

enforcement of privacy and confidentiality concerns [6]. Telemedicine has the potential of wider reach and reduced costs of medical care delivery, thus serving the ethical tenets of justice and beneficence. It is a valuable tool, which should continue to be used expeditiously, in a responsive manner, in the treatment of substance use disorders. As telemedicine has become, an important part of healthcare, more discussion will help in shaping its use as a responsible, effective, and efficient mode of delivering healthcare.

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References

- Lin LA, Casteel D, Shigekawa E, Weyrich MS, Roby DH, McMenamin SB. Telemedicine-delivered treatment interventions for substance use disorders: A systematic review. *J Subst Abuse Treat*. 2019 Jun;101:38–49. <https://doi.org/10.1016/j.jsat.2019.03.007>
- Chan B, Bougatsos C, Priest KC, McCarty D, Grusing S, Chou R. Opioid treatment programs, telemedicine and COVID-19: A scoping review. *Subs Abuse*. 2022;43(1):539–46. <https://doi.org/10.1080/08897077.2021.1967836>
- Hollander JE, Carr BG. Virtually perfect? Telemedicine for COVID-19. *N Engl J Med* 2020 Apr 30;382(18):1679–1681. <https://doi.org/10.1056/NEJMp2003539>
- Radfar SR, De Jong CA, Farhoudian A, Ebrahimi M, Rafei P, Vahidi M, et al. Reorganization of substance use treatment and harm reduction services during the COVID-19 pandemic: a global survey. *Front Psychiatry*. 2021 Apr 29;12: 639393. <https://doi.org/10.3389/fpsy.2021.639393>
- Stanberry B. Legal and ethical aspects of telemedicine. *J Telemed Telecare* 2006;12(4):166–175. <https://doi.org/10.1258/135763306777488825>
- Board of Governors in supercession of MCI. *Telemedicine Practice Guidelines — Enabling Registered Medical Practitioners to Provide Healthcare Using Telemedicine*. New Delhi;BOG; 2020 Mar 25 [cited on 2022 May 20]. Available at: <https://www.mohfw.gov.in/pdf/Telemedicine.pdf>
- Parmar A, Patil V, Sarkar S. Ethical management of substance use disorders: the Indian scenario. *Indian J Med Ethics* 2017 Oct-Dec;2(4): 265–70. <https://doi.org/10.20529/IJME.2017.051>

Ethical issues with MS (Ayurved) *Shalya Tantra*/*Shalakyata Tantra*: Need for public debate

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In November 2020, the Central government amended the Central Council of Indian Medicine Regulations, 2016, to introduce formal training in *Shalya* (general surgery) and *Shalakyata* (diseases of ear, nose, throat, eye, head, oro-dentistry) specialisations for postgraduate students of Ayurveda [1].

Postgraduate (PG) trainees of *Shalya* and *Shalakyata* will receive

practical training in surgery and will be equipped to independently perform some pre-defined procedures after completion of their PG degree, as stated in the gazette notification issued on November 19 [1,2]. The students will be trained in two streams of surgery and will be awarded the degrees of MS (Ayurveda) *Shalya Tantra* (General Surgery), and MS (Ayurveda) *Shalakyata Tantra* (diseases of the eye, ear, nose, throat, head, and oro-dentistry). Training modules for surgical procedures will be added to the regular curriculum of Ayurvedic studies.

This policy decision of the Government will allow Ayurveda practitioners to legally perform procedures such as skin grafting, cataract surgery, and root canal treatment. The list of procedures that will be taught includes — all types of skin grafting, ear lobe repair, excision of simple cyst and benign tumours (lipoma, fibroma, schwannoma, etc) of non-vital organs, excision/amputation of gangrene, traumatic wound management — all types of suturing, ligation and repair of tendon and muscles, foreign body removal from the stomach, colostomy, cataract surgery, local anaesthesia in the eye, rhinoplasty, hair lip repair, loose tooth extraction, dental caries tooth/teeth, root canal treatment etc [1,2].

It must be noted that the diagnosis and surgical management of a patient requires a multidisciplinary approach, involving various disciplines of allopathic medicine which have developed over a long period of time. Specialised branches like radiology, pathology, microbiology, and biochemistry are involved in the diagnosis of diseases. Any surgical procedure requires pre-anaesthetic check-ups involving disciplines like cardiology, and patients with complicated conditions may require clearances from nephrology, endocrinology, neurology, gastroenterology, etc. Anaesthesia was developed over many decades and is at present fully equipped to handle extremely complicated surgeries. Post-operative care requires a dedicated intensive care unit set up, especially for complex surgeries by qualified individuals from anaesthesia and critical care medicine.

Developing traditional medicine is a welcome step, but the skills and expertise of 8 to 10 domains are learned over a period of 8-10 years by students in the allopathic system. Is it possible to develop the so-called MS (Ayurveda) *Shalya Tantra* / *Shalakyata Tantra* within a few years of training to develop the same degree of expertise, without prior tedious and comprehensive training on the surgical anatomy and pathophysiology of the diseases mentioned?

The Ayurvedic surgery system is not widely accepted at present, and it has not yet evolved to handle complex surgeries and their possible complications [3]. So, it is a major ethical issue to subject patients to surgery at the hands of Ayurvedic postgraduate students. It is unclear how the referral system will work in case of complications in these complex operations performed under general anaesthesia. A failure to debate these issues among stakeholders could have disastrous results in terms of patient care.

