A Framework for Understanding the Role of Spirituality in Health

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Bio

Dr Kirti Ranchod is a neurologist, brain health specialist, founder of Memorability, co-founder and chair of the African Brain Health Network, and Global Atlantic Fellow for Equity in Brain Health. She combines neuroscience with brain skills training to optimise brain performance. Dr Ranchod has delivered workshops, talks, and written on various brain health topics. Her work includes the value of cultural capital in supporting brain health, and she has an interest in the field of neuroaesthetics. Dr Ranchod hosts a regular mental wellness walkabout at the Origins Centre, University of Witwatersrand, to make information on brain health and neuroscience accessible. She co-organised, with the Atlantic Institute, a Brain Health Perspectives convening in Johannesburg that centred on Pan-African voices in the global vision to support brain health.

Summary

In the context of the current mental health crisis, integrating spirituality into healthcare presents both opportunities and challenges for improving health and advancing health equity. While mainstream biomedical systems often exclude Indigenous knowledge and spiritual practices, these cultural traditions provide significant, often underappreciated, benefits for health. The role of visual art, as part of spiritual practices, offers a compelling example of how sacred forms can be utilised in health interventions. However, challenges arise when attempting to integrate spirituality into biomedical healthcare systems. The tension between subjective, spiritual experiences and the objective, evidence-based demands of public health

requires careful, respectful approaches to avoid harm and ensure beneficial outcomes. This perspective explores the sensitive use of neuroscience to evaluate the possible tangible health benefits of spiritual practices using visual art within spiritual practices as an example.

Positionality statement

I am a neurologist and brain health specialist whose clinical and professional work is grounded in neuroscience while also emphasising the potential value of cultural practices to support brain health. My interest in the relationship between spirituality and health developed while working in the neurology and brain health field for twenty years, practising traditional yoga for forty years, and being exposed to multiple local and global spiritual traditions. My approach is informed by both a respect for diverse cultural and biomedical perspectives and a commitment to rigorous inquiry. I recognise that these experiences shape how I interpret research and construct opinions. I have sought to balance personal insight with critical reflection, drawing on lived experience and interdisciplinary research to form the views expressed in this piece.

Introduction

In the field of public health, the current conceptualisation of health, health resources, and health systems largely excludes Indigenous knowledge, systems of practice, and experts (White, 2015; Svalastog et al., 2017; Jaca et al., 2022). Consequently, approaches to support better health, including brain health or mental health, privilege promoting non-Indigenous health literacy and investing in non-Indigenous resources (Peterson et al., 2011; Karamagi et al., 2023). While these investments in non-Indigenous systems are necessary and while promoting health literacy is encouraged, a more systematic and cohesive strategy that includes all resources supporting health may lead to improved health equity. Systematising strategy becomes even more critical given the current crises in mental health (GBD Collaborators, 2022), even in countries with high levels of investment in mental health services where there remain significant barriers to accessing care (Stanton, 2014; Hyland et al., 2022)

Various cultural practices, including spiritual traditions within Indigenous and immigrant communities, provide tangible and intangible benefits.

Highlighting the tangible health benefits and emphasising potential neurobiological mechanisms offers an approach to appreciating their value in supporting well-being. These are not the only benefits, but given the history and impact of colonialism on Indigenous cultures, societies, and health, it is crucial to demonstrate how and why they contribute to better health. The primary critique of this approach is that it is reductionist and continues to privilege a dominant knowledge system. While acknowledging this critique, when used sensitively and to complement Indigenous knowledge systems (IKS), the research into neuroscience and health is a powerful advocacy tool that can shift the narrative on health, health systems, and resource allocation (Kendall-Taylor & Levitt, 2017).

Since spiritual practices are not primarily designed to support health, any more than biomedical treatment is designed for spiritual growth there are tensions between these two knowledge systems that can affect dialogue and integration. Firstly, the definition of spirituality is nebulous, allowing for differences in perspective across people, place, time, space, and culture (De Brito, 2021). This perhaps necessary, form-shifting noun that provides for collective and individual variation in interpretation may be a potential strength for those on a spiritual path. However, public health approaches require a standardised definition (Pesut et al., 2008; Van der Linden & Schermer, 2024). Secondly, spiritual experiences, even when part of collective activities, are inherently personal, making them difficult to predict, measure, and generalise. Evidence-based public health initiatives require measurable outcomes, replicable results, and large datasets, with randomised controlled trials being the gold standard (Brownson et al., 2018). One way to bridge these tensions is by focusing on specific processes, activities, or components within spiritual practices that have been shown to support health. These include integrated approaches, mindfulness, intergenerational living, community engagement, brain stimulation, behaviour change, and various art forms such as visual art, music, dance, theatre, and storytelling.

Visual art as a framework for health and spirituality

Visual art within spiritual practices offers a framework for understanding the value of spiritual traditions in supporting health. Art has been embedded in community-based cultural practices across millennia, serving as a medium for play, communication, worship, celebration, honour, and mourning, with

the earliest recorded art dating back 73,000 years (Henshilwood et al., 2018). Many sacred traditions integrate art into worship to help the practitioner on their spiritual path, making the art functional, essential, and sacred. Sacred art is found in home-based altars, community-based places of worship, and during specific ceremonies. However, in academic fields of art and health, sacred artworks are often not included in discourses on art or art for health. The placement of sacred artworks in a gallery such as the Rubin Museum, the Metropolitan Museum in New York City, and the British Museum in London transmutes them from sacred objects into mercantile objects that are considered art.

