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The role of global traditional and complementary systems of medicine in treating mental health problems

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Abstract

Traditional and complementary systems of medicine (TCM) encompass a broad range of practices which are commonly embedded within contextual cultural milieu, reflecting community beliefs, experiences, religion and spirituality. Evidence from across the world, especially from low- and middle-income countries (LMIC), suggests that TCM is commonly used by a large number of persons with mental illness. Even though some overlap exists between the diagnostic approaches of TCM and conventional biomedicine (CB), there are major differences, largely reflecting differences in the understanding of the nature and etiology of mental disorders. However, treatment modalities employed by providers of TCM may sometimes fail to meet common understandings of human rights and humane care. Still, there are possibilities for collaboration between TCM and CB in the care of persons with mental illness. Research is required to clearly delineate the boundaries of such collaboration and to test its effectiveness in bringing about improved patient outcomes.

Introduction

The World Health Organisation has recently launched a Global Mental Health Action Plan to close the treatment gap for mental disorders, using a ask sharing approach between the community, primary and specialist care and other relevant sectors. There has long been appreciation that non-orthodox medicine plays a significant role in delivery of health care in

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all countries, but especially in low- and middle-income countries (LMIC), including in mental health. However well designed research is sparse, hampered by many challenges including conceptual confusion, and lack of funding. This paper therefore aims to provide a narrative overview of the literature for researchers and practitioners wishing to advance understanding of how to improve patient outcomes through evidence based collaboration with non-orthodox medicine (see Panel 1 for Methodology).

Definitions of traditional, complementary, and alternative medicine

Communication between professionals and researchers on health interventions both require a robust classification system so that like can be compared with like, but the spectrum of approaches in traditional, complementary and alternative medicine (TCM) is enormous, and attempts at definition and classification have revealed complex terminology, historical antecedents, diverse cultural meanings, and entrenched usage[3]. Even so, it is possible to trace two main strands of literature, the one focussing on traditional medicine in low and middle income countries, and the other focussing on complementary and alternative medicine as practised in richer countries. In this review and in regard to the first strand, even though emphasis is placed on traditional healing, much of what is written about that healing approach applies also to faith healing. Indeed, but for the fact that many faith healers have their influence derived from either Christianity or Islam, much of traditional medicine is also faith-based, albeit based on one form of indigenous religion or the other.

Traditional medicine (TM) has a long history. It is the sum total of the knowledge, skill and practices based on theories, beliefs and experiences, indigenous to different cultures, whether explicable or not, used in the maintenance of health, as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness[6]. The various healing traditions may have been evolved over tens of thousands of years, and indeed there is evidence that animals may also sometimes seek out specific plants or other natural substances for certain ailments, so it is possible that some knowledge of plant medicinal properties accompanied the evolution of man[7].

Much of traditional healing places an emphasis on the spirit world, supernatural forces and religion[9]. This has arisen because, for example in Africa, health is understood to be not just about proper functioning of bodily organs, but rather about mental, physical, spiritual and emotional stability of oneself, one's family and community members, and also one's ancestors who are believed to be able to protect the living[11]. On the other hand, western medicine that has evolved from the Greek Hippocratic system onwards to modern biomedicine is generally secular, although the mental health field in particular has generally expanded its emphasis from purely disturbed physiology to a more biopsychosocial understanding of the causes, manifestations and consequences of mental illness[12,13].

When adopted outside of its traditional culture, traditional medicine is often called complementary and alternative medicine (CAM). As the name implies, CAM therapies have been described either as alternatives to conventional medicine, or as complementary healing modalities used alongside conventional care[14]. Thus CAM has often been defined in terms of contrast with western biomedicine, which may be referred to as allopathy, orthodox,

