Best health care provision is now regarded as the identification and implementation of the best research evidence whilst taking into consideration patients’ needs, preferences, and values. Although research is intrinsic and critical to clinical decision-making, individual clinical expertise can never be replaced. It is the clinician who decides whether the external evidence applies to their patient and should be integrated into their clinical decision making [1]. However, in traditional systems of medicine clinical care was based on previously successful patient outcomes from individual cases and not randomized controlled trials which, by definition, are unlikely to be pragmatic. Evidence-based guidance to improve the outcomes of clinical practice is more likely to occur when there is the environment for change but conventional medicine practitioners typically believe there is insufficient evidence to recommend traditional, complementary, and integrative medicine (TCI). To stimulate clinicians to change their practice, trusted, up-to-date clinical guidelines are needed to provide patients with the best care. Such guidelines must be independent, based on reliable information, and in line with the latest research. A positive environment for change will facilitate the delivery of high-quality care and patient-focused services. However, the pragmatic nature of TCI does not reconcile with evidence-based medicine.

From the patient’s perspective what matters is that they receive the best care and treatment from clinicians who have the appropriate expertise. What evidence do patients want, and how do they interpret it? Helping the public to find, understand, and use the best evidence is a challenge and has been poorly researched. Fostering public understanding can be only facilitated if healthcare professionals recognize the available evidence is useful, can be put into practice, and can demonstrate a positive impact on patient health [2].

Implementation of evidence is complex, and its successful adoption is only achievable if put into practice, and embedded in education [3]. Organizational culture and leadership are key if evidence-based practice is to be facilitated [4]. However, it relies on the healthcare professional and their ability to communicate reliable, unbiased information effectively, and transparently to the patient. This has been substantiated in a recent study which looked at evidence-based policies on COVID-19 vaccine hesitancy [5]. It was reported that misinformation, and trust in the government, scientists and healthcare professionals were the leading causes of COVID-19 vaccine hesitancy. To build public trust, effective strategies based on evidence are needed [6]. Mistrust can be minimized if the benefit-to-risk ratio can be effectively messaged and presented. The issue with COVID-19 was that evidence was initially unavailable because it was a novel disease. The pandemic demonstrated that “living systematic reviews” are needed if knowledge is to actively update health policy and public education resulting in its translation into clinical practice. This has also demonstrated the need for open data sources to enable clarity to the public.

A global approach is required for evidence use and decision making to be effective, and this requires co-ordination to significantly reduce research waste and improve public trust. This was the focus of the Global Commission on Evidence to address Societal Challenges report published in January 2022 [7]. It highlighted how the use of evidence must improve especially when there is a global crisis. The Cochrane collaboration’s new model for evidence synthesis, approved in March 2022, was developed with a more streamlined structure for delivering global evidence [8].

Holistic care should be the aim of all healthcare provision, considering both mental and physical health. This is particularly true for those with long-term conditions which are usually multifactorial and often involve comorbidities which increase with age. Patients need a range of approaches for their health care, a “tool box” of potential
treatments to choose from following active engagement and debate over their health care needs [9].

The contribution of TCI should be recognized and integrated into healthcare provision if the evidence demonstrates clinical efficacy, cost effectiveness, and safety. This should in turn facilitate its integration into clinical guidelines [10]. So, what evidence should be used as even incorporating published evidence may not necessarily happen in practice. For example, it would be expected that in the Chinese healthcare system, which includes both traditional Chinese medicine and Western medicine, both would be equally reflected in Chinese clinical practice guidelines. A study of 604 Chinese Western medicine clinical practice guidelines showed that only 12% recommended traditional Chinese medicine (TCM), failed to use appropriate quality assessment, and ignored appropriate evidence from non-Chinese studies [11].

The use of and evidence for the diverse therapeutic practices associated with TCI has been steadily increasing, particularly for long-term conditions. A recent study of acupuncture therapies identified 2,471 systematic reviews in the Web of Science between 2000 and 2020, and highlighted that the number of systematic reviews had increased annually [12]. Published systematic reviews of randomized trials (1,578) and observational studies (893) were identified. These mainly focused on the following therapeutic areas: musculoskeletal and connective tissue diseases (35.0%), neurological conditions (12.3%), cancer (11.6%), and cardiovascular diseases (9.5%). Chinese researchers (996, 40.3%) conducted the greatest number of systematic reviews followed by the US (14.5%), the UK (12.8%), and South Korea (10.5%). However, the article highlighted that this evidence was underused in clinical practice and health policy.

