Commentary

Integrating Traditional and Complementary Medicine with National Healthcare Systems for Universal Health Coverage in Asia and the Western Pacific

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Abstract—In the WHO Western Pacific Region, traditional medicine has extensively been used by communities as part of primary health care which is critical foundation for achieving universal health coverage (UHC).

This paper conceptualizes integration of traditional and complementary medicine (T&CM) into national health systems and explores how such integration can contribute to pathways toward UHC. Integration has been variously conceptualized at health system, service delivery, and consumer levels. Integration can be conceptualized based on the level of institutionalization of T&CM in national health systems (i.e. regulation of T&CM, education system, monitoring and health financial scheme). According to it, countries and areas of the Region can be categorized: countries with: ‘well-established integration strategies’; ‘in-process of developing and implementing integration policies’; ‘mixed-level of integration’; or ‘indigenous traditional medicine practiced outside the national healthcare system’.

Integration of T&CM may offer pathways to advance five health system attributes essential to achieve UHC, namely: quality; efficiency; equity; accountability; and sustainability and resilience. It can contribute to improving quality of healthcare services through regulation of T&CM products, practitioners and services used by communities; meeting population needs in ageing population and managing non-communicable diseases; improving equitable access to care through health insurance coverage of T&CM; improving accountability by monitoring and use of data for informed-policy decisions on T&CM; and strengthening sustainability and resilience through maximizing potentials of T&CM in managing outbreaks of infectious diseases and disasters. Depending on the level of integration, actions to move forward integration of T&CM as a pathway toward UHC will be various.
Primary health care is foundational to attaining universal health coverage (UHC), that is, ensuring that all people and communities have access to the healthcare services that they want and need without suffering financial hardship. Traditional medicine is a form of primary health care used in many parts of the world, particularly African, Asian and Pacific nations. For many people, traditional medicine is culturally embedded in daily health-seeking behaviors and is an important component of health care; sometimes it is the only available or affordable health care option, especially in remote areas.

The 1978 Declaration of Alma Ata advocated strengthening primary health care, including the role of traditional medicine practitioners, to attain acceptable levels of health for all. Since then there have been many pledges, resolutions and strategies urging for integration, where appropriate, of traditional medicine with national healthcare systems, partly as a means to achieve UHC. Many governments have recognized the role of traditional medicine and developed national policies and strategies to protect public health and maximize the potential contribution of traditional and complementary medicine (T&CM) products, practices and providers to primary health care. Hence, traditional medicine can be harnessed to advance UHC.

This commentary explores how integration of T&CM may offer ways to contribute to improving health system attributes considered essential to achieving UHC in the WHO Western Pacific Region. These attributes are quality, efficiency, equity, accountability, and sustainability and resilience. Strengthening one attribute can contribute to strengthening others, and ultimately to the advancement of UHC. Below we conceptualize integration of T&CM with national healthcare systems and explain how such integration can contribute to moving towards UHC.

CATEGORIZING AND CONCEPTUALIZING INTEGRATION

Levels of T&CM integration with national healthcare systems vary widely across and between countries. Integration of T&CM has been variably conceptualized, defined and categorized at health system, service delivery, and consumer levels. Figure 1 provides a conceptual map that relates different levels of T&CM integration alongside country-specific contextual factors of setting and healthcare system architecture. The figure reflects that local contextual factors influence integration at the health systems level, that is, the level of official government recognition: intolerant, tolerant, inclusive, or integrative healthcare systems. In turn, health systems-level integration affects integration at service delivery level. A range of models suggest how healthcare providers integrate T&CM into their practice, from ‘parallel’ to ‘integrative practice’. Service delivery-level integration can see a number of providers of different modalities working together or a single ‘integrative’ clinician providing conventional and T&CM therapies. Consumers experience various levels of integration of T&CM and biomedicine regardless of the system-level model of integration because they seek healthcare services based on their needs, access and ideologies. ‘Consumer-led’ integration sees no integration at the provider level so the consumer integrates treatment by independently consulting with a mix of providers. ‘Full integration’ experienced by the consumer places them in partnership with a multidisciplinary team of T&CM and biomedical providers to experience cohesive continuity of care.