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regular, conventional, modern, mainstream or western medicine. The huge variety of CAM practices, derived from vastly different historical and philosophical traditions, are notoriously difficult to group together under a satisfactory definition[5,15,1]. The most influential definitions to date (Panel 1) focus on a few common features. Every definition notes that CAM therapies are not part of conventional biomedicine, though the exact phrasing differs and some authors note the intrinsic relativism of any such criterion[1,10]. Indeed, the boundary between conventional medicine and CAM is increasingly muddy as medical schools, general practitioners and hospitals worldwide have introduced CAM therapies alongside mainstream biomedical therapy[16,17,18], and official regulatory bodies acknowledge and licence selected CAM practices[1]. Definitions which note that CAM satisfies a demand not met by conventional biomedicine usefully explain the complementary function of CAM in society, but still depend unsatisfactorily on the ill-defined shortcomings of biomedicine. Some definitions make explicit the alternative theories and beliefs unique to CAM[5,1,19], such as the emphasis on holism and meaning which are essential, even in therapies like homeopathy which superficially mimic the form of biomedicine[20].

Another term, “integrative medicine”, refers to the integration of complementary and alternative medicine into conventional medicine, aiming thus to obtain a synergistic therapeutic effect greater than that obtained using either modality alone. Integrative medicine also shifts the emphasis of care from treatment to prevention and self-healing[21].

TM is more widespread in low- and middle-income countries even though it also tends to be popular and vibrant among minority cultures in industrialized countries. On the other hand, CAM tends to be less culture-specific and more widely used in industrialized countries. Despite the differences between the two, both share an emphasis on a more “holistic” approach to illness than conventional medicine. They make less distinction between mind and body and seek to attend to psychological, social and emotional aspects of illness, even when the illness is somatic. This “holistic” approach to care is particularly valued by patients with mental health conditions.

The profile and diversity of use of traditional and complementary medicine

Making generalizations about the prevalence of use of TCM is also difficult. This difficulty derives partly from the fact that the component approaches, TM and CAM, are popular in different populations and also because of the range of practices embedded in each. For CAM, twelve-month prevalence rates range from 10%–76% depending on the population studied, response rates, which therapies are counted as CAM, and the method of eliciting information[22,23]. For example, the inclusion or exclusion of prayer or exercise can drastically change results[23,24,25]. Nevertheless, large population surveys in Western countries suggest that the 12-month prevalence of CAM use is 20%–50%, with Australia and the USA having higher rates than Britain. Many indicators suggest that CAM use has been increasing since the 1960’s[23,26,8]. CAM is most often used for chronic conditions which are not adequately treated by conventional medicine. In many such instances, users continue to patronize conventional medicine in addition to the CAM therapy[27,28,29]. That is, its use is typically “complementary” rather than “alternative”.

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Given the chronicity and significant subjective component of mental disorders, it is unsurprising that use of CAM amongst psychiatric patients is high, with reported rates varying from 20%–80%[27,30]. As for non-psychiatric populations, illness chronicity and medical comorbidity tend to predict higher rates of CAM usage in those with mental illness[27,29,31,32]. Most CAM therapies are more easily available than conventional treatment and significantly free of the stigma associated with a psychiatric diagnosis.

Studies of patients consulting providers of TM in low- and middle-income countries have reported high but varying rates of psychiatric disorders, depending on the methods employed and the disorders examined. Saeed et al in a study of attendees at native faith healers in rural Pakistan, found an overall rate of DSM-III-R diagnoses of 61% using the Psychiatric Assessment Schedule[33]. The commonest diagnosis was major depressive disorder, (24%) followed by generalized anxiety disorder (15%) and psychosis (4%). In Uganda, Abbo et al used the Mini International Neuropsychiatric Interview (MINI) on patients presenting to traditional healers and reported a DSM-IV diagnosis in 60.2% of the sample, with psychotic disorders being the commonest (29.7%)[34]. Mbwayo in Kenya also used the MINI and found an overall rate of mental disorders of 64.3%, including 20.3% with depression, 10.5% with anxiety disorders and 7.5% with schizophrenia[35]. Ngoma in Tanzania, using the Clinical Interview Schedule – Revised (CIS–R) reported that 49% of patients presenting to traditional healers had an ICD-10 diagnosis of common mental disorders (depression and mixed anxiety/depression)[36].

Unlike the clear evidence of increasing use of CAM in industrialized countries, the pattern for TM usage in LMIC is likely to be more varied given the differential effect of Western influence on these countries. Thus, while it is certainly the case that practitioners of TM are still very commonly patronized, especially by persons with mental illness, there is no robust literature to draw on in regard to the trend in usage. Nevertheless, many studies around the world show that TCM practitioners are often consulted by patients with mental disorders on their pathway to conventional care. See Table 1.

