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## Short Communication

## Learnings from a veteran oncologist's long-standing efforts in integrative oncology

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## ABSTRACT

Kerala's first medical oncologist, the erstwhile Dr. CP Mathew, has left a rich legacy in cancer patients' case diaries and medical records. These documents contain valuable information about his attempts to integrate Siddha and Ayurveda treatments to manage cancer. A preliminary examination of these documents compiled over more than four decades gives us a glimpse of his contributions relevant to the development of Integrative Oncology in India. Patients who received treatment from Dr. CP Mathew presented with different types of cancer in varying stages of progression. In his clinical practice, he developed treatment approaches that integrated Ayurveda and Siddha with the standard of care for specific types and presentations of cancer. At Cherian Ashram in Kottayam, where he treated cancer patients, a team of medical doctors, including a senior Ayurveda physician and a Naturopathy and Yoga expert, worked together to offer integrative care. Based on his experience, he emphasized that the public should be made aware of the available options for alternative treatments even in advanced stages of cancer. While Ayurveda and Siddha could bolster the patient's immunity and improve clinical outcomes, he pointed out that such interventions could also improve tolerance to chemotherapy and radiation. In the wake of the growing global interest in Integrative Oncology, the work of Dr. CP Mathew preserved in the medical records of his cancer patients deserves to be studied with an open mind.

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A pluralistic health care system is prevalent in India. Along with modern medicine, other systems that are officially recognized are Ayurveda, Yoga & Naturopathy, Unani, Siddha, Sowa Rigpa and Homoeopathy forming the acronym AYUSH. The operational framework of health care delivery in India is conducive to co-existence but more emphasis at policy level is needed to realize the functional integration [1]. The various challenges of integration in the pluralistic health care system of India have been discussed by Patel et al. [2]. Informed decision making within an integrative health care framework focused on patient care is a distant reality. In the village of Kottayam, in the southern state of Kerala in India, the nonagenarian Dr. CP Mathew, the first Medical Oncologist from

Kerala, represents a rare example of how modern medicine and AYUSH systems can be integrated for better management of cancer.

Dr. CP Mathew was born to CM Paul and Catherine in Chirakkadavu, Kottayam on 2 September, 1929. Dr. CP Mathew graduated from Madras Medical College in 1954 and completed his post-graduation from Trivandrum Medical College in 1965. After graduating, he worked at Civil Hospital and later at Viyyur Central Jail in Thrissur, Kerala. He relocated to Trivandrum Medical College in 1960 and a year later moved to Kozhikode Medical College. He joined Kottayam Medical College as Associate Professor in 1968 and later served as the Head of Oncology and Vice Principal at Kottayam Medical College until he retired from service in 1986. For four decades in his illustrious career, he had been integrating Siddha and Ayurveda treatment modalities as standalone therapy or in combination with specific modern medical interventions. The success of his treatments has drawn thousands of patients to his clinic over the years. The case diaries that he maintained at his clinic attached

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to his residence from the 1980s has preserved clinical notes of more than four thousand patients. Since 2003, he was consulting patients at Cherian Ashram in Kottayam and comprehensive case records of thousands of patients are being maintained here.

Dr. CP Mathew swears by the efficacy of Siddha and Ayurveda formulations that he uses for management of cancers. Surprisingly majority of these formulations are prepared using heavy metals like mercury and arsenic. Navapāṣāṇa, Rasasindūra, Candrāmṛta, Rasagandhimezhugu and Nandimezhugu are foremost amongst the formulations prescribed by him. He affirms the safety of formulations with heavy metals as ingredients based on his clinical experience. He confirmed that he himself used these medicines and lived in good health up to the age of ninety-two without any untoward health effects. Dr. Mathew prescribed Arsenicum Album and Psorinum, both homoeopathic preparations for the management of cancer. In some cases, he recommended chemotherapy along with traditional medicines. In addition, he recommends CBD oil or medicinal marijuana in the management of certain types of cancer. A major goal of his therapy was to bolster the immunity of the cancer patient and he prescribed the Ayurvedic formulations Śivaguṭikā and Āsvagandhā in all types of cancer. He also prescribed immunity promoting formulations like Triphalācūrṇam, Kasturīkalparasāyanam, Śilājāturasāyana, Brahmarasāyana, Guggulurasāyana and Gokṣuramodakam. It is quite obvious that Dr. CP Mathew's practice was a unique model of integrative oncology that is worthy of examination. The case diaries and clinical medical records covering a period of over four decades offer a rich resource for critical analysis.

In spite of the fact that Integrative Medicine is still in infancy in India, we do encounter instances of patient driven integration. With two parallel streams of health care systems promoted by the independent Ministry of Health and Family Welfare as well as Ministry of Ayush, people often make their own choices when it comes to treatment of various illnesses and health care in general [3].

Practitioner driven integration also happens in clinical practice, but this can often be misunderstood as cross-system practice or "mixopathy". When the practitioner of one system of medicine prescribes interventions of another system of medicine in which s/he is not adequately trained, it is referred to as cross system practice. Sometimes, it is difficult to draw the boundary between legitimate and cross system practice when common over the counter formulations are prescribed for the management of common ailments [4].

Integrative medical practice requires good understanding of different medical systems and well-defined treatment protocols in specific diseases and its stages. Practitioner of one system of medicine may be trained in the other system or there can be a collaboration between practitioners of different medical systems. In integrative medical practice, the focus is on addressing unmet needs of the patient and ensuring the best clinical outcome in the given situation.