Individual settings have unique sociocultural, economic and political environments that enable or impede integration of T&CM within their healthcare systems. In this context, each country has to find its own way to achieve integration of T&CM, with various levels of acknowledgment of the role T&CM can play in achieving UHC. Thus, there is no one-size-fits-all model for T&CM integration with national healthcare systems.

INTEGRATION IN WHO WESTERN PACIFIC REGION

An alternative conceptualization of integration is based on the level of institutionalization of T&CM in national healthcare systems; this separates countries into those with: well-established integration strategies; in-process of developing and implementing integration policies; mixed-level of integration; or indigenous traditional medicine practiced outside the national healthcare system. Amongst the 37 countries and areas in the WHO Western Pacific Region, countries such as China, Japan, and Republic of Korea have well-established integration policies, stringent and well implemented regulatory systems for many T&CM products, practices and practitioners and education systems for T&CM practitioners. These countries recognize and institutionalize T&CM at the state level through strong political will, leading to supportive legislation.

Countries in-process of developing integration within their national healthcare systems tend to have long histories of traditional medicine use, but are yet to attain the level of support and institutionalization seen in the well-established countries. For example, Malaysia is in the process of establishing and implementing a T&CM regulatory system that reflects the diverse forms of T&CM practiced, and in
Cambodia reform to strengthen regulatory systems for the health workforce has led to work underway for a legal framework for traditional medicine practitioners.\textsuperscript{32,33}

Australia and New Zealand have mixed-level recognition of T\&CM.\textsuperscript{19,29} In New Zealand, attempts are being made to integrate Māori traditional medicine (as culturally appropriate).\textsuperscript{34} Use of various complementary medicine modalities in these countries is extensive, but consumer-led, with little government support at service-delivery level.\textsuperscript{35,36} Australia has government-led regulation of T\&CM products and some practitioners (chiropractors, osteopaths and Chinese medicine practitioners) driven by concern over potential quality and safety issues and some government support in the education of T\&CM practitioners.\textsuperscript{35,37}

Most Pacific Island Countries have indigenous traditional medicine practiced outside the national healthcare system. The traditional systems are transmitted orally from generation to generation and institutionalization of traditional medicine within the national healthcare system is very limited.\textsuperscript{5,5,19,29} Nonetheless, integration at service delivery level, specifically primary health care and consumer level, is active. Political will to preserve traditional culture, including traditional medicine, and government initiatives to identify ways to strengthen sustainable and resilient primary health care, have driven actions to bring indigenous traditional medicine into national healthcare systems.\textsuperscript{15,16,38-40}

However, lack of documentation about traditional medicine in the Pacific is a barrier to government development of integration policies.\textsuperscript{29,41}
INTEGRATION OF T&CM CONTRIBUTING TO UNIVERSAL HEALTH COVERAGE

Integration of T&CM into key infrastructure components of national health systems such as insurance coverage and care packages may contribute to advancing the particular health system attributes considered essential by WHO to achieve UHC: quality; efficiency; equity; accountability; and sustainability and resilience.\(^1\)

**Quality**

Ensuring quality and safety in health services, including for T&CM, is critical to improving population health and attaining UHC; and strengthening regulatory systems is a core action for achieving this goal. Given the extensive use of T&CM, its integration at healthcare system-level should include appropriate development and implementation of regulatory mechanisms for improving or maintaining T&CM quality and safety of practitioners, products and practices. Qualified and competent T&CM practitioners are a basic requirement to support interprofessional collaboration, and to provide integrated, people-centered healthcare services that meet individual and population health needs.\(^42\) Countries such as China, Japan, Mongolia, Republic of Korea, and Vietnam, where regulatory systems for traditional medicine products and practitioners are in place, have improved healthcare services through strengthening regulatory systems for T&CM.