Assessment, diagnosis and treatment of mental disorders

Every healing modality assesses and categorizes patients' distress according to its own philosophy of illness, which is embedded within a larger cosmological worldview. Differing diagnostic systems necessarily reflect deeper differences in worldview. Given extant differences in that worldview, it is no surprise then that TH and most CAM disciplines use diagnostic systems which are incompatible with conventional medicine.

The diagnostic practices of TM have been a subject of only a few systematic studies. The available studies used qualitative methods including focus group discussions and interviews with traditional healers. Diagnostic approaches used include a combination of history taking, examination or observation of the patient and divination[52,53,54,55]. Divination refers to the revelation of knowledge from supernatural sources such as spirits or ancestors, using a variety of methods including tossing of artefacts such as shells or bones, use of mirrors, animal sacrifice, drumming, trance, or prayer[56,55,57,35,58]. Although TM may sometimes attribute ill-health to physical causes, there is typically an accompanying supernatural

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explanation of why a person has become ill, and which spirits, earthly sorcerers or neglected rituals are responsible. In contrast to conventional psychiatry which emphasises the importance of specific symptoms or behaviours to diagnose a syndrome, the emphasis in TM is on divining the ultimate supernatural cause of a problem with little emphasis on particular symptoms[59,60]. Under TM, the same illness or behaviour may receive different diagnoses depending on different personal or social circumstances in which it occurs[61]. In general, diagnosis of mental disorders and the treatment prescribed by traditional healers are often based on the indigenous beliefs and cultural interpretations of the problem peculiar to each local culture[54,62].

The treatment modalities employed by traditional healers are often in keeping with the traditional beliefs about causation of mental disorders and generally aim to reduce or eliminate the cause of the illness rather than targeting the symptoms[33]. Both pharmacological and non-pharmacological treatment approaches are used. Pharmacological methods commonly involve the use of different types and preparations of herbs with varying routes of administration. Potentially every part of selected plants may be used for herbal remedies, prepared and administered in a myriad of ways, including boiling, pounding, burning and macerating, followed by drinking, inhaling, sniffing, rubbing, smearing and even parenteral application through skin incisions. Such use is based on the experience, oral tradition and divine revelation of the healers rather than any scientific evidence of efficacy[63]. Non-pharmacologic treatment modalities may include combinations of physical restraints, including the use of shackles and manacles, restriction of food, isolation, recitations from holy books, incantations, rituals, sacrificial offerings, exorcism, and prayers[53,64–67]. Another important non-pharmacological modality of treatment involves culture-specific psychotherapeutic methods. The healer is often revered by the community and draws on this in the use of powerful methods of suggestion which offers the patients an understanding of the problem and encouragement to adhere to the proffered solution[33,68].

In contrast to TM, long exposure to conventional medicine in non-indigenous settings has influenced CAM to adopt a hybrid position between that of TM and conventional medicine. Though CAM healing modalities espouse unconventional models of illness and healing, based for example on humors, chi, water memory or spinal alignment, they have more readily adopted conventional psychiatric diagnoses such as depression or anxiety, as evidenced by the myriad trials of CAM for these diagnoses. In exploring the possibility of collaboration between TCM and conventional medicine, the contrast in regard to the treatment approaches of TM and CAM practitioners is particularly germane in so far as the former has less in common with conventional practice than the latter.

The global context in which TCM operates and flourishes

In rich countries, the increasing popularity and use of CAM over the past fifty years must be seen in the context of broader social and cultural changes over the same period. The values and beliefs which may lead people to choose CAM are now part of contemporary culture[69], but this was not always the case.