Art as a part of spiritual practice becomes a spiritual practice itself and is therefore a potential resource to support health. Sacred art is diverse and includes abstract and representational forms. Examples of abstraction include Hindu and Buddhist yantra images, Yoruba masks, Hopi Katsina figures, and Dogon sculptures. Representational forms of gods, goddesses, ancestors, and sacred places are pervasive in religious and spiritual traditions. Given this vast repertoire, the implication is that art, through its sacred forms, is more accessible, acceptable, and affordable to the global majority than in its secular forms.

Visual art and the brain

Research in neuroaesthetics has provided insight into the impact of art on the brain, potentially explaining some of art's spiritual and health benefits. Creating and viewing visual art activates the Default Mode Network (Vessel et al., 2013; Bolwerk et al., 2014). This self-referential network is also activated during meditation (Jang et al., 2011). This network consists of specific areas of the temporal cortex (including the hippocampus) and frontal cortex (including the Medial Prefrontal Cortex) that work together. The network is involved in daydreaming, autobiographical memory, envisioning the future, and considering the perspectives of others (Vessel et al., 2013). It is inhibited when we process information about the external world (Raichle et al., 2001). Specifically, the Medial Prefrontal Cortex is thought to be active in the "cognitive regulation of emotions" (Bolwerk et al., 2014). Given the above, creating art potentially helps people living with an illness, going through a challenging situation, or facilitating a spiritual experience by increasing

self-awareness, regulating emotional responses, facilitating self-referential problem-solving, and visualising a self-directed future.

The functional integrity of the Default Mode Network has also been found to be affected in older people (Wang et al., 2022), people living with anorexia nervosa (McFadden et al., 2014), post-traumatic stress disorder (Patriat et al., 2016), depression (Anticevic et al., 2012), Alzheimer's disease (Balthazar et al., 2014), schizophrenia (Anticevic et al., 2012; Fan et al., 2022), and bipolar mood disorder (Bolwerk et al., 2014). An unanswered question is whether the repair of this network could lead to recovery or amelioration of symptoms and whether visual art could facilitate this repair.

Creating art improves psychological resilience (Bolwerk et al., 2014), hope (Frazer & Keating, 2014), a sense of empowerment (Keeling & Bermudez, 2006), stress levels (Noorily et al., 2023), and cognitive performance (Schindler et al., 2017). Small studies have also shown benefits in people living with HIV (Ness et al., 2021), dementia (Savazzi et al., 2020), stroke (Alwledat et al., 2022; Kongkasuwan et al., 2023), depression (Blomdahl et al., 2021), and anxiety (Abbing et al., 2019). However, systematic reviews have been mixed. A meta-analysis on the effect of art therapy on symptoms of depression in older adults found art therapy to be effective (Jenabi et al., 2022). A systematic review of Arts on Prescription programmes reported improved psychosocial well-being. Additional systematic reviews, while recognising the potential of art therapy as a 'lowrisk and high-benefit intervention' for people living with severe mental illness, report that the evidence is inconclusive, and recommend further research with standardisation of methods (Chiang et al., 2019; Shukla et al., 2022). Similarly, the evidence that art supports people living with Alzheimer's disease (Deshmukh et al., 2018) and anxiety is limited (Abbing et al., 2018). Herein lies the challenge for art, spirituality, and health.

Potential challenges in integrating spirituality into health systems

Various spiritual processes have the potential to support health. Visual art can serve as a model for integrating spiritual and biomedical knowledge systems, understanding their health benefits, and developing processes to evaluate specific practices. However, incorporating spirituality into biomedical health systems must be approached with care to avoid potential distortions in both.

Key challenges

Biomedical knowledge systems rely on specific processes of knowledge acquisition and validation (Payne, 2021). While an argument has been made for how spiritual practices benefit health and healthcare systems, practitioners may be reluctant to integrate without empirical evidence adhering to biomedical validation frameworks (for example, case-control studies).

Subjecting spiritual practices to biomedical validation may recognise only certain aspects of these traditions while disregarding practices, cultures, and traditions that have not undergone such evaluation. In addition, the validation of only one aspect, such as visual art within a ritual, risks missing the full context, which might be essential for its benefits or even reveal potential harm.

The adoption of spiritual practices by health practitioners without experience in the respective spiritual traditions risks cultural appropriation, commercialisation, and misuse.

Personal spiritual beliefs of healthcare professionals can influence patient care, necessitating a considered strategy for the inclusion of spirituality in health systems.

Specific dogmas or rigid beliefs within religious, spiritual, or health systems may alienate certain groups, affecting access to care.

Dialogical approaches to integrating spirituality in healthcare

While spiritual practices have the potential to support health, integration or inclusion of these at a systems level require critical evaluation of the opportunities and challenges involved. The first step necessitates open, respectful, and critical discussion with various stakeholders. A potential methodology for these discussions is dialogical multiplication, which allows for multiple perspectives, embraces complexity, and is iterative and generative (Guimarães, 2019). Within a health system, dialogical multiplication provides a framework for embracing plural definitions of health, encouraging diverse perspectives in a conducive space, and respecting differences while working towards a shared vision (Ranchod &

Guimarães, 2021). Outcomes from this process could include determining the next steps, such as developing a framework, curriculum, and pilot projects.

Conclusion

An improved understanding of the role of spirituality in health seems necessary as we work towards enhanced health outcomes and health equity. Scientific research utilised in a complementary, sensitive, and critical manner can potentially assist with this process. A dialogical approach with relevant stakeholders is suggested as a potential first step, with subsequent steps being determined during this process. While integration and inclusion are encouraged, there is potential for harm or distortions of specific practices within both knowledge systems. Care is required to ensure the integrity of both spiritual and biomedical systems.

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