

Author contributions

Conceptualization: JJW, MFZ, YTY, YLC. Methodology: JJW, MFZ, YTY, YLC. Validation: JJW, QQG, SYW, HL, JJZ. Formal analysis: JJW. Investigation: JJW, QQG, SYW, HL, JJZ. Writing – Original Draft: JJW. Writing – Review & Editing: JJW, MFZ, YLC. Supervision: YLC. Project administration: YTY, YLC. Funding acquisition: YTY.

Conflict of interest

The authors declare that they have no conflicts of interest.

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Ethical statement

No ethical approval was required as this study did not involve human participants or laboratory animals.

Data availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:[10.1016/j.imr.2022.100872](https://doi.org/10.1016/j.imr.2022.100872).

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