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Scientific optimism and trust in the medical establishment peaked in the 1950's as infectious diseases were conquered and lifespans extended[70], while homeopathic schools in the USA almost disappeared[71]. Political and social events of the 1960's and 1970's however, saw the emergence of a growing counter-culture which questioned authority and rejected paternalism, choosing to embrace instead personal autonomy and individualism. Disillusionment with the reductionism of the medical establishment was spurred on by an increasing awareness of iatrogenesis, exemplified by the thalidomide tragedy of the 1960's, overprescribing of medication[72], and the fall from grace of the benzodiazepines[73]. The relationship between user satisfaction with conventional medicine and use of CAM is subtle and complex. Large epidemiological samples in Western countries show that CAM users are no less satisfied with conventional medicine than non-CAM-users[74,27,31]. That is, using CAM is not simply due to dissatisfaction with conventional treatment. Repeatedly, CAM users report that using both forms of care together is more useful than either alone[74,75,76]. However, CAM users do complain about the quality of the doctor-patient relationship during the brief consultations typical of conventional medicine[18,77]. In addition to more satisfying consultations, the philosophies behind CAM have a persuasive appeal which users find compelling[19,78]. An appeal to the wisdom of "nature" is a defining metaphor for many types of CAM. Nature is idealized as innocent, wholesome and virtuous, creating a moral dichotomy in which the artificial, the toxic, the synthetic and the processed are condemned. Conventional medicine, notably psychiatric drug treatment, is typically perceived as falling on the wrong side of this divide. Holism – the attention to not merely the physical body but also the social, psychological and spiritual needs of a unique individual – is another philosophy by which CAM defines itself. In contrast, conventional medicine is described by CAM users as fragmented and impersonal, and ultimately disempowering[19]. Whereas conventional doctors may be more interested in objective improvements – or changes in psychopathology, perhaps even measured on a rating scale – CAM practitioners acknowledge and take seriously all subjective changes, thus validating the patient and their experience[79]. While psychiatrists acknowledge the importance of spirituality and religion, and are more willing than other physicians to talk about them with patients[80], they are unlikely to supply a worldview which is as appealing and satisfying as the philosophies motivating CAM use.

The patronage of traditional healing practices has followed a less consistent trajectory. The colonial and immediate postcolonial era witnessed the introduction and promotion of western medicine for the treatment of mental disorders in low and middle income countries and a concomitant decline in the influence of traditional medicine, including the outright banning of traditional medicine practice in some countries[81]. Indeed, at a time, it was thought that the more available and accessible the orthodox form of treatment becomes, the less the influence of traditional medicine will be in the society. A few western medicine practitioners were confident enough to predict "narrower" roles for TM in the succeeding years[82]. The reality is far from this as the use of traditional and faith healing methods of care for mental disorders as well as physical illness has probably waxed over the years especially in developing countries[83]. The wave of nationalism that heralded independence from colonial powers improved the fortunes of traditional healing practice as the initial ambivalence of the governments of the newly independent countries towards traditional

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medicine afforded some growth in this sector. Subsequently, in asserting independence and evoking national consciousness, several governments in LMIC have given recognition to traditional medicine through the setting up of boards and registering of practitioners. A number of countries, including China and India, have in principle approved integration of traditional medicine into mainstream healthcare delivery systems[84]. This policy has also received political support from the highest quarters as reflected in the declaration by the continental body, the African Union, of 2001–2010 as the decade of Traditional Medicine.

Traditional healers share a common perception of the causes of mental illness with their patients and this often results in the joint pursuit of an end to the abnormal experience of illness. Supernatural origin of mental illness remains a highly prevalent notion of causation of mental illness in most low and middle income countries[47,81,49,43,85,86]. Indeed, neither urbanization or level of education has affected the common belief in the supernatural causation of mental illness with educated elites consulting traditional healers at a similar frequency to those with no formal education[86].

Economic context

The economic context in which the services of TCAM are sought in high income countries is different from that of low- and middle-income countries: in the former, persons from higher economic groups are more likely to use the services of CAM while the reverse is the case for the use of TM in LMIC[87,88,25]. Indeed[84], has identified poverty as a major reason TM has continued to enjoy considerable patronage in LMIC. Treatment received from healers is generally regarded as more affordable and payment schedules are also often flexible[89]. Perhaps beyond affordability, the employment of outcome contingency contracts between patients and TM providers may be an added incentive to seek care from the latter[90,91] and the main reason that people in the community choose traditional healers above allopathic medicine practitioners for some medical conditions. The outcome contingency contract involves the healer getting an initial deposit which is usually a small amount (token) at the first contact with patient, while the final payment is deferred until treatment is complete and is only paid for satisfactory outcome achieved following intervention by the healer ("pay if cured").