**Efficiency**

Healthcare systems should meet the needs of populations. With aging populations and increased levels of chronic disease, healthcare system effectiveness and efficiency can be improved, in some contexts, through the integration of T&CM practitioners which effectively increase the health workforce. Also, many T&CM services are sought by healthcare consumers who consider them beneficial for disease prevention and chronic illness management.\(^43,44\) The barefoot doctor program in China was an early example,\(^48,49\) and the recent ‘Zhi Wei Bing’ programs in Chinese community health centers are designed to promote health, well-being and disease prevention through traditional medicine practices including patient-tailored diet and exercise. In the Republic of Korea, programs integrating traditional medicine are also used for health promotion and disease prevention.\(^50\)

**Equity**

Healthcare equity includes financial protection, service coverage and access, and non-discrimination. Equity promotes and respects consumers’ choice to access the type of healthcare services they want and need.\(^29\) The very basis of integrating T&CM with national healthcare systems is to draw on existing resources to ensure adequate service coverage and access.\(^10\) By expanding national health insurance to include T&CM products and/or services, China and the Republic of Korea have improved healthcare equity through decreasing out-of-pocket payments.\(^51,52\) In this way people can better afford wanted and needed healthcare services—a fundamental element of UHC. In Mongolia, inpatient traditional medicine services are reimbursed by the national health insurance and the government is looking to expand its coverage to outpatient services to increase equitable access to services.\(^6\)

**Accountability**

Accountable healthcare systems are transparent in their activities, preferably with governments providing leadership and working in partnership with communities.\(^29\) Integration of T&CM with national healthcare systems enables transparent monitoring and evaluation of use and impact of T&CM for evidence-informed policy decision-making. In the WHO Western Pacific Region, countries with well-established models of T&CM integration are working to be accountable through public reporting of health system performance, including T&CM. In China and Republic of Korea, for instance, annual statistics on prevalence of use and health expenditure on traditional medicine, including national health insurance reimbursement data, are available; these provide critical data for policy decisions.\(^51,53\) Furthermore, establishment of regulatory systems to improve quality and safety for T&CM products and services also contributes to improving accountability of healthcare systems.

**Sustainability and Resilience**

Healthcare system sustainability and resilience relate to preparedness and capacity to cope in the face of disease outbreak or disaster.\(^29\) When communicable disease outbreaks occur for which biomedicine cannot provide sufficient treatment (including pharmaceutical or practitioner shortages), countries with well-established integration models tend to explore T&CM options to manage them. For example, in China during the severe acute respiratory syndrome (SARS) outbreak, combined traditional and
biomedical treatments were provided to cohorts of people in some areas resulting in positive (although inconclusive) effects including better control of fever, symptom relief and reduction of steroid consumption.\textsuperscript{54} Throughout Pacific Island Countries, traditional medicines are important resources that could be leveraged to ensure healthcare system sustainability; i.e., filling the access gap to health care and building culturally-sensitive healthcare systems in the face of climate change.\textsuperscript{55,56}

**THE WAY FORWARD**

Ongoing community use of T&CM and the need to expand the health workforce are major driving factors of integration of T&CM with national healthcare systems. Yet, cultural, political, economic and other contextual factors shape the extent to which various T&CM are integrated (or not), not only in the WHO Western Pacific Region, but around the world (Figure 1). The prevalence of community use of T&CM, including when T&CM providers are the only accessible primary healthcare providers (as is the case in some rural/remote locations),\textsuperscript{8,9} puts T&CM in a position to advance UHC in many countries.

Table 1 provides a summary of actions for policy-makers wishing to advance T&CM integration, delineated by the integration models and informed by WHO consultations. The actions enable improvement of the healthcare system attributes desired for moving towards UHC: quality; efficiency; equity; accountability; and sustainability and resilience.\textsuperscript{1}

A challenge of institutionalization of T&CM is the standardization of traditional medicine education and practices so they can fit within institutionalized frameworks. Standardization may divorce the holistic or spiritual aspects of healing which are of known importance for many people in their personal management of and coping with illness.\textsuperscript{57,58} Also, there are examples where T&CM integration has led to decreased access to services through increased costs. For example, when traditional medicine practitioners (who previously accepted low payment) seek greater remuneration after upskilling through government instituted programs.\textsuperscript{28}

Also, even in countries with well-established systems of T&CM integration, including China, Hong Kong SAR(China), Japan, Republic of Korea and Singapore, efforts to improve product and service quality are ongoing.\textsuperscript{18,19} Many Member States of the Western Pacific Region have established regulatory systems for T&CM products and there are networks and initiatives for cooperation between Member States to develop, share and adopt regulatory standards, such as within the Association of Southeast Asian Nations (ASEAN) and the Forum for the Harmonization of Herbal Medicines.\textsuperscript{38,59} However, implementation of standards remains variable, and establishment of regulatory systems for traditional medicine practitioners is challenging.

