Integrative Medicine Research 10 (2021) 100745

Contents lists available at ScienceDirect

Integrative Medicine Research

journal homepage: www.elsevier.com/locate/imr

Commentary

Thinking about traditional medicine diagnostic patterns and instruments

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ARTICLE INFO

Article history:
Received 28 February 2021
Accepted 4 May 2021
Available online 25 May 2021

Ho and colleagues[1] have conducted an analysis of instruments that assess traditional Chinese medicine (TCM) diagnoses for functional dyspepsia (FD). Their quality assessment and use of the COSMIN approach helps set the standard for future work in the area. However, their results were disappointing, concluding: "*This systematic review revealed that the quality of existing TCM diagnostic instruments for FD is unsatisfactory. We were not able to identify any reliable and valid instruments for TCM pattern diagnosis of FD. Future researchers are recommended to develop and evaluate TCM diagnostic instruments following the guidance of the COSMIN Initiative, with relevant amendments to accommodate the features and uniqueness of TCM diagnostic process. Such research initiative will establish the evidence base of TCM pattern diagnosis, supporting further standardisation of diagnostic practice under the auspice of ICD-11*."

Their paper brings to mind a series of difficult questions that need to be raised and addressed about TCM and the broader field of traditional East Asian medicine (TEAM) of which it is a part. TEAM includes medical systems derived from Chinese Han dynasty origin ideas found in the Inner classic, the Neijing, such as TCM from China in the mid-1950s, Meridian Therapy from Japan in the early 1940s, Sa'Am from Korea in the 1570s and Five Element acupuncture from the UK in the 1970s.[2,3] The field of TEAM spread significantly outside of Asia after the early 1970s and is now quite diverse with many variants in other countries.[2,4] In general TEAM has not been sufficiently researched.[3–5]

A common form of TEAM practice is to assess the patient by collecting observational data via the 'four diagnoses.' These data are then analysed according to the theory of each system of TEAM practice to arrive at a diagnosis often described in terms of 'patterns.' A commonly used term for this process is 'pattern identification' (PI).[3] Treatment using herbal medicine formulations or acupuncture techniques and point selection is then based on the pattern(s) that have been identified.[3] Treatment is often administered in two parts, the zhibenfa (root treatment) and the zhibiaofa (branch treatment), the first according to the pattern, the second more based on the symptoms themselves. Within this, the practitioner can choose the PI based root treatment by focusing on patterns thought to be 'causally' associated with the main symptom of the patient or the practitioner can choose to use a PI based root treatment that focuses on the overall patterning of all signs and symptoms independent of dominant symptoms.[3] TEAM medical systems can also be administered without use of PI, adopting a 'branch' treatment approach only that targets the symptom(s).[2] It seems to be up to individual practitioners which approach they use.

Research in TEAM medical systems has increased in recent years with research using PI in clinical trials [6] and research around PI in TCM in terms of its' diagnostic observations and conclusions, development of various PI instruments for specific patterns and development of instruments for PI focused on specific symptoms.[3] However, we wonder, before we develop such PI instruments do we not need to be more certain about how practitioners use the TCM system? What diagnostic approaches are used by different practitioners in different countries? We have clear evidence of practice differences related to choice of treatment modalities.[4] To what extent do TCM practitioners focus their diagnostic assessments around the primary symptom of the patient by choosing from among pre-identified patterns of diagnosis described as be-

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https://doi.org/10.1016/j.imr.2021.100745

ing potential reasons for why the symptom has occurred? To what extent do practitioners use the theories and diagnostic assessments of TCM to select pattern(s) of diagnosis regardless of the primary symptom of the patient, but rather as a more complex and whole assessment of the patient? At present we do not have enough information about how practitioners of TCM use what they have studied to answer these questions. Insufficient surveys have been conducted about how TCM is practiced[4] so we have only partial understanding of this important issue. For practitioners that follow the first track a functional dyspepsia TCM diagnostic instrument would be helpful for their clinical performance. However, for TCM practitioners that follow the second track, such instruments would be of less or very limited value for them. We also wonder what happens to the results if practitioners using the latter approach are included as part of the development team for a disease specific PI instrument? Might this skew the results? Should initial screening be done to determine the preferential approach to use of PI by recruited practitioners? The lack of clear answers to these questions raises the possibility that these issues may have contributed to the poor results identified by Ho and colleagues.

For practitioners that choose not to use a symptom focussed approach that limits their PI selection, a broader diagnostic instrument is needed. Here a tool like that of Popplewell and colleagues may be helpful.[7] Hence, further work is needed to test and validate this instrument before wide spread adoption can be recommended to help make sure it is suitable for clinical practice. Then a dual instrument based approach can be developed to support the two types of PI use based practice.

In general, TEAM diagnostic approaches remain vulnerable to additional limitations. There is not sufficient knowledge of international practice and use of PI based diagnostic systems to establish similarities and differences across countries and practice populations with regards use of disease or non-disease based approaches. Further, do standard descriptions of patterns exist? Has work been done to examine and establish standard definitions of each pattern? If we take the example of blood stasis, within China that standard is still a work in progress.[8] But, as importantly, how are patterns described in different countries based on various bio-psycho-social regional factors? Are they uniform across countries or are different descriptions needed? There is little evidence around this issue to date, with suggestions that such differences will be needed.[9] Efforts at describing standards such as those published by the World Health Organization in its inclusion of TCM diagnoses in the ICD-11[10] lack the types of scientific corroboration studies that address some of these questions, leaving open questions of accuracy and generalisability of these descriptions.[9] We feel that more fundamental studies are needed to permit clear definitions of the patterns of diagnosis in TEAM systems and any regional variations in those patterns of diagnosis to support use of PI-based instruments relative to specific diseases or for non-disease specific PI based approaches.

Author contributions

Writing – Original Draft: SB. Writing – Review & Editing: TA, MSL, THK.

Conflict of interest

The authors are the editor or the editorial board members of this journal. The authors have no other conflict of interests to declare.

Funding

None.

Ethical statement

Not applicable.

Data availability

Not applicable.

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