The large patronage of traditional and faith healers is also closely related to their availability and accessibility. It has been estimated that the number of traditional medicine practitioners in sub-Saharan Africa is about 100 times the number of conventional medical practitioners[92]. Though in many LMIC the majority of the population resides in rural areas, facilities providing conventional medical care are more commonly located in urban areas. Traditional and faith healers thus usefully fill the resulting gaps in services[87,83].

Role of complementary and alternative mental health providers in the context of global mental health and scaling up of services

The treatment gap for mental, neurological and substance use disorders in low- and middle-income countries (LMIC), where treatment rates for these disorders in 12 months range from 15% to 24%[93], necessitates an urgent scaling up of delivery of core mental health services[94].

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An evaluation of epidemiological and health services data from 58 LMIC by the World Health Organisation found that 67% LMIC had a shortage of psychiatrists, 95% a shortage of nurses, and 79% a shortage of psychosocial care providers[95]. In order to scale up services, it is clear that the workforce of trained non-specialists and non-medical services needs to be increased. The large number and wide distribution of TH (and FH), compared to conventional mental health providers, makes incorporating their service into mainstream mental health service a desirable goal[96].

For patients and their caregivers, there are several potential advantages of collaboration between TCM and conventional mental health service. Cultural acceptability, accessibility, perceived holistic approach to care and less stigma may lead to better utilization of a collaborative service by patients and their caregivers. It is also plausible to expect that the availability of a variety of healing modalities might make it more likely that patients would find the therapy that best meets their needs[97]. Other advantages might include the involvement of family and community as well as the patient, manipulation of the environment to achieve therapeutic goals, and cost effectiveness[59,98,99].

It is not a new idea to try to use TM as a way of maximising mental health services for the community[100] and various models exist for working together with TH[101]. In a "task-shifting" model, TH may be incorporated into existing mental health services by co-opting their penetrance and cultural acceptability to deliver conventional treatment. For example, they may administer psychotropic medication to patients in rural areas, or be trained to deliver other psychiatric support[96,101]. While this task-shifting approach may expand the reach of psychiatric services in poorly resourced countries, it makes little use of healers' unique skills and specific advantages, which should rather be acknowledged and built on. In a collaborative model, TH and conventional practitioners remain autonomous and independent, but co-operate fully, for example by referring patients to each other or consulting on complex cases. In a fully integrated model, TH and conventional services would be blended into a new hybrid system such that patients need not choose one over the other. Treatment approaches would be similarly integrated – for example, a culturally relevant explanation may be given for why someone is depressed, followed by the necessary ritual and a prescription for an antidepressant.

Variants of collaborative model have been practiced with some success in Ecuador[102], Puerto Rico[103], Brazil[104], as well as in New Zealand where a Maori mental health facility is offered within a large psychiatric hospital, staffed by Maori nurses and psychiatrist[105]. In all of these examples, conventional psychiatric interventions as well as traditional healing practices are offered to patients. Patients may also be offered a choice of which healer they believe in, thus capitalizing on powerful expectancy effects which influence outcome[103,106]. Patients greatly appreciate this collaborative approach, and both healing modalities can benefit from the legitimacy thus bestowed by the other[102].

Only a few examples of collaborative use of traditional healers to effectively deliver community-based mental health care exist in LMIC. The lack of collaborative engagement between primary mental health services and traditional healers remains a challenge and best practice models of blending or aligning treatment delivery and scale-up of treatment

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delivery are, as yet, elusive[107,108]. The potential roles that TCM practitioners can provide include promotion of mental health, prevention of mental illness[109], detection and assessment of mental disorders, treatment of mental disorders, referral to primary care practitioners or directly to hospitals, collaborative care including monitoring of medication, side effects, symptoms, family support, education of families about early warning signs of relapse. A recent review did not find any studies evaluating the role of TCM providers in delivering these interventions[110]. However, a more recent study using standardized clinical assessments to evaluate the outcome of such collaboration, the combined use of biomedical services and traditional healing in a cohort of patients with psychosis (schizophrenia, mania, and depression with psychosis) was associated with a significant reduction in psychosis at three months, although at six months combination treatment was more likely in patients who still met psychopathology criteria for caseness[111].

