Integrative Medicine as a Panpharmacon for COVID-19 Pandemic: A Call for Global Advocacy





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Received 30 June 2021; accepted 1 July 2021

The COVID-19 infection has become a pandemic with no sight of standard therapy for cure. About 183,020 new cases and 4,743 deaths were reported on June 21, 2020, the International Day of Yoga (IDY).¹ Although the virus is appreciably less virulent given the lower fatality, it remains catastrophic due to the huge population of India thereby posing a threat to the public health and economy. Interestingly, the global lockdown, as a mitigation strategy to prevent spread of COVID-19, coincided with the sixth IDY's theme of "Yoga at Home, Yoga with Family." Ironically, this acted as a recourse to the vulnerable population, reeling under increased cases of domestic violence and impending economic crisis, experiencing unprecedented fear and anxiety, and psychological stress. The current times are often termed as the "generational challenge" of our era as even the health care workers are overwhelmed by the gravity of the health crisis. At this time, one of India's largest Medical Institute, PGIMER, Chandigarh, with its Journal Integrative Medicine Case *Reports*², began to systematically broadcast the need, theory and practice of mindfulness, Yoga and Ayurveda, through its Facebook page "Yoga scholars PGIMER" with the help of world experts for public and physicians, empowering both with coping skills, resilience, and philosophy. This 3-month continuous educational series culminated with Professor Jagat Ram, Director, PGIMER announcing the plenary talk by Dr David Frowley on the occasion of PGI's IDY 2020. This session, which was broadcasted from Department of Telemedicine's server, sought to profile the "Common Yoga Protocol" approved by Ministry of AYUSH. Dr Frowley gave an inspiring talk on "Yoga and Ayurveda Psychology," which was well attended by faculty, residents, staff, and students within and outside Chandigarh. This set the tone of paradigm shift in the manner in which the practice of Medicine has so far been perceived and practiced. Insights of this development are presented in the following commentary.

Interplay Between Risk Reduction of COVID-19 and Traditional Medicine

Health can be expounded as a holistic well-being achieved by maintaining the physical, mental, social, and spiritual homeostasis as referenced by *Tiattiriya Upanishad*,³ which was later redefined by WHO as "ONE" health paradigm, aptly cited by Professor Jagat Ram in his IDY 2020 welcome address. The unprecedented infection caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has deteriorated both physical and mental health added with the economic crisis. Preliminary studies have reported an intensified fatality of those nursing noncommunicable diseases (NCDs), including cardiovascular diseases, diabetes mellitus, respiratory diseases, and cancer.⁴ At the same time, the current situation of social isolation, complete/partial lockdown, restricted travel, coupled with closure of community resources, has entailed faulty dietary habits, physical inactivity, paradigm shift in the psychosocial relations, poor health monitoring further exacerbating the existing NCDs that might increase its incidence and prevalence in future. Temporary halt in the activities of preventive medicine and rehabilitation departments has further brought rehabilitation of NCDs to a grinding halt. Physical activity in the current situation is confined to indoors and requires resources, which itself is a barrier for individuals living in the low- and middle-income countries. In this context, advocacy for ONE

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health paradigm alluded in the PGI's IDY deliberations call for an urgent need for installation of Integrative Medicine (IM). This may foster evidence-based physical, spiritual, and psychological well-being of not only the health care workers but also patients.

Unequivocally, the trends of NCDs will be heightened in the aftermath of COVID-19 outbreak and may cumber the path of achieving the sustainable development and reduction of premature death goals set by the World Health Organization (WHO).⁵ Thus, there is an acute need of holistic mind-body medicine system not only because of current health policy but also as an emergent need in response to achieving postpandemic solutions.

Integrative Medicine (IM) for ONE Health

IM brings conventional and complementary approaches together in a coordinated fashion such that it is grounded in the definition postulated by WHO, addressing the full range of physical, psychological, social, and spiritual well-being of a person's health. Yoga, a composite ancient Indian technique can aid in achieving wellness, harmony, and social order. It is gaining popularity as a major component of IM across the globe. Professor Jagat Ram cited Tiattiriya Upanishad, explaining the concept of Panchkosha as a narrative of mindbody connection, pointing out that the "mind-body medicine" being the proposed Joint flagship program of Ministry of AYUSH and MOHFW, New Delhi. He even quoted from second sutra of Patanjali's yoga sutras⁶ the Yoga Chitta Vritti Nirodhah arguing that Yoga provides the tools and techniques to alleviate the perturbations of the mind. "If mental perturbations remain unaddressed, chronic psychological and psychosomatic disorders might follow," he mentioned, indicating the manner in which practice of medicine has to transform itself. It is well known that yoga and mindfulness interventions not only improve psychological health by reducing stress, anxiety, and depressive symptoms⁷ but it may also enhance the lung capacity if practiced under supervision. Professor Ram's advocacy for Yoga's integration with the conventional medicine bridges the chasm that had prevented the harmonization of physical, spiritual, and psychological health. His vision that this may reduce the risks associated with age and comorbidities in a cost-effective manner, earlier advocated by Ministry of AYUSH, was never flagged effectively as evident from his welcome address on IDY 2020.

Integrative Medicine for Knowledge Economy

WHO's global action plan for the prevention of noncommunicable diseases advocates harnessing the potential of traditional and complementary therapies

because of their potentially lower costs and greater cultural acceptability. India's potential in acquiring global leadership in IM is inspired by the known susceptibility of the vulnerable population to COVID-19. Professor GD Puri's concluding remarks on the aforementioned PGI's IDY program that not only acknowledged David Frowley's Yoga and Ayurveda Psychology prescription for post COVID-19 era but also qualified it by highlighting the abundant evidence that showed how neurochemicals influence disease and health outcome. It is also writ large that having practices of such integrative methods could be one of the effective ways of handling unexpected and unwarranted pandemic situations. PGI's IDY advocacy paves the way for national framework of "Integrative Medicine Departments" in the country, as alluded by Professor Jagat Ram. All India Institute of Medical Sciences (AIIMS), New Delhi, has already established the Center for Integrative Medicine and Research (CIMR) with support of Ministry of AYUSH, and able guidance of Dr HR Nagendra, the Chancellor of S-VYASA. The new AIIMS units have followed suit. Other institutions like NIMHANS, Medanta, Manipal University have already taken early lead providing an inclusive and collaborative environment for mutual learning, research, and clinical practice. The model of IM calls for a new paradigm of integration, ranging from active participation of funding agencies like Department of Biotechnology (DBT), Council for Scientific and Industrial Research (CSIR) to educational reforms by the University Grants Commission (UGC) and National Medical Commission (NMC) to installation of appropriate governing bodies and deans of mentor institutions. This will ensure that evidence-based integration is entrepreneurial, sustainable, and caters to knowledge economy by integrating the technology component of IM.

Author's Contribution

Conceptualization was done by Sriloy Mohanty and Amit Singh. Methodology was done by Pramod Avti and Sriloy Mohanty. Validation was done by Amit Singh and Pramod Avti. Resources were done by Pramod Avti and Sriloy Mohanty. Writing—original draft preparation was done by Sriloy Mohanty. Writing—review and editing was done by Pramod Avti and supervision was done by Amit Singh. All authors have read and agreed to the published version of the manuscript.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

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