Information overload has demonstrated the importance of summarizing large bodies of evidence and has led to the development of comparatively new methods of synthesis such as overviews of systematic reviews, umbrella reviews, meta epidemiological reviews, and bibliometric studies [13,14]. The critical steps required for conducting an overview of systematic reviews in TCI was proposed in a recent article [13]. Published systematic reviews of randomized trials (1,578) and observational studies (893) were identified. These mainly focused on the following therapeutic areas: musculoskeletal and connective tissue diseases (35.0%), neurological conditions (12.3%), cancer (11.6%), and cardiovascular diseases (9.5%). Chinese researchers (996, 40.3%) conducted the greatest number of systematic reviews followed by the US (14.5%), the UK (12.8%), and South Korea (10.5%). However, the article highlighted that this evidence was underused in clinical practice and health policy.

Judgment will also affect the interpretation of evidence for clinical guidelines and is also a huge barrier to integration into clinical guidelines. This includes issues such as the lack of agreement between various medical professionals, the need for a strong but neutral chairperson, and a balanced group of guidelines developers to prevent bias from one professional group [15].

The degree to which evidence is considered and implemented into mainstream clinical practice is problematic particularly regarding which information is used to inform practice. This has been highlighted in articles which have investigated in detail the omission of acupuncture in clinical guidelines for osteoarthritis, pain, and stroke [15-19].

The results of a survey of Norwegian acupuncturists suggested that the barriers to implementation of acupuncture did not differ from other medical disciplines, emphasizing that continuing professional development was key in facilitating changes in clinical practice [20].

A recent systematic review exploring the problems of disseminating acupuncture clinical practice guidelines to clinicians identified important issues: lack of guideline standardization, unclear target population, mismatch between guidelines and clinical practice environment, lack of reliable health economics evaluation, poor quality content, lack of linkage between recommendations and evidence [21]. They concluded that evidence evaluation should be standardized and relevant to clinical practice [21].

In the UK, clinical guidelines do not necessarily reflect complementary medicine or acupuncture provision, and knowledge of evidence is scarce amongst Western medicine clinicians [22,23]. A systematic review of the Cochrane database of systematic reviews concluded that although TCM was commonly used, evidence of its effectiveness remained largely inconclusive [24]. Further rigorous high-quality trials are recommended to increase the evidence base and facilitate high-quality reviews.

There are many other reasons why TCI is not integrated into main stream Western medicine such as cultural differences, history/policy, education, regulation/licensing, and perceptions of what conditions can be treated by TCI. However, the most common reason provided is, there is not enough evidence [24]. It is also worth highlighting that the conclusions made in systematic reviews of interventions can rapidly become obsolete if not updated [25-27].

Grading of Recommendation, Assessment, Development and Evaluation is the internationally recognized appraisal tool used to assess the strength of evidence and is critical when developing clinical practice guidelines. This validated instrument can evaluate the evidence, and permit grading according to the strength and weakness of evidence, and identify which is the most reliable evidence. When adapting this tool for the guidelines of TCI, five domains for the downgrading of evidence should be considered: (1) study design and execution; (2) inconsistency; (3) indirectness; (4) imprecision; and (5) publication bias [28]. Three domains for the upgrading of evidence were identified in this article: (1) large effect size; (2) dose-response; and (3) control of confounding factors. In addition, stakeholder involvement and the context being considered, together with expert consensus, should be incorporated with diversity of evidence for traditional medicine guidelines.

A recent systematic review demonstrated that the adequacy of designing and reporting acupuncture randomized clinical trials remains problematic and this has a direct effect on data quality [29]. This is also the case for other traditional medicine practices [30], and even if
randomized clinical trials conform and can be pooled, there are methodological features of these approaches which may lead to statistical heterogeneity, and do not reflect real world clinical practice [31]. Pragmatic studies are increasing in every field of medicine [32]. It is now recognized that the complexity of care must be addressed in order for an intervention to be applicable to the real world, and studies and consequent data synthesis requires a different methodology that resembles routine practice. So, what is the best evidence to provide the best care? A balance between evidence and clinical expertise?

Conflicts of Interest

Emeritus Professor Nicola Robinson is an editor on the board of Perspectives on Integrative Medicine but this had no influence in the decision to publish this article.

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Ethical Statement

This research did not involve human or animal experiments.

References