There is a substantial literature on the problems arising from vertical rather than integrated health programmes[112]. Given this experience and the scarcity of resources, and motivated by the current need to strengthen general health systems[113], it would seem more rational to focus on integration of mental health into general health care at each level of the community based system[110]. Such an approach would utilise self-help, family help, TCM, volunteer community health workers, as well as generic primary care staff, supported and supervised by district mental health specialists[110], or district public health nurses, as has been successfully implemented in Kenya[114].

Whatever model is used, any attempt to forge a working relationship between TM and conventional medicine is likely to confront several challenges. Practitioners of orthodox medicine will have to deal with the fundamental clash of ideologies between the Western view based in a materialistic empiricism, and the TH worldview based in magic, religion and sorcery[96,105]. Such practitioners may also be concerned about evidence suggesting that patients attending TH may be less likely to comply with biomedical treatment[96], are more likely to have longer duration of untreated psychosis and about some of the potentially harmful practices employed by TH such as the use of toxic potions, physical beatings, inhumane restraints and longer duration of untreated psychosis[115,116,117]. On the other hand, given the important role of ritual and symbolism in traditional healing practice, TH may feel that their effectiveness is undermined by any collaborative arrangement that discourages the use of ritual and symbolism[118].

To be successful, any approach would require the provision of adequate training and continuing education for TM practitioners and re-education for conventional practitioners. Other than information about the recognition and treatment of defined mental disorders, education would need to focus on the boundaries of collaboration, the modality of engagement and referral, and the importance of mutual respect and trust. However, given that LMIC currently struggle to find the resources to provide continuing education to primary health care workers, it is unlikely that they would be able to do so for TM practitioners who may be 50 times or more in number compared to primary care workers. A potential way forward, as is being tried in Kenya, is to utilize primary care to provide CPD around mental health. In this scenario, primary care workers, who have themselves undergone 40 hours of CPC on mental health, are asked to include a mental health

component in their weekly training of volunteer community health workers and are also encouraged to initiate ad hoc and planned dialogue with their local TCM practitioners[114].

It would seem therefore that, at least in the context of LMIC, there is some role for practitioners of TCM, specifically TH and FH, in filling the existing treatment gap. It is currently unclear which model of collaboration works best. It's unlikely that one model will suit every situation, so each region's solution will need to be tailored to local circumstances and resources. This tailoring should be based on a more detailed understanding of the dynamics of traditional healing than we currently have. Relevant gaps in our knowledge include: What are the effects of traditional healers on mental health? What is the nature of the qualitative changes they facilitate? What are the mechanisms which bring about such change, and how could these be preserved? Will these mechanisms work in a collaborative setting? Each of these questions requires empirical investigation. Ultimately, efforts aimed at the collaboration or integration would have to take cognizance of the variety of treatment approaches that TCM delivers. Such efforts would include ways in which harmful treatment practices can be discouraged and effective monitoring designed and implemented. Research is required to clearly describe the nature and form of collaboration that can be developed between providers of TCM and those of conventional mental health and to test the effectiveness of such collaboration on patient outcome.

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Panel 1

Methodology

We conducted a narrative review of the literature focussing on current practices of providers of TCAM and the potential contributions of these methods of healing to scaling up mental health service especially in low- and middle-income countries. To obtain information relevant to each section of this report, several electronic databases were searched with the main ones being Medline, Social Science Citation Index, Scopus, PsycArticles Medline, Alternative and Complementary Medicine Database (AMED), and Embase. We retrieved relevant papers from the overlap of "traditional healers" (with 14 variants or synonyms) AND "mental disorders" (with 9 variants or synonyms) AND "effect" (with 10 variants or synonyms). With the subsections of the review in mind, papers were sorted according to relevance to the subsections. Papers on TCM with only a tangential mention or reference to mental health but discussing one or more physical problems in detail were excluded from the review. For the exploration of pathways to care, we conducted a search covering the period from 1970 to February 2014 using keywords "traditional medicine" AND/OR "complementary medicine", "mental disorder" AND/OR "mental illness". Articles addressing traditional and or complementary medicine in relation to mental health or mental disorders were selected for further scrutiny.