In the case of Dr. CP Mathew, we see the evolution of an integrative approach for better management of cancer at point of care that was triggered and fueled by personal encounters with cancer patients who had benefited from the use of traditional systems of medicine.

Dr. CP Mathew recalled the transforming encounter with a terminal lung cancer patient of his, who was in the last days of his life. This incident inspired him to explore Siddha system of medicine and its potential for the management of cancer. This patient had received medicines from a wandering mendicant and survived for eight years in good health in a miraculous turn around. He also narrated successful management of bladder cancer that metastasized to the stomach in a 42-year-old patient that he treated in 1984 with Siddha

and Ayurvedic medicines. A nurse from South Africa had an inoperable stomach cancer and was advised to return to India to spend the last days of her life. This patient was treated with Siddha and Ayurveda medicines by Dr. CP Mathew. She recovered miraculously and went back to South Africa. These encounters convinced him about the potential benefits of Siddha and Ayurveda in management of cancer.

Dr. CP Mathew took great efforts to learn the principles and practice of Siddha medicine and Ayurveda. He narrated how he left his home in the middle of the night in 1983 to meet a Siddha mendicant in Kumili near Kottayam. He has not looked back ever since and had integrated Siddha and Ayurveda treatments in management of cancer for all his patients. At Cherian Ashram, he had a team of modern medical doctors, a senior Ayurveda physician as well as Naturopathy and Yoga expert to offer holistic care for cancer patients seeking his treatment.

Drawing from insights gained from his clinical practice spanning four decades, Dr. CP Mathew had opined that the public should be made aware of the options for treatment of cancer in Ayurveda and Siddha systems of medicine. He confirmed in interviews that many patients even in advanced stages of cancer can benefit from such treatments. He also pointed out that instead of palliative care, aggressive treatment with integration of Siddha and Ayurveda can improve outcomes in many advanced cancers.

On the basis of his experience with patients, he clarifies that in some cases, addition of Siddha and Ayurveda medicines help in better toleration of chemotherapy and improved clinical outcomes. In other patients, he says that to his surprise, the growth of the tumor could be totally arrested and at times total remission has been achieved.

He was against administration of chemotherapy in cancer of the lung and pancreas considering undesirable outcomes of the treatment. He also advised against surgery in cancer of breast and colon as he was of the opinion that surgical intervention can trigger further progression of the disease. However, he was in favor of surgery for cancer of prostate.

A cursory survey of the case diaries and medical records of his patients reveal that Dr. CP Mathew had treated a wide variety of cancers presenting in different stages. A snapshot of the different types of cancers that he treated and the key medicines that he prescribes is given in Table 1.

Dr CP Mathew had been engaged silently in his clinical practice without any expectation of recognition. Yet, his good work has been recognized on many occasions. He was felicitated with Golden Leaf Award instituted by a social service group, Servants of Nature, for his service to the society in a function held at Press Club in Thiruvananthapuram in June 2016 by the former Chief Minister of Kerala, Oommen Chandy. In 2021, the Rashtriya Ayurveda Vidya-peetham conferred upon him the Life Time Achievement Award for his contributions in cancer care. Dr. CP Mathew passed away on 18th October 2021 at the advanced age of 92.

The recent three major documents related to health policy viz. National Health Policy (NHP) 2017; Situation Analyses- Backdrop to NHP 2017, Ministry of Health and Family Welfare, Government of India; and Three-Year Action Agenda 2017–2020, NITI Aayog, Government of India highlighted on prevention through lifestyle advocacy, health care delivery through integration, co-location and medical pluralism [5].

In the light of the findings discussed here, the work of Dr. CP Mathew assumes great relevance and needs to be critically studied. The take away lessons of such an exercise would provide valuable inputs to develop strategies to nurture and develop Integrative medicine in India.

Integrative approaches are gaining momentum globally in the field of Cancer [6]. Integrative Oncology is an emerging discipline in

**Table 1**  
Cancers treated and traditional medicines commonly prescribed.

Commonly treated cancers	Breast cancer, Lung cancer, Colon cancer, Stomach cancer, Rectal cancer, Oral cancer, Pancreatic cancer, Acute myeloid leukemia, Acute lymphoid leukemia, Sarcomas, Liver cancer, Prostate cancer, Ovarian cancer, Glioblastomas
Commonly prescribed medicines	<p><b>Ayurveda:</b> Triphalā cūrṇa, Aśvagandhā cūrṇa, Pūrṇacāṁdrodaya guṭīkā, Śivāguṭīkā, Kasturīkalparasāyanam, Śilājatu rasāyana, Brahma rasāyana, Guggulu rasāyana, Gokṣuramodakam, Kumārāyāsavaṁ, Rasasindūra, Siddhamakaradhvajam, Guḍūcisattvama, Tāmrabhasma, Vijayāguṭīkā, Canapain</p> <p><b>Siddha:</b> Nandimezhuku, Rasagandhimezhuku, Madhuvarkam, Navapāsānam</p> <p><b>Homoeopathy:</b> Psorinum, Arsenicum album</p>

the west but is yet to strike roots in India. Research studies on the work done by experienced clinicians like Dr. CP Mathew would be educative in developing Integrative Oncology in India.

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#### Conflict of interest statement

None declared.

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