### Table 1. Actions for Policy-Makers to Integrate T&CM in National Health Systems to Advance Universal Health Coverage

- Include traditional medicine in national health planning
- Include T&CM products and practices into national adverse event reporting systems to improve safety and quality of T&CM (and encourage reporting by T&CM practitioners)
- Advance T&CM standards for quality and safety
- Support greater interdisciplinary communication and collaboration to improve integrated, people-centered care
- Monitor and evaluate the contribution of T&CM in achieving universal health coverage through public reporting on T&CM indicators in (annual) national health and service system reporting
- Strengthen capacity for research and information sharing to improve evidence-informed policy decisions on T&CM
- Expand health insurance to cover T&CM services and products based on evidence of safety, effectiveness and cost-effectiveness

- Countries with well-established integration policies/strategies
  - Include traditional medicine in national health planning
  - Include T&CM products and practices into national adverse event reporting systems to improve safety and quality of T&CM (and encourage reporting by T&CM practitioners)
  - Advance T&CM standards for quality and safety
  - Support greater interdisciplinary communication and collaboration to improve integrated, people-centered care
  - Monitor and evaluate the contribution of T&CM in achieving universal health coverage through public reporting on T&CM indicators in (annual) national health and service system reporting
  - Strengthen capacity for research and information sharing to improve evidence-informed policy decisions on T&CM
  - Expand health insurance to cover T&CM services and products based on evidence of safety, effectiveness and cost-effectiveness

- Countries in the process of developing and implementing integration policies and countries with mixed-levels of integration
  - Develop and implement a national policy for traditional medicine
  - Develop or strengthen regulatory systems for improving safety and quality of T&CM products
  - Establish regulatory systems for T&CM practitioners including minimum education standards
  - Integrate T&CM services into healthcare packages, where appropriate, to meet the population needs
  - Collect information on public use of T&CM and current services
  - Include T&CM services and products with approved quality, safety and effectiveness in the national health insurance scheme

- Countries with indigenous traditional medicine practiced outside the national healthcare system
  - Undertake a situation and needs analysis of the current status of T&CM and its role in building sustainable and resilient healthcare systems, especially in consideration of adaptation to climate change in the Pacific
  - Develop a national T&CM policy or strategy
  - Move towards voluntary self-regulation of T&CM practitioners as a stepping-stone towards mandatory regulation at a later date
  - Document T&CM knowledge, taking into consideration the implications with regard to intellectual property rights
  - Integrate T&CM services into care packages, where appropriate, to meet population health needs
due to limited systematic documentation of traditional knowledge and practice, and lack of institutionalized or systematic education leading to difficulties in setting standards and qualifications. For instance, Cambodia, Philippines and Samoa have encountered these challenges in their development of regulatory standards and training for T&CM practitioners.\textsuperscript{6,39}

In the short and mid-term, based on access to qualified and competent T&CM practitioners and safe products, redesigning health service delivery to meet people’s needs will be important to improve healthcare system capacity and efficiency. The actions to meet needs at individual and population levels can furthermore improve healthcare system equity. Resources to undertake robust health services research, in particular population needs assessments on the provision and use of T&CM, are critically lacking—without which there is a lack of appropriate evidence to inform policy decisions for T&CM integration. Thus, actions to develop information systems for monitoring and evaluation of T&CM sectors, and to publicly report their performance, are critical to improving accountability of healthcare systems generally, and transparency in the T&CM sector specifically. Such monitoring and reporting will provide important information for policy-making—a strategic objective of the global and regional WHO T&CM strategies.\textsuperscript{18,19,29,60}

In the long term, active community engagement and empowerment in the process of integration will be essential to enable health systems to be more sustainable and resilient. This is especially so in low-resourced settings where traditional medicine can be a significant resource, preserving culturally-situated wisdom, promoting health, and helping to address public health challenges.

**DISCLOSURE OF POTENTIAL CONFLICTS OF INTEREST**

No potential conflict of interest was reported by the authors.

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