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Pane 2: Influential Definitions of Complementary and Alternative Medicine

Complementary and alternative medicine (CAM) is a broad domain of resources that encompasses health systems, modalities, and practices and their accompanying theories and beliefs, other than those intrinsic to the dominant health system of a particular society or culture in a given historical period. CAM includes such resources perceived by their users as associated with positive health outcomes. Boundaries within CAM and between the CAM domain and the domain of the dominant system are not always sharp or fixed.

CAM refers to a broad set of health care practices that are not part of a country's own tradition and not integrated into the dominant health care system.

A group of diverse medical and health care systems, practices, and products that are not generally considered part of conventional medicine.

Complementary and alternative medicine: Includes all such practices and ideas which are outside the domain of conventional medicine in several countries and defined by its users as preventing or treating illness, or promoting health and well-being. These practices complement mainstream medicine by (1) contributing to a common whole; (2) satisfying a demand not met by conventional practices; and (3) diversifying the conceptual framework of medicine.

Therapeutic practices which are not currently considered an integral part of conventional allopathic medical practice.

- MeSH (Medical Subject Headings) on NIH's Pubmed Database

Unconventional therapies [are] medical interventions not taught widely at U.S. medical schools or generally available at U.S. hospitals.

Practices not accepted as correct, proper or appropriate, or are not in conformity with the beliefs or standards of the dominant group of medical practitioners in a society.

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Table 1

Studies on pathway to care for patients with mental disorders attending orthodox mental health facilities.

Reference	Site	Setting of study	Diagnosis of population studied	No of Subjects (N)	consulted THP first %	consulted FHP first %	consulted THP/FHP %
37	Abeokuta, Nigeria	Psychiatric hospital & Community Mental Health Centre	Schizophrenia	208	74.5	11.5	**84.5**
38	Ibadan, Nigeria	Outpatient department of a teaching hospital	Any mental disorders, but mainly psychosis	159	19	13	**35**
39	Harare, Zimbabwe	PHCs (3) and THP facilities (4)	Common mental disorders	109	24.5	20	**34.5**
40	Jaipur, India	Department of Psychiatry of a Teaching Hospital	Any mental disorders	76	39.5	4	**43.5%**
41	Cape Town, South Africa	Acute inpatient wards	Psychosis	71	2.8	2.8	**5.6**
42	Dhaka, Bangladesh	OPC of a Department of Psychiatry of a Teaching hospital	Any mental disorderh	50	ND	ND	**22**
43	Kwazulu Natal, South Africa	Inpatients of Psychiatric Hospital	Psychosis	54	ND	ND	**39**
44	Malaysia	OPC of Departments of Psychiatry and Medicine of a Teaching hospital	Psychosis and epilepsy	120	ND	ND	**44.2**
45	Ontario canada	Early Intevention for Psychosis Specialized Units	psychosis	200	ND	ND	**12.2**
46	Ilorin, Nigeria	OPD of a Department of Psychiatry in a Teaching Hospital	Any mental disorder	238	26.5	13.4	**39.9**
47	Tamil Nadu, South India	Psychiatric Hospital	Any mental disorder	198		44.9	**44.9**
48	Kumasi, Ghana	Psychiatric Hospitals	Any mental disorder	303	5.9	14.2	**20.1**
49	Kelantan, Malaysia	OPD of psychiatry department of a Teaching Hospital	Any mental disorder	134	69		**69**
50	Delhi, India	OPD of a tertiary Hospital	Any mental disorder	78	1.3	29.5	**30.8**
51	Al-Ain, United Arab Emirate	Inpatients and outpatient of Psychiatry department of a general hospital	Any mental disorder	106		44.4	**44.4**

THP=Traditional Healing Practitioner; FHP=Faith healing Practitioners; OPD= Outpatient department