Ayurveda has a glorious history of 3500 years. Even today, proficient practitioners of Ayurveda, although reduced in numbers due to the poor quality of academic training [4], continue to command respect while delivering effective health services. There are reputed Ayurveda hospitals and clinics across the globe. The core strengths of Ayurveda lie in the management of non-communicable diseases. It also has unique expertise not available in other health sciences in designing wellness strategies based on its concept of homeostasis (*swasthya*) at multiple levels of the biological system [5].

We need to integrate the Indian systems of medicine, AYUSH (Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homeopathy), including the promotion of Yoga as a form of lifestyle change to tackle non-communicable diseases. If not handled correctly, this integrative system of medicine will end up as a disastrous cocktail, with patients paying the price [2].

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References

1. Special Correspondent. Nod for Ayurveda PGs to perform surgeries. *The Hindu*. 2020 Nov 21 [Cited 2020 Nov 21]. Available from <https://www.thehindu.com/news/national/nod-for-ayurveda-pgs-to-practise-surgical-procedures/article33150514.ece>
2. Mathew JC. Ayurvedic doctors can now practice general surgery alongside ortho, ENT and dentistry. *India Today*. 2020 Nov 21 [Cited 2020 Nov 21]. Available from <https://www.indiatoday.in/india/story/ayurveda-doctors-practice-general-surgery-ortho-ent-dentistry-1742883-2020-11-21>
3. Krishna GL. Ayurveda Needs an Intellectual Reinvention. *The Wire Science*. 2020 Nov 24 [cited 2022 Jul 1]. Available from: <https://science.thewire.in/the-sciences/ayurveda-needs-an-intellectual-reinvention/>
4. Patwardhan K, Gehlot S, Singh G, Rathore HCS. The Ayurveda Education in India: How Well Are the Graduates Exposed to Basic Clinical Skills? *Evid Based Complement Alternat Med*. 2011; 2011:197391. <https://doi.org/10.1093/ecam/nep113>
5. Shankar D. Roadmap for Ayurveda Education in Modern India. In: Sarangapani PM, Pappu R, eds. *Handbook of Education Systems in South Asia*. Global Education Systems. Springer, Singapore; 2020. https://doi.org/10.1007/978-981-13-3309-5_5-1

Imparting knowledge is no more considered a paramount contribution

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I have been practising medicine in an under-served rural setting since 1976, and have published around 109 papers in PubMed-indexed journals — including *The Lancet*, *BMJ*, *NEJM* and several tropical medicine journals — on scorpion and snakebite cases causing acute life-threatening conditions. I have researched in detail, with restricted resources, the acute clinical effects of envenomation and management of scorpion

and snakebite cases [1, 2]. In Mahad, the fatality rate due to refractory heart failure arising from autonomic storm evoked by scorpion venom was previously 30% [3]. Since the advent of prazosin and scorpion antivenom, it has dropped to less than 1% [4]. Similarly, fatalities due to snakebite poisoning have been reduced from 18% to 5% [5].

In India, one victim of snakebite dies every five minutes. Farmers, labourers, hunters, migrant population, and snake rescuers are more prone to snakebite. Mortality due to envenomation is considerable in the rural and semi-urban population. These victims report to primary health centres and are then referred to civil hospitals or medical colleges, where newly posted and resident doctors have not seen and treated snakebite before [4]. I took on the training of doctors in peripheral institutions by arranging a meeting at each *tehsil*, all over the Konkan region and surprisingly enough, the fatality rate due to stings and bites was reduced [5]. Early administration of antivenom arrests the progression of snake venom toxicity [6,7].

Delay in diagnosis of snakebite contributes to fatalities, because of poor knowledge regarding diagnosis, use and dosage of antivenom and the role of adjuvants like acetylcholinesterase inhibitors, calcium gluconate, tranexamic acid, indications regarding the use of ventilators including BiPAP, in the treatment of snakebite. Nowadays, a few read medical journals with authentic information, because of easily available superficial information on Google and the internet which is available with one click. The majority of students and medical faculty are happy to be Googleites. This results in irrational, non-protocol management.

I have often received phone calls late at night requesting help in the diagnosis and management dose of antivenom and prazosin to treat envenomation. Considering this urgent need of doctors in peripheral hospitals, I prepared PowerPoint presentations including case studies and arranged talks at my own expense on weekends at rural locations in the region, and there was a remarkable reduction in fatalities due to stings and bites, and no phone calls from the nearby areas during the night hours.

Unfortunately, undergraduate medical curricula do not include scorpion sting and snakebite and scant space is given to them in the medical text books. I was surprised to receive emergency calls from residents of medical colleges from places as distant as Mumbai, Pondicherry, Chennai, and Kurnool during the night hours, regarding management doses of antivenom and prazosin for stings and bites. Hence, I decided to train final year MBBS students, and residents of medical colleges on this topic.

Irrespective of their being voluntary, my attempts at training medical students were thwarted. These depressing incidents demoralised me and killed my desire to share a scientific approach to the management of life-threatening snakebites and scorpion stings. Even the publication of my chapter on